SUBJECT: SCBA EQUIPMENT FOR NEW JFRD APPARATUS

BID #: XF-0345-22 **OPEN DATE: 04/06/2022**

GENERAL GOVERNMENT AWARDS COMMITTEE

KIND AND BASIS OF CONTRACT: SUPPLY CONTRACT – ONE-TIME PURCHASE

AGENCY: FIRE/RESCUE

BASIS OF AWARD: ALL OR NONE, TO THE LOWEST RESPONSIVE, RESPONSIBLE BIDDER

NUMBER OF BIDS INVITED: 23 **NUMBER RECEIVED:** 1 **OTHER:** 0

SUMMARY OF BIDS AND RECOMMENDED ACTIONS:
Recommend approval of award to Ten-8 Fire Equipment & Safety, LLC as the lowest responsive, responsible bidder for the supply of SCBA Equipment for new JRFD Apparatus for the Jacksonville Fire and Rescue Department. Total estimate expenditure not to exceed $141,355.62.

Funding for this award to be encumbered by account: 00111.123004.564290.00000000.00000.0000000 - to be executed by Purchase Order.

Attachments: Recommendation Memo, Tabulation Sheet, Terms and Conditions, Specifications

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Analyst: _____ **RESPECTFULLY SUBMITTED:** _____
OLIVE WALLACE-COHEN GREGORY PEASE, CHIEF
PROCUREMENT DIVISION

CONCURRENCE BY: KEITH POWERS, DIRECTOR/FIRE CHIEF

(ALL AWARD ACTIONS SUBJECT TO LAWFULLY APPROPRIATED FUNDS)
ACTION OF GGAC COMMITTEE ON RECOMMENDATIONS ABOVE

MEMBERS APPROVING _____ MEMBERS DISAPPROVING _____ DATE: _____

_____ _____ OTHER: _____

_____ _____

_____ _____

ACTION OF AWARDING AUTHORITY DATE _____

APPROVED _____ DISAPPROVED _____

OTHER _____

SIGNATURE OF AUTHENTICATION _____

FIRE AND RESCUE DEPARTMENT

May 2, 2022

TO: Gregory Pease, Chief of Procurement

FROM: Keith Powers, Director/Fire Chief

SUBJ: **BID XF-0345-22 SCBA EQUIPMENT FOR NEW JFRD APPARATUS**

We have reviewed the bid tabulation submitted for Bid XF-0345-22 SCBA Equipment for New JFRD Apparatus and recommend awarding the bid to the sole respondent, Ten-8 Fire Equipment & Safety, LLC.

Total Bid Award: $141,355.62

Funding Source: 00111.123004.564290.0.0.0.0

If you have any questions, please let me know.

KP/tjh

TITLE: SCBA EQUIPMENT FOR NEW JFRD APPARATUS

BID NO: XF-0345-22

OPEN DATE: 04/06/22

ANALYST: Olive Wallace-Cohen

NO. INVITED: (23) No. Received: (1) No Bids: (0)

RECORDED BY: MELISSA PIERCE

ANNOUNCER: JOHN HERNANDEZ

TEN-8 FIRE EQUIPMENT & SAFETY, LLC

ITEM #	DESCRIPTION	QTY	Unit Price	Extended Price
1	MSA-G1FS422MB2C2LAA G1 SCBA H-P configured (Per Specifications)	18	$ 5,732.29	$ 103,181.22
2	MSA-10156424-SP G1 Cyl. RC, 4500 PSI 45 Min Carbon LP (Per Specifications)	33	$ 1,156.80	$ 38,174.40
	GRAND TOTAL			$ 141,355.62

Insurance Acknowledgement	✓
Delivery	100 Days
Conflict of Interest:	✓
Addendums ( ):	N/A

TERMS AND CONDITIONS
SCBA EQUIPMENT FOR NEW JFRD APPARATUS

1. SCOPE
The City of Jacksonville's Fire and Rescue Department is currently accepting bids to obtain a source of supply for the items/services as outlined in the bid documents provided. The purpose of this bid invitation is to obtain information about your firm and its ability to provide these items/services and to obtain pricing commitments for **SCBA Equipment for New JFRD Apparatus** as listed in the bid documents.

