



## CITY OF TORRINGTON

**PURCHASING DEPARTMENT**  
140 Main Street, Room 206  
Torrington, CT 06790

**Pennie Zucco, Purchasing Agent**  
Phone: (860)-489-2225  
Fax (860)-489-2547  
Email: pennie\_zucco@torringtonct.org

March 29, 2021

Mayor Elinor Carbone  
Members of the City Council  
Members of the Board of Public Safety

**RE: RFP# TBV-023-112420 TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**

The City of Torrington received three (3) proposals to supply Ballistic Vests for the Torrington Police Department. Two bids were rejected for non-responsive bids.

I agree with the recommendation of Chief William Baldwin and recommend the City award the bid to Tactical Police Gear, Cheshire, CT for the purchase of fourteen (14) Tactical Ballistic Entry Vests for the Special Response Team. The cost per vest is \$2,600.00 (\$36,400.00 for 14 vests) pending approval from the Board of Public Safety.

Thank you for your consideration on this matter.

  
Pennie Zucco  
Purchasing Agent

cc: W. Baldwin; B. Barown

3/29/2021 7:11 PM  
RECEIVED FOR RECORD  
TORRINGTON TOWN CLERK



City of Torrington

Bid Name Tactical Ballistic Entry Vests for PD

Bid Number TBY-023-112420

Date of Opening November 24, 2020

Time of Opening 11:00 AM

VENDOR \_\_\_\_\_ BID BOND \_\_\_\_\_ NON-COLLUSION \_\_\_\_\_ BID AMOUNT \_\_\_\_\_ ADDENDUM \_\_\_\_\_

Overdun Uniform  
1801 Page Blvd.

2625.00/ Vest

Springfield, MA 01151-1372

Tactical Police Gear  
1555 Highland Ave.  
Croton, CT 06410

OK  
\$1800.00

2600.00/ Vest

Schley - Tactical Medical Solutions

487 E Main St #341

1974.24/ Vest

MT Kisco NY 10549

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



William R. Baldwin Jr  
Chief of Police

# City of Torrington

Department of Police Services



Proudly Serving  
Since 1888

March 1, 2021

Mayor Carbone  
Members of the Board of Public Safety  
Members of the City Council

Re: Tactical Entry Vest Bid Acceptance

The Torrington Police Department is requesting to accept the entry vest bid for the Special Response Team SRT. The Special Response Team wear tested four other vests and determined that the Armour Express Lighthawk XT 3.0 vest meets the needs for the team. The vests will be replacing the current tactical vests that all 14 team members currently wear. The vests are used for training and call outs such as active shooter incidents and high risk warrant services. The vests that we are replacing are between 8 and 13 years old and have a five-year manufacture recommended shelf life.

The attached quote from Tactical Police Gear in Cheshire, CT is for the protective vest which includes attachments to protect the throat, neck, shoulders, and two ballistic panels. The Total price for 14 vests and shipping is \$36,400.00. The quoted price is good for 90 days. The funding for the vests is currently available in the department Capital Account.

There is a second separate bid that is being tested for the ballistic plates that fit inside the entry vests.

The one-time purchase will suffice the needs of the Department and will be used for five or more years.

Thank you,

William R. Baldwin, Jr.  
Chief of Police

Pc: Pennie Zucco-Purchasing



**CITY OF TORRINGTON**  
**REQUEST FOR PROPOSAL**

**RFP#TBV-023-112420 TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**

**Bid Opening: November 24, 2020 Time: 11:00 AM Location: City Hall, 140 Main St., Room 206, Torrington**

Bid Bond or Certified Check required with bid: 5%

Performance Bond required if awarded bid: "See Instruction to bidders"

**SUBMIT AN ORIGINAL AND THREE (3) COPIES.**

The City of Torrington reserves the right to accept or reject any or all bids or any portion thereof, to waive technicalities, and to award the contract as will best serve the public interest.

Omit State and Federal Taxes.

All prices must be F.O.B.: Destination (Torrington) unless otherwise requested.

