Pittsburg County, Oklahoma COUNTY PURCHASING OFFICE

Pittsburg County Court House McAlester, Oklahoma Phone: (918) 423-4934

INVITATION TO BID

	REVIEW TERM	DATE ISSU	JED		
SIDE RELATING TO SUBMISSION OF THIS BID.					24-Sep-12
Notarized Affidavit completions and signature required on reverse side.					
BID NUMBER			BID CLOSING DATE AND HOUR	REQUIRED DELIVERY DATE	
Bid # 5			October 8, 2012 @ 10:00AM	Days after award of Purchase Order	
TERMS:				DATE OF [DELIVERY:
Item	Quantity	Unit of issue	DESCRIPTION	Unit Price	Total
		ISSUE	The Board of County Commissioners wishes to advertise for the following for Haileyville Volunteer Fire Department: Four (4) Self-Contained Breathing Apparatus (SCBA) & Four (4) additional cylinders with funds provided by County Fire Tax Dollars See specifications attached		

TERMS AND CONDITIONS

- Sealed bids will be opened in the Commissioner's Conference Room, Pittsburg County Courthouse, McAlester, Oklahoma, at the time and date shown on the invitation to bid form.
- 2. Late bids will not be considered. Bids must be received in sealed envelopes (one to an envelope) with bid number and closing date written on the outside of the envelope.
- 3. Unit prices will be guaranteed correct by the bidder.
- 4. Firm prices will be F.O.B. destination.
- 5. Purchases by Pittsburg County, Oklahoma, are not subject to state or federal taxes.
- 6. This bid is submitted as a legal offer and any bid when accepted by the County constitutes a firm contract.
- 7. Oklahoma laws require each bidder submitting a bid to a county for goods or services to furnish a notarized sworn statement of non-collusion. A form is supplied below.
- 8. Bids will be firm until delivered

(DATE)

	worn before this 2011			
Firm:				
My commission expires		Signed by:	Title:	
		Address:	Phone:	
NOTARY PUBLIC (CLERK OR JUDGE)		City:	State	
			Z ip	

RESOLUTION

To

Advertise

The Board of County Commissioners, Pittsburg County, met in regular session on Monday, September 24, 2012.

WHEREAS, the Board of County Commissioners wishes to advertise for the following for the Haileyville Volunteer Fire Department:

Four (4) Self-Contained Breathing Apparatus (SCBA) and Four (4) Additional cylinders with funds provided by County Fire Tax Dollars

A bid package containing specifications and an "Invitation to Bid" are available at the Pittsburg County Clerk's Office, 115 East Carl Albert Parkway, Room 103, McAlester, Oklahoma, 74501 or online at pittsburg.okcounties.org.

THEREFORE, each competitive bid submitted to the county must be accompanied with an affidavit for filing with the competitive bid form, as required by 61 O.S. § 138.

Sealed bids will be received and filed with the Pittsburg County Clerk and opened on Monday, October 8, 2012 at 10:00 a.m. in the conference room of the Board of County Commissioners, Pittsburg County Courthouse, 115 East Carl Albert Parkway, McAlester, Oklahoma. Contract will be awarded to the lowest or best bidder. The Board of County Commissioners, Pittsburg County, reserves the right to reject all bids and re-advertise.

BOARD OF COUNTY COMMISSIONERS PITTSBURG COUNTY, OKLAHOMA

GENE ROGERS, Chairman

KEVIN SMITH, Member

ONNIE YOUNG, Member

ATTEST:

JANICE BARKER, County Clerk

Spec Sheet for SCBA

I. Approvals:

- 1. The 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 a 30, 45, or 60-minute-rated service life and compliant with all requirements of the National Fire Protection Association's 2007 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus.
- 2. Units equipped with an integrated PASS must meet the requirements of NFPA 1982, 2007 edition.
- 3. Units equipped with an emergency egress system, shall also comply with the NFPA 1983 Standard on Fire Service Life Safety Rope and System Components, 2006 Edition; Type: Escape.
- 4. Units equipped with an accountability system must meet the minimum requirements for FCC part 15 & part 90.

II. Specific Requirements:

1. Facepiece

- A) The facepiece shall be made of Hycar rubber and be available in small, medium and large.
- B) Two sizes of removable nosecup. The nosecup shall contain a voice collector system which enhances unamplified speech transmission.
- C) The facepiece shall have an inhalation check valve and exhalation valve to prevent exhaled air from entering and contaminating the mask-mounted regulator.
- D) The facepiece shall have a speaking diaphragm with aluminum-coated membrane suitably protected, and located centrally on the facepiece for optimal voice projection.
- E) The lens shall be field-replaceable and of a non-shatter type and shall fit all three sizes of the facepiece
- F) The facepiece head harness shall be a flame and heat-resistant Kevlar assembly featuring a suspension with five-points of attachment and four points of adjustment.
- G) The facepiece shall be HUD ready.