2. AWARD
Award will be **ALL or NONE**, whichever is in the best interest of the City of Jacksonville, to the lowest responsive, responsible bidder. Bidders must bid on all items to be considered for all or none award. The City reserves the right to reject any or all bids. ALL awards are subject to the availability of funds.

- As per Section 126.114 of the City of Jacksonville Ordinance Code, preference will be given to a responsive and responsible vendor offering American manufactured, assembled, or produced goods, and who is within 5% of the lowest responsive and responsible bidder. To receive this preference, the bidder must complete the attached Buy American Preference Compliance Certificate and attach supporting documentation and/or evidence attesting that at least 51% offered in the bid response is manufactured, assembled or produced in the United States.
    - Bidder is not required to submit for the Buy American Preference. Bidders may quote items less than 51% American made but will not be eligible for the preference.
    - Restrictions and exemptions may apply. Please refer to Section 126.114 for specifics.

3. TERM OF AGREEMENT
This is a one-time purchase.

4. PRE-BID CONFERENCE
Not Applicable

5. COMPLIANCE WITH SPECIFICATIONS
The bidder, by affixing their signature to the bid form submitted, agrees to provide the items/services in accordance with the bid documents provided. Bid only a single offering for each bid item. Multiple offerings, alternates (unless stated) and or stipulations may be cause for bid rejection. Bid only on forms provided herein unless otherwise stated. Bid submissions shall be in ink or typewritten. All corrections must be initialed.

6. STATE CONTRACTS
The City reserves the right to utilize contracts established by the State of Florida and or other governmental agencies for service(s) covered under this bid. The city reserves the right to cancel this contract in whole or in part for such service(s).

7. QUANTITIES

Quantities indicated reflect the fixed quantity to be purchased throughout the contract period. The City reserves the right to add or delete items, or increase the volume of services required, or not to make any purchase against this bid if it so deems necessary at any time during the contract period.

8. PRICES

All unit prices shall include freight, delivery, and handling charges to the delivery location as outlined in the bid documents.

9. ESCALATION / DE-ESCALATION

All pricing submitted shall remain firm for the initial term period. Upon renewal (if applicable), a supplier may submit in writing a request for price escalation/de-escalation for the percentage of change as listed in the Consumer Pricing Index (CPI) and/or documentation notifying of an industry wide increase. The City reserves the right to decline any price increase request.

10. DELIVERY

Jacksonville Fire and Rescue Department, 355 Ellis Road, Jacksonville, Florida 32254 Attn: Tactical Support. A packing list shall accompany all shipments, which shall indicate, at a minimum, the following: purchase order number, item number and description, date of shipment, quantity ordered, and shipped, unit price, and unit of measure.

11. PICK UP AND RETURNS

The City reserves the right to return an order in whole or in part if the merchandise is not in compliance with the bid specifications. The City or its agencies will determine compliance with bid specifications. Pick-up and returns will be made within 48 hours of notification at no charge to the City or its agencies.

12. SUPPLIER ACCESSIBILITY

The City or its representative must be able to contact, during normal business hours, by telephone or email any supplier providing goods or services to the City or its agencies. Any supplier accessibility requirements outlined in the specifications supersede this section.

13. REPORTING

The City may request, during the term of this bid, reports including but not limited to; usage, pricing, and delivery. Suppliers will be required to provide reports requested in hard copy and electronic format as required.

14. INVOICING

Invoices will be issued once supplies/services are delivered and/or rendered to the City of Jacksonville or its agencies. At a minimum, invoices must include: purchase order number or contract number, item number and description, date of shipment, quantity ordered and shipped, unit prices, unit of measure, and extended totals. Payment terms are Net 30 days. All invoices must be submitted through 1Cloud and/or e-mailed to jfrdprocurement@coj.net.