Dated in Torrington: 11/3/20

Purchasing Agent \_\_\_\_\_  
Pennie Zucco

Item	Price
<b>FIRSTSPEAR SEIGE</b> - R Optimized Ver. 2, 6/12, Tubes Level IIIA NIJ 06 AXIIIA Spear Balcs	
• Mass Collar guard with Level IIIA NIJ 06 AXIIIA	\$ 2,600 EACH
• Mass Throat guard with Level IIIA NIJ 06 AXIIIA	
• Mass Shoulder straps and pads with Level IIIA NIJ 06 AXIIIA	\$ 36,400 TOTAL
• Mass Bicep guard with Level IIIA NIJ 06 AXIIIA	
<b>per specifications</b>	<b>FOR APPROX. 14 ENTRY VESTS</b>

The Purchasing Agent is authorized to offer City based bidders that exceed the lowest bid by up to 6%, the opportunity to match the lowest bid. A City based bidder within the 6% differential who agrees to accept the amount of the lowest bid will be awarded the bid. When multiple City based bidders agree to accept the amount of the low bid then the City based bidders will be invited to submit a new bid, not to exceed the low bid. The bid will then be awarded to the lowest responsive, responsible bidder.

Bidder: TACTICAL POLICE GEAR LLC

Address: 1555 HIGHLAND AVE CHESHIRE CT 06410

(Signed By) [Signature] Title: LE SALES PRODUCT MGR

Name (please print) VALDEMAR QUEIROGA Date: 11/23/20

Phone: 203-434-8999 Fax: 203-651-1738 E-Mail: val@tactical-police-gear.com

Federal Tax Identification Number: (FEIN) 81-1672444

Comments: \_\_\_\_\_

**SAMPLE FORM**  
Bid # TBV-023-112420

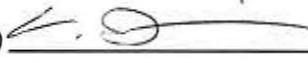
**NON-COLLUSION AFFIDAVIT**

STATE OF CONNECTICUT COUNTY OF NEW HAVEN

I, Valdemar Queiroga, being first duly sworn, deposes and says that:

1. I am Valdemar Queiroga of Tactical Police Gear, the Bidder that has submitted the attached Bid for "TBV-023-112420 Ballistic vests";
2. I am fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with such Contract, for which the attached Bid has been submitted nor has it in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Torrington or any person interested in the proposed Contract; and
5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Printed) Valdemar Queiroga

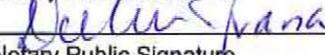
(Signed) 

(Title) CE Sales / Product MGR

Subscribed and sworn to before this 13<sup>th</sup> day of NOVEMBER, 20 20.

IVANA DELIIC

Notary Public Printed

  
Notary Public Signature

My Commission Expires 12/31/2021

(Notary Seal)



**NOTE:** Documents must be signed before and sealed by a Notary Public. Only documents bearing a notary seal will be accepted.



**REQUEST FOR PROPOSAL  
TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT  
TBV-023-112420**

The City of Torrington is seeking sealed bids for Ballistic Entry Vests for the Torrington Police Department. **Pricing is all-inclusive.** Bid Price shall include inside deliver to the Torrington Police Department, 576 Main Street, Torrington, CT 06790. There shall be no fuel surcharges, loading/unloading fees or other shipping/delivery fees added to the cost of the delivered goods.

**\* *Product information sheets for all vests must be provided with submitted proposals.***

The deadline for submittals is **November 24, 2020 by 11:00 AM**. Proposals shall be submitted to the Purchasing Department, City Hall, 140 Main Street, Room 206, Torrington, CT 06790. Submit one (1) original and three (3) exact copies in a sealed envelope and clearly marked "**BID# TBV-023-112420, TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**". Bids received after the time and date specified will be rejected and returned unopened. In the case where City Hall is closed due to an emergency, then submittals shall be due the next day when City Hall reopens for business, no later than 11:00 AM on that day. The City will not be liable for any costs incurred by a vendor in the preparation or submission of a proposal. Once opened such proposals are public record. Vendors mailing proposals should allow normal delivery time to ensure timely receipt of their proposals. The City of Torrington shall not be held responsible for lost or misdirected proposals. **No faxed or e-mailed Proposals will be accepted.**

Deadline for questions is **Friday, November 13, 2020 by 12:00 noon**. Submit all questions to Pennie Zucco, Purchasing Agent, [pennie\\_zucco@torringtonct.org](mailto:pennie_zucco@torringtonct.org). It is the vendor's responsibility to check these websites 48 hours before the closing date for addenda's. All information given by the city except by written addendum shall be informal and shall not be binding upon the city nor shall it furnish a basis for legal action by any Proposers against the City.