2. External HUD System

- A) The Heads-Up-Display, HUD System, shall be wireless to eliminate snag hazards and provide modularity for easy maintenance.
- B) The HUD shall prevent the ability to cross talk between firefighters.
- C) The HUD System shall be immune to radio frequency interference (RFI), and must function properly in the close proximity of fire service hand-held radios.
- D) The HUD shall provide the user with the remaining volume of air in their cylinder in 25% increments through a series of 4 colored LED's.
- E) The light logic used to convey remaining cylinder volume shall be as follows:

Four Green Lights - 76 to 100% Cylinder Volume
Three Green Lights - 51 to 75% Cylinder Volume
Two Flashing Amber Lights - 26 to 50% Cylinder Volume
Flashing Red Light - 0 to 25% Cylinder Volume

- F) The HUD system shall allow the user to select between two modes of operation
 - a) Continuous lights on mode or
 - b) An intermittent lights on mode for power conservation.
- G) The HUD shall indicate to the user of PASS pre-alarms with a blinking orange light seen inside the facepiece.
- H) The HUD shall provide the user with a low-battery indicator.
- I) The HUD shall provide the user and their partner (by means of a buddy light) with a visual alarm indication of a low air cylinder.
- j) The transmitter shall incorporate a refresh button that permits a user to update their display or change the receiver's mode of operation.
 - L) The HUD shall incorporate a sonically welded seal to provide the highest level of protection against water ingress.
 - M) The receiver shall use three AAA alkaline batteries. The batteries shall be contained in removable cartridge for easy replacement. The radial-sealed battery compartment shall incorporate an O-ring seal.
 - N) The HUD shall be field removable and replaceable without the use of tools.
 - O) The expected service life of the batteries with frequent use of the Heads Up Display shall be 8 to 12 months, on average.

3. Internal HUD System

- A) The Heads-Up-Display, HUD System, shall be wireless to eliminate snag hazards and provide modularity for easy maintenance.
- B) The HUD shall prevent the ability to cross talk between firefighters.
- C) The HUD System shall be immune to radio frequency interference (RFI), and must function properly in the close proximity of fire service hand-held radios.
- D) The HUD shall provide the user with the remaining volume of air in their cylinder in 25% increments through a series of 3 colored LED's.

E) Internal HUD shall be contoured to fit securely within facepiece to reduce snag hazards.

Three Green Lights - 76 to 100% Cylinder Volume
Two Green Lights - 51 to 75% Cylinder Volume
Two Flashing Amber Lights - 26 to 50% Cylinder Volume
Flashing Red Light - 0 to 25% Cylinder Volume

- F) The Internal HUD receiver shall display remaining air pressure, battery life warning, and PASS pre-alarm and EVACUATE indicators.
- G) The HUD system shall allow the user to select between two modes of operation
 - 1) A continuous lights on mode or
 - 2) An intermittent lights on mode for power conservation.
- H) The HUD shall incorporate a photoelectric sensor that senses ambient light conditions automatically adjusting the display to one of 16 pre-programmed light intensities.
- I) The HUD shall be field removable and replaceable without the use of tools.
- J) Three buddy lights shall be visible from the outside of a firefighter's facepiece.
- K) The Internal HUD receiver shall have a green test button.
- L) The Internal HUD battery should last four to eight months and use a single CR2 battery.

4. Clear Command

- A) Must be available in two versions: amplifier and amplifier with radio interface.
- B) Design must allow shared-use of the amplifier so the individual/personnel issue is not required.
- C) Communication system must feature a microphone assembly mounted internally to the SCBA facepiece, designed to maximize voice communication clarity.
- D) The amplification portion must feature a large diameter (2") amplifier speaker for optimal clarity and volume.
- E) Facepiece mechanical voicemitter must still function even when the communication device is installed on the facepiece.

5. Universal Rescue Connection

- A.) The system shall be capable of:
 - 1. Transfill and refill in immediately dangerous to life or health (IDLH) atmospheres.

- 2. Quickly refilling (approximately one minute) an SCBA cylinder from a mobile compressor, cascade system or RIT Pack.
- 3. Extend the wearer's air supply over longer duration when a remote cascade system or other compressed gas source is located in a remote area.
- 4. Transfilling between two SCBA wearers (connection allows for donation and receipt of air), providing an emergency breathing system (EBS), while maintaining NIOSH approvals.

