BREATHING AIR FOR TRAPPED MINERS

Mine cave-ins and fires are unpredictable.

The number of miners trapped and the duration of that entrapment cannot be predicted in a set of specifications.

"Oxygen Caches" are a good idea and have proven to save lives. However, stored at 2300 PSI in aluminum cylinders and located throughout the mine, they can be explosive.

Mine operators and safety organizations can not accurately predict how many O2 bottles to store based on any rule of thumb and the more they store in mines, the more hazardous they become.

We have developed the SKYAIR™ system for mine safety breathing air. SKYAIR™ safely fills SCBA cylinders (self contained breathing apparatus) so the trapped miners can have a fresh supply of breathing air cylinders at their disposal. Since SKYAIR™ is connected to the surface the miners and rescuers can be assured clean GRADE “E” breathing air is always available. Grade “E” Breathing Air is not explosive. Grade “E” Breathing Air is the grade of air used by fireman and divers.

SKYAIR™ is not limited by the number days or hours of protection it can offer, nor does it limit the number of miners it can protect. Located in small caches throughout the mine, SKYAIR™ is connected to the surface by two small diameter stainless steel tubes. These tubes are buried in the mine floor and run up and outside of the mine into an air box. (buried in the mine floor, the air lines are protected against damage due to cave-ins and fire) During an occurrence, miners only have to move to a SKYAIR™ Breathing Air Cache, located within their work areas. Inside there will be sufficient air cylinders and respirators ready to use. As the miners deplete the air within their pack, they snap on a spare air tank and refill the spent air tank within the SKYAIR™ system. The SKYAIR™ system includes ground level, onsite, stored breathing air and a breathing air compressor sufficient to keep the system charged.

SKYAIR™ caches can be custom stocked with SCBA respirators, spare air cylinders, flash lights, potable water, first aid kits or any equipment required during a mining emergency.

SKYAIR™ will refill every brand of SCBA system in the United States and abroad, as it is fitted with a standard CGA-347 Fill adaptor. A CGA-347 fill adaptor threads onto all SCBA cylinders and is the required breathing air refill fitting mandated by OSHA, NIOSH, NFPA and CGA.

SKYAIR™ protects rescue parties as well. Situated every 1/10th of a mile, rescuers can refill their air packs without leaving the mine. Rescue operations can continue to move forward within the mine without support personal toting spare cylinders to the rescue teams. It also protects rescue parties who may be cut off from mine egress's due to spontaneous cave ins or when fire and debris have made it slow to traverse the tunnels.
I have attached our literature on SKYAIR™. For more data on SKYAIR™ and other compressed breathing air information, please visit our web site @ www.coastalfiresystem.com

Respectfully submitted

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**Skyair (tm)**

The end of the “Bucket Brigade”

Located at stairwell or elevator on every other floor.

Locked and architecturally designed cabinet housing explosion proof fill enclosure.

Dual Stainless Steel air lines with flow fuses located at each floor.

Mobile air charges Skyair system through an exterior, wall mounted glad-hand.

SCBA air packs can be safely filled on site. Fireman are a maximum of one floor away from a full air pack. No human or SCBA resources put at risk transporting bottles up and down stairs. Fresh air is within reach of fireman.
Skyair™

The end of the “Bucket Brigade”

Features & Benefits

- Safely Fill SCBA cylinders on lower floors at the site.
- Expend less energy fighting fires.
- Lower asset risk both in personnel and equipment
- Faster response time for fire and Hazmat calls
- Safer search and rescue operations.
- Fireman work better knowing air is only a staircase away.
- No need to run up stairs without protection to save air.
- No need to run out of building when air is low.
- Extends air source from ½ hr to infinity.

Fire Department Options.

- Hose and hose reels.
- Low voltage DC lighting.
- Charged station alarms, bells, locators
- Training options.
- Keyed with FD standard key for tamper resistance

Building Owner

- Affordable for building owners.
- Economical installation.
- Easily retrofit existing structures.
- No need for special areas or rooms, Skyair can be located near existing staircases or elevator waiting areas.
- Attractive custom wooden cabinet. Designs include raised panel, black lacquer finishes, and custom carvings to match any building or hotel motif.
Skyair™ Mine Safety

Breathing air where you need it most

**Mines and Tunnels**

- Safely Fill SCBA cylinders in mines and tunnels.
- Replenish air source from above ground.
- Locate Skyair at 1/10th of a mile intervals, include one at each tunnel branch and one at every tunnel head.
- Enclosed in custom Steel Cache to house safety equipment, first aid supplies, spare SCBA packs, full cylinders, potable water, MRE’s and other desired safety equipment.

**Mine Owner**

- Affordable for mine operators.
- Economical installation, drop in place, connect stainless steel tubing to compression fittings.
- Easily retrofit existing mines, set on floor or cut into wall.
- No need for special areas or rooms, Skyair can be located at each mine shaft entrance, at 1/10th of a mile intervals and at mine shaft head (end of tunnel).
- Custom Steel cabinet built to house miners safety equipment, gasketed to seal out dirt.
- Can be electrified with batteries and charger for sirens, strobe lights, internal cabinet lighting.
- May lower insurance costs.
Skyair (tm)

Mine Safety

Breathing air where you need it most

Dual Stainless Steel air lines with flow fuses located at each station. Station includes auxiliary air outlets.

Gasketed Steel “Cache Cabinet” can house safety equipment, spare SCBA packs, SCBA cylinders, potable water, MRE’s and first aid supplies.

Located at every tunnel entrance, end of tunnel and 1/10th of a mile intervals.

Mine Entrance, dual air lines run to Skyair system, each tunnel is valved through external control box and connected to external air source.

SCBA air packs can be safely filled on site. Miners are a maximum of 1/10th of a mile away from a full air pack. Fresh air is within reach of trapped miners and will not run out if extradition is delayed due to fire or collapse.

Mobile air charges Skyair system through exterior glad-hand located at each mine entrance.