All proposals must include the bidder's name and be signed by a responsible officer or employee of the vendor submitting a proposal. The vendor shall provide at least three (3) references of companies or agencies that have purchased similar equipment from vendor. Prior to actual acceptance and usage by the Torrington Police Department, vests shall be completely certified by the successful bidder or his/her authorized agent according to the manufacturer's specifications. Any alleged oral agreement made by a bidder or contractor with any agency or employee of the City of Torrington shall be disregarded. This Bid does not commit the City of Torrington to select any vendor or enter into any contract agreement. The City of Torrington reserves the right to request additional information from some or all bidders. The City of Torrington reserves the right to accept any Bid deemed in the best interests of the City of Torrington.

All proposals will be considered valid for a period of ninety (90) days from the date of opening. The ninety-day period may be extended upon written mutual agreement.

The City of Torrington reserves the right to award or reject any or all bids, or any portion thereof; to waive technicalities; to award the contract to a bidder other than the lowest bid, and to award the bid and/or contracts to one or more bidders submitting essentially identical proposals and, that in the city's judgment, will best serve the public interest.

**There will not be a public opening of this bid**

**AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER  
MBE'S WBE'S AND SBE'S ARE ENCOURAGED TO APPLY**



**REQUEST FOR PROPOSAL**  
**TBV-023-112420 - TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**

**MAKE:** Firstspear Seige-R Optimized Ver. 2, 6/12, Tubes

- Level IIIA NIJ 06 AXIII A Spear Balcs
- Mass Collar guard with Level IIIA NIJ 06 AXIII A
- Mass Throat guard with Level IIIA NIJ 06 AXIII A
- Mass Shoulder straps and pads with Level IIIA NIJ 06 AXIII A
- Mass Bicep guard with Level IIIA NIJ 06 AXIII A

**Package to include: NO SUBSTITUTIONS**

- 1) Bullet resistant vests shall meet current updated NIJ Level IIIA requirements:
  - A. Must meet or exceed ballistic testing to NIJ Standard 0101.06 Tested to stop .357 SIG and .44 Magnum ammunition.

A letter from the manufacturer shall be included with the bid proposal stating, *"The manufacturer certifies that this model of armor, \_\_\_\_\_, has been tested through NLECTC and has been found to comply with Type IIIA performance for NIJ Standard-0101.06."*

- 2) The bidder attests that the items offered should be new, original brand name items. **NO** refurbished, repaired, or remanufactured items allowed.
  - i. Since relative strength to weight ratio of a ballistic design is important in determining its comfort and performance characteristics, a high **Relative Performance Index** is required. Therefore the minimum RPI shall be no lower than;
  - ii. .357 SIG FMJ Flat Nose (FN) bullets with a specified mass of 8.1 g (125 gr) and a velocity of 448 m/s  $\pm$  9.1 m/s (1470 ft/s  $\pm$  30 ft/s) and with .44 Magnum Semi Jacketed Hollow Point (SJHP) bullets with a specified mass of 15.6 g (240 gr) and a velocity of 436 m/s  $\pm$  9.1 m/s (1430 ft/s  $\pm$  30 ft/s).
  - iii. Type IIIA armor that has been conditioned shall be tested with .357 SIG FMJ FN bullets with a specified mass of 8.1 g (125 gr) and a velocity of 430 m/s  $\pm$  9.1 m/s (1410 ft/s  $\pm$  30 ft/s) and with .44 Magnum SJHP bullets with a specified mass of 15.6 g (240 gr) and a velocity of 408 m/s  $\pm$  9.1 m/s (1340 ft/s  $\pm$  30 ft/s).
- 3) Since low **Back Face Signature (BFS)** should result in reduced blunt force trauma injury, the BFS results of the NIJ 0101.06 certification test reports for BFS shall be no higher than Type IIIA armor that is new and unworn shall be tested with .357 SIG FMJ Flat Nose (FN) bullets with a specified mass of 8.1 g (125 gr) and a velocity of 448 m/s  $\pm$  9.1 m/s (1470 ft/s  $\pm$  30 ft/s) and with .44 Magnum Semi Jacketed Hollow Point (SJHP) bullets with a specified mass of 15.6 g (240 gr) and a velocity of 436 m/s  $\pm$  9.1 m/s (1430 ft/s  $\pm$  30 ft/s).
- 4) Type IIIA armor that has been conditioned shall be tested with .357 SIG FMJ FN bullets with a specified mass of 8.1 g (125 gr) and a velocity of 430 m/s  $\pm$  9.1 m/s (1410 ft/s  $\pm$  30 ft/s) and with .44 Magnum SJHP bullets with a specified mass of 15.6 g (240 gr) and a velocity of 408 m/s  $\pm$  9.1 m/s (1340 ft/s  $\pm$  30 ft/s).