6. First-Stage Regulator:

- A) Reduces the cylinder pressure to an outlet pressure not to exceed 100 psi. Regulator outlet pressure must be adjustable.
- B) The pressure reducer shall incorporate a down stream flow to ensure fail-safe in an open position.
- C) Regulator redundancy shall be achieved by two inter-nested long-life springs.
- D) The regulator body shall be constructed of a high strength heat treated aluminum alloy, and plated with a Teflon hard coat anodize to minimize corrosion and wear of internal components.
- E) There shall not be more than 14 individual replacement parts on the regulator.
- F) The regulator shall be mounted on a slide bracket to facilitate easy cylinder attachment and top prevent binding of high-pressure hose.
- G) The regulator must not require any special tools for disassembly.

7. Mask-Mounted Regulator: (Slide-to-Connect)

- A) The second stage regulator shall not obstruct or reduce the field of vision of the wearer when installed on the facepiece.
- B) The second stage regulator must be equipped with Positive Protection Tetraplex Shield membrane that covers the diaphragm, preventing against the permeation of CBRN agents.
- C) When doffing the regulator, the disengagement of the regulator from the facepiece must simultaneously stop the flow of air and release the regulator.
- D) The regulator must be equipped with a variable flow by-pass.
- E) The second stage regulator must be labeled with a CBRN notation.
- F) An over-the-shoulder air-supply hose routed through a shoulder strap tunnel to the first stage regulator.
- G) As an option, the detachable regulator must have a slide-to-connect attachment to the facepiece, with an audible click. The regulators forked upper attachment slides down a track that is molded into the inhalation assembly cover of the facepiece. This provides an ambient air stand-by mode for the regulator, allowing the user to go on air quickly with a simple push of the regulator into the facepiece. In this configuration, the regulator must be restricted from rotation after attachment to maintain a consistent location of the regulator controls with respect to the user.

H) The second stage regulator must not require any tools for disassembly. Number of parts in the second stage regulator is not to exceed a count of 28 parts.

8. Mask-Mounted Regulator: (Push-to-Connect)

- A) The second stage regulator shall not obstruct or reduce the field of vision of the wearer when installed on the facepiece.
- B) The second stage regulator must be equipped with Positive Protection Tetraplex Shield membrane that covers the diaphragm, preventing against the permeation of CBRN agents.
- C) When doffing the regulator, the disengagement of the regulator from the facepiece must simultaneously stop the flow of air and release the regulator.
- D) The regulator must be equipped with a variable flow by-pass.
- E) The second stage regulator must be labeled with a CBRN notation.
- F) An over-the-shoulder air-supply hose routed through a shoulder strap tunnel to the first stage regulator.
- G) As an option, the detachable regulator must have a push-to-connect attachment to the facepiece. This option of the regulator shall feature a non-indexing design, capable of mounting to the facepiece in any orientation. In this configuration, the regulator must rotate freely when connected to the facepiece, maximizing the user's freedom of head movement.

9. Primary Low Pressure Warning Device:

- A) An audible bell alarm shall be an air-actuated, self-cocking, continuous ringing audible warning bell automatically operating when air pressure in the supply cylinder reaches approximately 25% of the rated service life.
- B) An audible bell alarm must cover multiple levels of frequencies to cover all hearing levels.

10. Cylinders:

- A) Cylinders with 2216 psig operating pressure must be rated for 30 minutes. Cylinders with 4500 psi operating pressure must be available in 30, 45 and 60 minute durations.
- B) Cylinders must be available in two operating pressures 2216 & 4500 psi.
- C) The valve shall incorporate a flow control insert to limit the airflow over the first half-rotation of the handwheel, minimizing propulsion thrust in the event the cylinder is mishandled.
- D) The cylinder shall contain a closing valve which shall incorporate a pressure gauge to indicate the pressure in the cylinder at all times. The pressure gauge face shall be luminescent. The handwheel shall be at a 900 angle from the longitudinal plane of the cylinder.

- E) The cylinder shall be constructed of a deep-drawn, seamless aluminum liner that is fully wound over its entire surface (except for the thick neck area) with high-strength carbon fiber filaments impregnated with epoxy resin.
- F) The cylinder shall have a minimum 2-inch wide luminescent band to enhance visibility of the wearer.

