532-2022 APPENDIX A

Winnipeg Fire Paramedic Service

Self-Contained Breathing Apparatus Evaluation

EVALUATION FORM

1. Initial Evaluations

- a. Overall package profile (uncluttered)
- b. Face piece profile (uncluttered)
- c. Voice amplifier profile / size (if equipped)
- d. Overall package perceived weight / balance while donned
- e. Overall package size height / width / depth while donned
- f. Straps well constructed and padded
- g. Buckles and/or fasteners operate easily
- h. Straps are long enough / not too long
- i. Cylinder securely fastened to back frame
- j. Cylinder gauge easy to read when in back frame
- k. Ease of battery change number of batteries number of battery locations tools needed

2. Donning and Off-Air Breathing

- a. Harness opens large enough for entry
- b. Overall comfort of back frame and harness
- c. Weight distribution and balance
- d. Mask location/management when not being worn
- e. Facepiece harness opens large enough for entry

- f. Ease of facepiece harness adjustment
- g. Comfort and balance of facepiece when worn
- h. Comfort of seal against face
- i. Facepiece resists fogging while not on air
- j. Ease of breathing while not on air
- k. Cylinder valve easy to reach and turn on
- I. Hood fit well around facepiece no gaps
- m. Straps easy to locate and adjust when donning
- n. Shoulder straps slide easily into place on shoulders no bunching or grabbing on bunker coat
- o. Clarity of communication with facepiece on
- p. Helmet fits well to facepiece
- q. Compatibility with thermal imaging camera, radio, flashlight, and other equipment

3. On Air and Pre-entry Test

- a. Regulator easily dismounts from holster
- b. Regulator docks easily to facepiece with gloves on
- c. Bypass/Purge valve operates easily with gloves on
- d. Remote gauge/ control module easy to read with facepiece donned
- e. Remote gauge / control module easy to light up to facilitate viewing in the dark
- f. Field of view with regulator in (look down, up, side to side without moving your head)
- g. Ease of regulator air shutoff and doffing
- h. Clarity of communication while on air
- i. Vision is not distorted by lens when looking to side, up, down

4. Peak Load Performance

- a. Ease of breathing during peak workload
- b. Comfort during stair climb (no binding or strain)

- c. Facepiece resists fogging
- d. Facepiece resists migration upon perspiration
- e. Facepiece leaks at seal
- f. Facepiece requires re-adjustment due to migration or leaks

5. Harness Security / Chopping Test

- a. Harness does not restrict movement during task
- b. Hoses, gauge and other components don't interfere
- c. SCBA stays secure & balanced on back
- d. Straps stay secure & don't loosen during activity
- e. Facepiece remains secure/no leakage

6. Harness Freedom / Pike Pole Pulling

- a. Freedom to perform overhead task
- b. Back of helmet doesn't contact cylinder
- c. Mask does not impede upward vision
- d. Facepiece seal leaks while looking up

7. Balance and Reaching

- a. SCBA is secure when reaching
- b. Harness allows stretching of arms
- c. Vision is not distorted for hand-eye tasks

8. Face piece Radio Communications

- a. Clarity of radio audio via supplied speaker (headset or other)
- b. Clarity of voice communications as delivered by face piece microphones
- c. Ease of use of PTT and other controls
- d. Reliability and performance of SCBA integration with department radios/continuity of communications

9. Search and Rescue

- a. Low pressure alarm, volume
- b. Ease of identifying low pressure alarm (hear, feel, see)
- c. Ability to read remote gauge in darkness
- d. Ability to communicate with crew while in low air alarm, can you easily lessen the sound of the alarm in order to communicate
- e. Ability to communicate over radio while in low air alarm
- f. Ability to hear other crew members low air alarm from different room and from outside the building

10. Cleaning

- a. Facepiece cleaning is a simple procedure
- b. Harness and back frame are easy to clean
- c. SCBA harness and back frame are easy to clean
- d. Should voice amp and/or HUD be removed for thorough cleaning
- e. Does inside of regulator require decontamination to prevent cross contamination between Firefighters. Will this require drying time to prevent regulator freeze-up?

11. Overall General Evaluation

- a. Facepiece
- b. Backframe, Harness, Fasteners
- c. Low Pressure Alarm (mechanical)
- d. Regulator connection, ease of use, ease of maintenance
- e. HUD features, ease of viewing, ease of maintenance
- f. Remote Gauge / Control Module features, ease of use
- g. RIT / Survival Options
- h. Communications Clarity (face to face)
- i. Telemetry

12. Comment section for any $\underline{\text{Health and Safety}}$ concerns, recommendations, Pros and Cons.

13. Comment section for Additional features, Options, etc.