15. INSURANCE / INDEMNIFICATION

Each supplier shall maintain, for the entire term of this bid, current insurance coverage as stated in the bid documents. All insurance certificates shall list the City of Jacksonville as an additional insured.

SPECIFICATION
SCBA EQUIPMENT FOR NEW JFRD APPARATUS

MSA
The Safety Company

MSA G1 SCBA (4500)

I. Approvals:

1. Apparatus shall be approved by the National Institute for Occupational Safety and Health (NIOSH), under 42 CFR, Part 84 for chemical, biological, radiological, and nuclear protection (CBRN) with 30-, 45- or 60-minute-rated service life and compliant with all requirements of the National Fire Protection Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus.
2. Units equipped with integrated PASS device must meet requirements of NFPA 1982, 2013 edition.
3. Units equipped with emergency egress system shall also comply with NFPA 1983 Standard on Fire Service Life Safety Rope and System Components, 2012 Edition; Type: Escape.
4. Units equipped with accountability system must meet minimum requirements for FCC part 15 and part 90.

II. Specific Requirements:

Facepiece

1. Facepiece shall have removable inhalation check valve to prevent exhaled air from entering and contaminating regulator (demand valve).
2. Facepiece shall have open port to provide miniscule breathing resistance when regulator is not attached.
3. Facepiece shall not contain electronic components.
4. Facepiece shall provide means to display to user with visual indicators for HUD.
5. Facepiece shall have icon for HUD system status indicators.
6. Facepiece shall have regulator attachment that does not bear any weight on lens.
7. Facepiece shall have effective field of view of 86% and overlapping field of view of 122% without attached component.
8. Facepiece shall be available in three sizes in Hycar Rubber (small, medium, large).
9. Facepiece shall have nosecup comprised of silicone rubber and available in three sizes (small, medium, large).
10. Facepiece shall have three head harness options constructed of flame/heat resistant assembly: Kevlar Head Harness (4-pt. adjustable), Kevlar 5-pt. adjustable and rubber 5-pt. adjustable.
11. Facepiece shall have universal lens that can be used with all three facepiece sizes, shall be comprised of non-shatter type material and shall be field-replaceable.
12. Lens shall be hard coated on outside and anti-fog coated on inside.
13. Facepiece shall have optional flame/heat-resistant fabric or rubber neck strap to carry facepiece in ready position for quick donning.

14. Facepiece shall have removable speaking diaphragm with aluminum-coated membrane, suitably protected and located centrally on facepiece for optimal voice projection.
15. Facepiece shall have exhalation valve that is to be serviceable without special tools.
16. Facepiece shall be capable of water submersion for cleaning and disinfection.
17. Facepiece provides optional RFID chip for asset and maintenance tracking.

Mask-Mounted Regulator (Demand Valve): Push-to-Connect

1. When doffing regulator, regulator disengagement shall simultaneously stop airflow and release regulator.
2. Regulator shall house electronic module that functions as microphone and HUD system.
3. Regulator shall be equipped with variable flow bypass.
4. Regulator shall not have exposed wiring in order to prevent snags and increase product durability.
5. Regulator shall have two cover options: hard cover or purge cover.
6. Regulator shall have fewer than 35 parts that are easily replaceable without special tools.
7. Regulator shall have two options for air-supply hose:
    1) Continuous hose from pressure reducer to regulator.
    2) Quick-connect hose that terminates on shoulder in front of user.
8. Regulator must be equipped with positive protection Tetraplex Shield membrane that covers diaphragm, preventing permeation of CBRN agents.
9. Regulator shall have optional RFID chip for asset and maintenance tracking.