11. Carrier & Harness:

- A) The backplate shall be constructed of a glass reinforced composite material that conforms to the user's back and provides spine relief for wearers with protruding vertebrae.
- B) The backplate shall be equipped with large side handles for pulling and dragging a firefighter to safety. Each handle shall be capable of holding a 400 lb load in the vertical and horizontal direction, with a combined load of 800 lbs.
- C) The backplate shall be equipped with a centrally located carabiner attachment point for the purpose of dragging a downed firefighter. The attachment point shall be capable of holding a 1000lb load.
- D) The backplate shall be equipped with a first stage regulator slide for ease of cylinder connection.
- E) An adjustable, stainless steel cylinder band having a quick-opening device at one end to properly retain various size cylinders. The cylinder band must retain its open shape for easy cylinder change-out.
- F) Two padded Nomex shoulder straps, each having a Kevlar strap reinforcement that provides retention if the Nomex fibers are weakened. The shoulder straps shall have retro reflective markings and shall have anti-rotation-style buckles for ease of adjustment.
- G) The shoulder straps shall incorporate high visibility reflective panels.
- H) All harness components shall be affixed with tri-bar slides for easy field replacement.
- I) The friction buckles of the shoulder straps and waist strap shall be constructed of forged stainless steel for maximum strength and resistance to wear.
- J) An optional mid-connect Kevlar-blend chest strap with snap-type fastener that properly positions the shoulder straps allowing full arm movement.
- K) An adjustable double-pull Kevlar waist belt.
- L) A metal push-button seat belt-type buckle.

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- N) The left shoulder strap shall be equipped with a retaining clip to stow the facepiece while not in use.
- O) The belt assembly shall be equipped with a regulator retainer for safe storage of the regulator while not in use.

13. Shoulder-Mounted UAC Quick Fill System Accessory

A) Positioned on the front of the user for easy access.

- B) Must be capable of Transfilling and refill in immediately dangerous to life or health (IDLH) atmospheres.
- C) Must refill (approximately one minute) an SCBA cylinder from a mobile compressor or cascade system.
- D) Shall be capable of extending the users air supply over longer duration when a remote cascade system or other compressed gas source is located in a remote area.
- E) Must be capable of Transfilling between two SCBA wearers, providing an emergency breathing system (EBS), while maintaining NIOSH approvals.

14. PASS Device

- A) The PASS device is a combination integrated PASS and HUD Transmitter that shall be contained in a single enclosure and shall be easily replaced in the event of fire ground damage.
- B) The PASS device unit must be immune to radio frequency interference (RFI), and must function properly in the close proximity of fire service hand-held radios.
- C) The unit shall be capable of storing up to 25 hours of use information, in the form of sessions that are generated each time the SCBA is pressurized. The sessions must indicate the day, time, user's name, cylinder pressure, duration of use, and time of alarm (PASS and thermal), for each pressurization of the SCBA stored on a minute-by-minute basis.
- D) The sessions must provide the option of being downloaded to a personal computer for addition to maintenance records, or for use in incident investigations.
- E) The PASS device must utilize a perimeter seal (sonic weld) to provide the highest level of protection against water ingress.
- F) The PASS device must be equipped with "buddy lights" on the front and back of the firefighter. The purpose of the "buddy lights" is to easily identify firefighters that are in immediate need of assistance. Buddy lights are positioned to face one towards the firefighter and one away from the firefighter.
- G) The power module shall be equipped with dual sound emitters. The sound emitters shall perform at a minimum of 95 dBa after heat emersion of five minutes at 500 Degrees Fahrenheit.
- H) The PASS device must be equipped with time remaining display and an optional thermal sensor. The time remaining must update calculations every 30 seconds, based on the user's previous 3 minutes of air consumption. The initial calculation will appear after 3 minutes.
- 1) The PASS device and power module shall be powered by four C-cell batteries.
- J) The expected service life of the batteries with frequent use on the transmitter shall be 6 to 8 months, on average, on units without telemetry and 4 to 6 months, on average, with telemetry.
- K) If equipped with the telemetry, the unit shall have the capability of electronically storing the user's name into memory through an ID Tag.

15. Emergency Escape Breathing Support System (Buddy Breather)

- A) As an option, an emergency escape breathing support system must be accommodated by the SCBA.
- B) The system must be available with a common SCBA quick-disconnect fitting.
- C) The system shall connect to the intermediate pressure side of the SCBA, downstream of the first stage regulator.
- D) The system shall have both male and female connections.

17. Weight

- A) The weight of a basic SCBA (less cylinder) shall not exceed 13 lbs, 4 oz.
- B) The weight of the cylinder and valve assemblies (empty) shall not exceed:

Cylinder Type	Weight		
Carbon-Wrapped L30	8 lbs, 0 oz.		
Carbon-Wrapped H30	7 lbs, 4 oz.		
Carbon-Wrapped H45	9 lbs, 7 oz.		
Carbon-Wrapped H45LP	9 lbs, 10 oz.		
Carbon-Wrapped H60	11 lbs, 12 oz.		