- 5) If vendor submits multiple models for consideration, vendor must include appropriate documentation for each model proposed. Use separate photocopy of bid cover page for each proposed model.
- 6) Manufacturer's sales and specification literature shall be included for each model vest proposed including information such as the weight, density, thickness, colors, etc. for the proposed vest. Include any additional data that may be of assistance to the City of Torrington when evaluating the various proposals.
- 7) The manufacturer's warranty and insurance coverage liability certificate shall be included with the bid proposal.
- 8) It is the bidder's responsibility to provide sufficient documentation to enable the City of Torrington to compare various manufacturers and models proposed on an "apples to apples" basis.
- 9) This bid is for Approximately 14 Ballistic Entry Vests for the Torrington Police Department. The City reserves the right to add or reduce the quantity of vests as may be necessary to meet any changes to the Police Department.
- 10) **Exceptions and Alternates** – If a price is bid for a substitute or alternate brand/product (anything other than the specified brand/product), then the bidder must create a detailed list of substitute/alternate items bid on a separate page or pages entitled "EXCEPTIONS AND ALTERNATES TO SPECIFICATIONS" and must enclose such information about each and every substitute/alternate items:
  - a. Brand/Manufacturer
  - b. Make/Model
  - c. Part/Product Number
  - d. Detailed Product Specifications to the extent required to establish that the substitute or alternate item meets or exceeds the time specified;
  - e. Any additional information and/or documentation related to substitute/alternate items must be clearly referenced and cross-referenced to the corresponding items within the list.
- 11) Samples of alternate items must be available for review upon request by the City of Torrington, and if requested, delivered promptly to the Torrington Police Department at the bidder's expense, for such review. If the bidder desires that the sample items be returned, the bidder must include packaging materials and pre-paid postage for such return.
- 12) Samples will only be required for items marked "NO" for compliance on the bid specification sheets, thus indicating that an alternate item is being bid.
- 13) Samples submitted as alternates may be subjected to testing at the discretion of the City of Torrington. Bidders are responsible for all costs associated with testing of their sample products.
- 14) The City of Torrington, in its sole discretion, will determine whether alternate items meet or exceed bid specifications. The Proposal will be disqualified if an alternate product does not meet or exceed all specifications for the specified brand/product.
- 15) The acceptance of any price quote made pursuant to this Bid shall not be binding upon the City until a notification of award in writing and issue a purchase order from the City Purchasing Agent has been delivered to the successful bidder.
- 16) The City of Torrington is exempt from State of Connecticut sales tax. Please do not include sales tax in your proposal.
- 17) Unit prices quoted must remain firm for the entire period of the contract including extensions and renewals thereof.