Heads-Up Display (HUD)

1. Heads-Up Display (UD) System shall be integrated within regulator, eliminating snag hazards and increase product durability.
2. HUD shall be powered from central power system.
3. HUD System shall eliminate crosstalk among firefighters.
4. HUD System shall be immune to radio frequency interference (RFI) and must function properly in close proximity to fire service hand-held radios.
5. HUD System shall separate pressure indicators from status indicators:
    - Left: status indicators.
    - Right: pressure indicators.
6. HUD system shall provide user with remaining cylinder air volume, available in four increments through series of four colored LEDs:
    - Four green lights — 76 to 100% cylinder volume
    - Three green lights — 51 to 75% cylinder volume
    - Two flashing amber lights — 36 to 50% cylinder volume
    - One flashing red light — 0 to 35% cylinder volume
7. HUD status indicators shall be icon-based and display battery life warning, PASS alarms, EVACUATE indicator, and secondary alarm indicator.
8. HUD shall incorporate photoelectric sensor that senses ambient light conditions, automatically adjusting display to one of multiple pre-programmed light intensities.
9. Buddy lights shall be visible from outside of firefighter's facepiece.
10. HUD system shall allow user to select from four modes of operation:
    1) Continuous pressure mode that shall always have pressure LEDs on.
    2) Intermittent pressure mode that shall turn on first three increments when reached for 20 seconds.
    3) Oscillating pressure mode that shall brighten and dim LEDs every 20 seconds.
    4) Mixed pressure mode that shall turn on first two increments when reached for 20

seconds and last two increments are in continuous mode.

11. HUD shall be field-removable and replaceable without use of special tools.

Universal Air Connection (UAC)

1. System shall be capable of:
    1) Refill within immediately dangerous to life or health (IDLH) atmospheres.
    2) Transfilling between two SCBA wearers (connection allows for donation and receipt of air), providing emergency breathing system (EBS) while maintaining NIOSH approvals.
    3) Quickly refilling (approximately one-minute duration) SCBA cylinder from mobile compressor, cascade system or RIT pack.
    4) Extending wearer's air supply over longer duration when remote cascade system or other compressed gas source is located within remote area.
2. Primary UAC shall be illuminated when supply pressure reaches Low Pressure Warning Alarm or can be configured to optional medium pressure warning alarm.
3. SCBA shall have secondary options for UAC to be mounted on user's waist.

Pressure Reducer (First-Stage Regulator) with Primary Low Pressure Warning Device

1. Pressure reducer shall incorporate downstream valve to ensure fail-safe design when in open position.
2. Pressure reducer shall incorporate bell alarm mechanism.
3. Bell alarm mechanism shall be an air-actuated, continuously ringing audible warning alarm, automatically operating when supply cylinder air pressure reaches approximately 35% of rated service life.
4. Bell alarm mechanism shall cover multiple levels of frequencies to cover all hearing levels.
5. Bell alarm mechanism shall be user-accessible while wearing SCBA.
6. Pressure reducer reduces cylinder pressure to outlet pressure not to exceed 115 psi; outlet pressure must be adjustable.
7. Pressure reducer shall have flow capacity of 700 liters per minute at full pressure.
8. Pressure reducer shall have two options for cylinder connection type: threaded or quick-connect.
9. Quick-connect connection shall not be removable from cylinder while under pressure.
10. Pressure reducer shall have two options for cylinder connection location: remote connection or direct connection.
11. Pressure reducer shall be capable of converting from threaded to quick-connect or vice versa.
12. Pressure reducer body shall be constructed of high-strength aluminum alloy and anodized with Teflon hard coat to minimize corrosion and wear of internal and external components.
13. Pressure reducer shall be sealed system that does not allow moisture to enter valve components.
14. Pressure reducer shall have no more than 42 individual regulator replacement parts.
15. Pressure reducer shall not require special tools for disassembly.
16. Pressure reducer shall have two accessory ports, one medium pressure and one high pressure.