**EXHIBIT A**

**CITY OF TORRINGTON  
TBV-023-112420 TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**

**DETAILED SPECIFICATIONS AND BID COMPLIANCE**

**Please select the appropriate response regarding your bid/Proposal:**

- Yes**, all goods/products provided to the City to fulfill this Bid/Proposal ARE in full compliance with all specifications described herein.
- No**, the goods/products to be provided to the City to fulfill this Bid/Proposal ARE NOT in full compliance with all specifications and I have attached a document entitled "EXCEPTIONS AND ALTERNATES TO SPECIFICATIONS" to describe, in detail, how the proposed system/solution differs from the specified system/solution.

**IMPORTANT: if "no" is selected, above, you must complete and submit additional documentation to provide information about the extent to which your proposed goods/products comply with the listed and required detailed specifications and to explain your rationale and/or justification for providing an alternate good/product.**

---

Company Name Tactical Police Gear LLC

Signature 

Name (please print) Valdemar Queiroga

Authorized Official's Title LG Sales / Product MGR

Date 11/23/20

Federal Tax Identification Number: (FEIN) 81-1672444

**EXHIBIT B**

**PRICE SHEET**

**CITY OF TORRINGTON**

**TBV-023-112420**

**TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**

**BID OPENING DATE: NOVEMBER 24, 11:00 AM**

**ITEM: TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT AS SPECIFIED.**

**UNIT PRICE PER VEST** \$2,600

**TOTAL PRICE DOLLARS/CENTS:** \$36,400

**TOTAL PRICE IN WORDS:** Thirty six thousand four hundred dollars

**COMPANY NAME:** Tactical Police Gear LLC **DATE:** 11/23/20

**ADDRESS:** 1555 HIGHLAND Ave Cheshire CT 06410

**COMPANY REPRESENTATIVE:** Valdemar Queiroga

**COMPANY REPRESENTATIVE (signature)** 

**TITLE:** LE Sales / Product MGR

**ADDITIONAL ORDERS:**

**The City would like the option to increase the quantity of Police Ballistic Vests at the quoted price through additional orders. Please indicate the timeframe allowed for additional orders:**

1 year

CITY OF TORRINGTON

BID #TBV-023-112420 TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT  
STATEMENT OF REFERENCES

List at least three (3) references which demonstrate your ability to supply equipment and services included in the scope of the specifications. Attach additional pages if required. The City reserves the right to contact each of the references listed for additional information regarding your company's qualifications.

Reference No. 1

Customer Name: BRANFORD POLICE DEPARTMENT  
Contact Individual: CHIEF MULHERN Phone No: 203-481-4241  
Address: 33 LAUREL ST BRANFORD CT 06405  
Email address: JMULHERN@BRANFORDPOLICE.COM Year: 2019  
Description of products supplies: BODY ARMOR

Reference No. 2

Customer Name: NORTH HAVEN POLICE DEPARTMENT  
Contact Individual: CHIEF GLENN Phone No: 203-239-1616  
Address: 8 LINSLEY ST NORTH HAVEN CT 06493  
Email address: KGLENN@NORTHHAVENPO.COM Year: 2020  
Description of products supplies BODY ARMOR

Reference No. 3

Customer Name: WATERTOWN POLICE DEPARTMENT  
Contact Individual: SGT DIANORA Phone No: 860-945-5200  
Address 195 FRENCH ST WATERTOWN CT 06795  
Email address: JDIANORA@WATERTOWNCTPA.ORG Year: 2020  
Description of products supplies BODY ARMOR, RIOT GEAR,

Reference No. 4

Customer Name: HAMDEN POLICE DEPARTMENT  
Contact Individual: CAPT. SAMPERI Phone No: 203-230-4000  
Address: 2900 DIXWELL AVE HAMDEN CT 06518  
Email address: KSAMPERI@HAMDENPO.COM Year: 2019/2020  
Description of products supplies: BODY ARMOR, AMMO

Reference No. 5

Customer Name: MERIDEN POLICE DEPARTMENT  
Contact Individual: SGT VISCONTI Phone No: 203-238-1911  
Address: 50 WEST MAIN ST MERIDEN CT 06451  
Email address: DVISCONTI@MERIDENCT.GOV Year: 2019, 2020  
Description of products supplies HOLSTERS, LIGHTS, MISC SWAT EQUIPMENT

**EXHIBIT C**

**CITY OF TORRINGTON  
BID #TBV-023-112420  
TACTICAL BALLISTIC ENTRY VESTS FOR POLICE DEPARTMENT**

**Acceptance of Terms of this Agreement**

Name of Proposer: TACTICAL POLICE GEAR LLC

Contact Person: VALDEMAR QUEIROGA

Address: 1555 HIGHLAND AVE CHESHIRE CT 06410

City/State/Zip: CHESHIRE CT 06410

Federal Tax Identification Number (FEIN) 81-1672444

Telephone: 203-439-8899 Fax: 203-651-1738

E-mail: val@tactical-police-gear.com

Authorized Signature  Title: LB SPCS / PRODUCT MGR

Name Printed: Valdemar Queiroga Date: 11/23/20

It is agreed by the above signed proposer that the signature and submission of this proposal represents the proposer's acceptance of all terms, conditions, and requirements of the proposal specifications, and, if awarded, the proposal will represent the agreement between the parties.

The proposer agrees that the cost of any work performed, materials furnished, services provided, or expenses incurred, which are not specifically delineated in the proposal documents, but which are incidental to the scope, intent, and completion of this contract, shall be deemed to have been included in the prices for the various items scheduled.

**BID # TBV-023-112420**

**ALTERNATIVES**

<b>REQUESTED</b>	<b>ALTERNATIVE</b>
First Spear Seige-R Optimized Ver. 2, 6/12, Tubes	Armor Express Lighthawk XT 3.0 LHT503 with upgraded Alpha Tubes Cumberbund
Level IIIA NIJ 06 AXIIIA Spears Balcs	Level IIIA NIJ 06 Armor Express Razor Balcs Cut
Mass Collar Guard with Level IIIA NIJ 06 AXIIIA	Lighthawk Shoulder Flanks and Collar with Level IIIA NIJ 06 Armor Express Razor Ballistics
Mass Throat Guard with Level IIIA NIJ 06 AXIIIA	Lighthawk Throat Protector with Level IIIA NIJ 06 Armor Express Razor Ballistics
Mass Shoulder Straps and Pads with Level IIIA NIJ 06 AXIIIA	Lighthawk Shoulder Flanks and Collar with Level IIIA NIJ 06 Armor Express Razor Ballistics
Mass Bicep Guard with Level IIIA NIJ 06 AXIIIA	Lighthawk Structured Deltoids with Level IIIA NIJ 06 Armor Express Razor Ballistics



# LIGHTHAWK XT 3.0 LHT503

## TACTICAL CARRIER SPECIFICATION

2019



1.0 **DESIGN REQUIREMENTS:** The tactical soft body armor described herein is intended for primary use as an external garment—worn visibly over a uniform or other type of garment. The ballistic vest shall consist of two primary components—the BALLISTIC PANELS, which consist of the ballistic panels enclosed by a protective, waterproof ballistic panel cover and the TACTICAL CARRIER or “outer shell”.

**LIGHTHAWK XT 3.0:** This carrier exhibits lightweight, low profile architecture with fully adjustable shoulders and waist. It uses SPEAR BALCS cut panels for higher mobility and vehicle operations. This carrier uses the Dynamic Cummerbund System allowing the user to breathe and move much more efficiently. The Shoulder Strap geometry was improved for enhanced ergonomics. MOLLE has been added to the plate pocket flap for more modularity and attachments.

1.1 **TACTICAL CARRIER and Cummerbund Exterior Material:** The LIGHTHAWK XT 3.0 tactical carrier is constructed with 500D Nylon, 520E Tweave for the outer shell.

1.1A **500D Nylon:** Nylon material, with a composition of 100% Nylon and a 1 oz. polyurethane coat, a denier of 500D, weighing 7.6 oz/yd<sup>2</sup>, with an abrasion resistance of at least 1000 cycles (FTM5306), a tear resistance of 14 lbs. (warp) and 10 lbs. (fill), and a break strength of 335 lbs. (warp) and 265 lbs. (fill).