Cylinders

1. Cylinders with 4500 psig operating pressure must be available in 30-, 45- and 60-minute durations.

2. Cylinder shall be constructed of deep-drawn, seamless aluminum liner that is fully wound over entire surface (except for thick neck area) with high-strength carbon fiber filaments impregnated with epoxy resin.
3. Cylinder shall contain cylinder valve that shall incorporate pressure gauge to indicate cylinder pressure at all times. Pressure gauge face shall be luminescent. Hand wheel shall be placed at 90° angle from cylinder axis.
4. Cylinder valve shall be available in two options: remote connection or direction connection
5. Cylinder valve shall incorporate flow control insert to limit air flow over hand wheel's first half- rotation, minimizing propulsion thrust in event that cylinder is mishandled.
6. Cylinder valve shall incorporate CGA thread that can be converted to quick connect cylinder without special tools.
7. Cylinder shall have bracket and boot that can be user-installed and provide positioning and added security of cylinder to backplate.

PASS Device

1. PASS device shall contain power, control and battery modules.
2. Power module shall provide power to all electronic SCBA components from battery module and act as central power system.
3. Power module shall act as central command center, distributing all information and data among electronic components.
4. Battery module shall be powered by six C-cell batteries or one lithium-ion rechargeable battery.
5. Expected battery service life batteries shall be 4 to 6 months on average for units with speaker module (without telemetry) and 3 to 5 months on average with telemetry.
6. PASS device shall be designed for battery level check and removal of batteries while SCBA remains in jump seat.
7. Power module shall be capable of illuminating UAC fitting when supply cylinder reaches 35% of rated service time.
8. Control module shall have analog and digital display for added redundancy. Analog gauge must be positioned above digital display as viewed by user.
9. Control module shall be equipped with full color graphical display. Display shall be reprogrammable and capable of future integrations. Display's background color coordinates with HUD pressure status.
10. Control module shall automatically provide information to user when placed in upright position. Device can be manually activated by pressuring reset button.
11. PASS device shall use single line to connect power and control module.
12. Control module shall have two reset buttons that perform same function no matter which button is pressed.
13. Control module shall have alarm button to activate full alarm and is to be illuminated.
14. PASS device shall be capable of being reprogrammed to fire department standard operating procedures (SOP). Using PC software program, configuration tag can be created and tagged on each device needed. Reprogramming options are as follows:
    1) Medium pressure alarm.
    2) Pressure drop alarm.
    3) Primary temperature alarm.
    4) Secondary temperature alarm.
    5) Audible low-pressure alarm

15. PASS device shall be equipped with buddy lights on firefighter's front and back and viewable from 360° view; two buddy lights on front of user and four buddy lights in back of user.
16. PASS device shall have colored buddy lights: green (pressure above 50% and no alarms), yellow (pressure between 36 and 50%) or red (below 36% or alarms are active).
17. Power module shall be equipped with dual sound emitters; sound emitters shall perform at minimum 100 dBa in room temperature.
18. PASS device shall be capable of storing up to 25 hours of use information in event log form that are generated each time SCBA is pressurized. Event logs must indicate on/off cycles, alarms, alarm reset, and tagging events.
19. PASS device shall be capable of storing periodic logs. Periodic logs must indicate cylinder pressure for each SCBA pressurization stored at 15-second intervals.
20. PASS device's event and periodic logs shall provide ability to download to personal computer for maintenance records or for use in incident investigations.
21. PASS device shall be immune to radio frequency interference (RFI) and must function properly in close proximity of fire service hand-held radios.
22. PASS device shall have optional time-remaining display. Time remaining function must update calculations every 30 seconds based upon user's previous three minutes of air consumption. Initial calculation will appear after three minutes. Calculations can be made to zero pressure, low pressure alarm or medium pressure alarm.
23. PASS device shall employ gasket perimeter seal to provide highest protection level against water ingress, while providing ability to upgrade or repair electronics.
24. PASS device shall be capable of electronically storing user's name into memory via ID tag.
25. PASS device shall be removable with no more than two screws.
26. Control module shall have service mode that provides ability to see number of hours used, connect to PC and firmware versions.
27. Control module shall incorporate rubber boot for added protection and is to be replaceable.
28. Power and Control Modules shall have optional RFID chip for asset and maintenance tracking.