1.1B **TAFFETA:** Taffeta material was manufactured to conform to the requirements set forth in the Berry Amendment (USC, Title 10, Section 2533a)

1.1C **MOLLE Webbing Material:** The MOLLE webbing material affixed to the tactical carrier exterior is to be constructed from a nylon material, with a width of 1" with a tolerance of +/- 2/32, a thickness of .040 inches, with a tolerance of .038-.050, and a weight of 3.72lbs. per 1000 yds. and a tolerance of +/- 10%.

1.1C-1 **MOLLE Loop / Tape:** The MOLLE located on the Plate Pocket Flap is pre-assembled. 1" Loop is sewn to 1" Webbing Tape prior to attachment on Plate Pocket Flap.

1.1D **Hook & Loop Material:** The hook and loop material used in the construction of the aforementioned tactical carrier shall be constructed of a nylon base material with acrylic base binder adhesive. This material shall exhibit closure peel strength of 1.0 PIW and closure shear strength of 10.0 PSI.

1.1E **520E TWEAVE:** 520E Tweave, composed of 91% Nylon, 9% Spandex with a weight of 6.50 oz/yd<sup>2</sup> (+/- 5%). Stretch using ASTM D4965: Warp- 24-30% Stretch, Fill- 23-29% Stretch. Shrinkage: using AATCC test method 187- Dimensional Stability less than 3% in each direction, Water repellency: using AATCC test method 22, 100 spray rating. Air Permeability: 23 (CFM via ASTM D 737-96). Abrasion testing: (Martindale using 12Kpa weight) 10,000 cycles: Class 5, 20,000 cycles: Class 5, 30,000 cycles: Class 5.

1.2 **TACTICAL CARRIER and Cumberbund Interior Material:** The Tactical Carrier uses 3D Spacer Mesh material, while the Cumberbund uses 500D Nylon.

1.2A **500D Nylon:** Nylon material, with a composition of 100% Nylon and a 1 oz. polyurethane coat, a denier of 500D, weighing 7.6 oz/yd<sup>2</sup>, with an abrasion resistance of at least 1000 cycles (FTM5306), a tear resistance of 14 lbs. (warp) and 10 lbs. (fill), and a break strength of 335 lbs. (warp) and 265 lbs. (fill).

1.2B **Hook & Loop Material:** The hook and loop material used in the construction of the aforementioned tactical carrier shall be constructed of a nylon base material with acrylic base binder adhesive. This material shall exhibit closure peel strength of 1.0 PIW and closure shear strength of 10.0 PSI.

1.2C **Notions:** Thread and accessories used in the construction of the jacket shall be corrosion resistant under subjection to environmental elements such as sunlight (UV), moisture, and humidity.

1.2C-1 **Thread:** Thread used in the construction of the aforementioned tactical carrier shall be 100% nylon multi-filament (constructed from nylon consisting of multiple

continuous filaments woven together into a cohesive bundle and plied to make the thread) with a Polyurethane Coating. This thread shall possess a single-end break strength of 9.5 lbf., elongation break strength of 19.2 lbf., and shall exhibit a seam strength of 229lbf. (ASTM D 5034) and 263lbf.

1.2C-2 **Elastic:** The Elastic used in the Tactical Carrier will be made from 25% Polyester yarn and 75% Natural Rubber. It will have a width of 1/8" with +/- 0.050" tolerance. Including stretch tolerance of 100% (+/- 15%) and a nominal yield strength.

1.2C-3 **Snaps:** Snaps used in the construction of aforementioned non-concealable carrier are to be constructed of metal and oxidized for corrosion resistance. Finished snap caps are to measure 0.625 in. diameter.

1.2C-4 **Ring Pull Cord Cincher:** This is a black nylon locking mechanism for 1/8" and 3/16" cord which attaches the cummerbunds to the Tactical Carrier.

1.2C-5 **Cable Cord:** This cable is part of the quick release system on this Tactical Carries. It 3/32", 7x7, galvanized CTD 5/32" Black Nylon. 3/32", Terminal Copper Sleeve (thin wall). 3/8: ID heats shrink tubing.

1.2C-6 **2:1 Reducer:** The shoulder buckle is made from Mild Steel, Thickness of .060 (+/- .015"), Color: Dark Gray or Black (powder coated).

1.2D **3D Spacer Mesh:** Using test Method (ASTM D3776): Weight, 21.05 +/- 10% oz/yd<sup>2</sup>, Using Test Method (ASTM D3887): Wales (Holes) 25 +/- 3/in, Courses (Holes) 52 +/- 5 /in, using Test Method (ASTM D3787): Instron Ball Burst: 125 lbs/min, Thickness: .1160 +/- .0116.

1.2E **Construction:** The Tactical carrier shall be constructed of very durable Nylon fabric with a Denier of 500. General stitching is to be 9-12 spi (stitches per inch) and general bar tacking is to be 42 spi. Combined material and construction methods will produce a heavy duty, durable, wear resistant garment.

2.0 **FEATURES and BENEFITS (Tactical Carrier):** The features and benefits of the Tactical Carrier shall create a value added product for the end user.

2.1 **Safety:** The Tactical Carrier shall provide specific attributes with respect to safety.

2.1A Tactical Carrier shall provide external rifle plate pockets on front and back of carrier to support a 10" x 12" or 8" x 10" rifle plates and allow for the option to upgrade to NIJ threat level III or IV.

2.2 **Integration:** The Tactical Carrier shall include mic tabs for supporting radio microphones.

2.3 **Donning and Doffing:** Tactical carrier is to provide user with the ability to don the carrier without assistance in 10 seconds or less. Tactical carrier is also to provide the user with ease of donning and doffing and shall do so as a pull over, side opening, vest with a solid front.

2.4 **Carriage and Transport:** A Tactical Carrier shall include a 1.5" reinforced Carry Handle Strap sewn to the Rear of the Tactical Carrier.

**2.5 Comfort:** Tactical carrier is to accommodate user with respect to comfort and adjustability.

2.5A Tactical Carrier shall provide adjustable exterior side strap closures with 4" hook and loop on the Cummerbunds to aid in reduction of weight burden across users' shoulders and allow redistribution of said weight across users' torso/abdomen.

2.5B Tactical Carrier shall provide adjustable shoulder straps allowing for adjustment in the height of the Tactical Carrier.

**2.6 Customization:** Items that can be added to enhance the LIGHTHAWK XT 3.0 Tactical Carrier include:

2.6A Customizable ID Tags placed using hook and loop attachment system on front and back of the carrier.

**2.7 Accessories:** Tactical Carrier shall provide user the option to customize with accessories in an effort to provide the most ideal product for the users' specific duties.

2.7A Tactical Carrier shall provide the option for a retractable, pull down Groin Guard with a ballistic coverage area of 94.911 in.<sup>2</sup> (+/- 3 in.<sup>2</sup>) to add protection for the user. The groin guard is designed to provide a greater range of movement and comfort while wearing. The Groin Guard is removable.

2.7B Tactical Carrier shall provide the option for removable shoulder flanks with integrated collars with a ballistic coverage area of 114.810 in.<sup>2</sup> (+/- 3 in.<sup>2</sup>) to add protection to the users' neck and shoulders. The shoulder flanks with integrated collars are designed to provide a greater range of movement and comfort.

2.7C Tactical Carrier shall provide the option for a removable throat protector with a ballistic coverage area of 19.912 in.<sup>2</sup> (+/- 2 in.<sup>2</sup>) to allow for more complete protection of the vulnerable throat and neck area.

2.7D Tactical Carrier shall provide the option for additional protection to the upper arms in the form of Structured Deltoid Protectors with a ballistic coverage area of 106.788 in.<sup>2</sup> (+/- 3 in.<sup>2</sup>) per sleeve (prior to darting).

2.7E Tactical Carrier shall provide the option for a retractable, pull up Nape Protector with a ballistic coverage area of 33.387 in.<sup>2</sup> (+/- 2 in.<sup>2</sup>) to add protection to the back of the users neck. The Nape Protector is designed to provide a greater range of movement and comfort while wearing a helmet during combat.