Speaker Module

1. Speaker module shall provide amplified speech that removes inhalation breath noise.
2. Speaker module shall provide at minimum, 70 dBa output.
3. Speaker module shall turn on and off with PASS device.
4. Speaker module shall be powered by central power system.
5. Speaker module shall be capable of passing NFPA heat and immersion leakage test (not NFPA-required).
6. Speaker module shall be positioned on chest and attached to shoulder straps.
7. Speaker module shall be capable of being mounted on either shoulder.
8. Speaker module shall easily be attached and removed without special tools.
9. Speaker module shall have light to indicate that device is powered on.
10. Speaker module shall have on/off button to allow user to manually power off as needed.

Emergency Escape Breathing Support System

A. As option, emergency escape breathing support system must be accommodated by SCBA.
B. System must be available with common SCBA quick-disconnect fitting.
C. System shall connect to intermediate pressure side of SCBA, downstream of pressure reducer.

D. System shall have both male and female connections.

Carrier and Harness

1. Shoulder harness shall have separate left and right pads for easier and less costly replacement.
2. Shoulder harness shall have retro-reflective markings for better visibility within low light conditions.
3. Shoulder harness shall have localized frictions pads on shoulders to prevent slippage.
4. Shoulder harness shall be available in standard and serviceable tunnel.
5. Shoulder harness shall have improved color stability up to 600 degrees Fahrenheit.
6. Shoulder harness shall be capable of washing 40 times before color fastness fades.
7. Shoulder harness shall have optional chest strap.
8. Harness design shall have Kevlar webbing.
9. Shoulder harness shall have accessory attachment point available for facepiece or pouch and can be moved from left to right shoulder strap or vice versa.
10. Shoulder harness shall differentiate pad inside from pad outside by color; pad inside is grey and outside is black.
11. Waist pad shall have this option:
    1) Basic – basic pad with straps attaching directly to backplate.

12. Backplate shall have two side handles and one top handle that are accessible with gloved hand.
13. Backplate side handles shall be capable of 500 lbs. of force.
14. Backplate top handle shall be capable of 1000 lbs. of force.
15. Backplate cylinder band shall be available in two types: metal or fabric.
16. Waist pad shall be of rigid construction to allow for easy donning and support.
17. Waist straps shall be double-pull forward design.
18. Harness design shall have regulator keeper for storage that can be attached to waist strap or chest strap.
19. Regulator keeper shall allow regulator to be connected at any angle.

Weight

1. Weight of SCBA shall not exceed 24 lbs.
2. Weight of facepiece (without regulator, with communications) shall not exceed 1.4 lbs.
3. Weight of cylinder and valve assemblies (empty) shall not exceed:

Cylinder Type	Weight
Carbon-wrapped L30	8 lbs. 0 oz.
Carbon-wrapped H30-SL	7 lbs. 4 oz.
Carbon-wrapped H45	9 lbs. 7 oz.
Carbon-wrapped H45-SL	9 lbs. 10 oz.
Carbon-wrapped H60-SL	11 lbs. 12 oz.

Power Source:

1. All components of the SCBA must be powered from single power source
2. Power source must have the ability to interchange between alkaline and rechargeable without making adaptations to the SCBA itself
3. Alkaline battery must be powered by six C cell batteries
4. Alkaline battery must weigh no more than 1lbs. 5 oz.

Products must be new. Refurbished, Remanufactured, Rebuilt or Used parts are not acceptable.

No Substitute

Vendor MUST be an authorized dealer/reseller/distributor of equipment/software and specifically must be a MASA certified reseller.

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