



Cooperation: A Path to Affordability

By: Chief Robert Turpel

Today, fire departments face daunting financial challenges to provide the public with up-to-date, multi-faceted emergency services. Long Grove Fire Protection District (LGFPD or District) is prepared and positioned to meet expensive realities through the use of joint ventures and agreements so costs become shared and more reasonable.

Automatic Response Agreements (ARAs) are one way to assure we can efficiently, effectively, and safely place needed personnel and equipment on an emergency scene to control and mitigate the situation in a timely and financially responsible manner. Responses are front loaded with personnel and equipment. For example, we have 6-7 personnel on duty. When a reported structure fire is dispatched in a non-hydranted area, on-duty personnel respond with a Chief Officer, Pumper-Squad, Pumper-Tanker, and Ambulance. Additional command officers are notified. Our fire apparatus initially responds carrying 4000 gallons of water. The ARAs pre-designate additional personnel and equipment to be simultaneously dispatched to our incident from surrounding jurisdictions. The National Fire Protection Association Standard 1710, "Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments 2010 Edition" requires a fire department to be able to deploy a first alarm assignment within an 8-minute response time to 90% of structure fire incidents involving a 2000 square foot, two-story single family dwelling without a basement or exposures. Such an assignment consists of 15 personnel with the ability to flow 400 gallons of water per minute for 30 minutes. They must be able to staff an incident commander position, pump operators position, aerial operators position, two 3 person hoseline crews, 2 person search crew, 2 person ventilation crew, and 2 person Initial Rapid Intervention crew (used to rescue lost/trapped/injured firefighters).

The above requirements are the minimum. Take into account the size of your home. This minimum doesn't

reflect the fact that the area is rural in nature and there is a lack of city-type fire hydrants, causing us to transport extra water to the scene in tankers. Safety Officers, Water Supply Officers, additional hoseline companies, or search crews are not considered in the 15 personnel minimum. Then there are other command positions, emergency medical, and emergency responder rehab functions. ARAs allow us to put 26-29 personnel on the scene immediately along with 12,750 gallons of water without elevating the alarm from the initial response. This entire response is quite the "bang for the buck". No money is paid out to the agencies responding in to us. It is simply a matter of engaging in reciprocal agreements where we will help them out in their time of need. Also, it allows a smaller district, like us, to forgo the purchase of expensive special apparatus like an Aerial (Tower) Ladder.

Currently, we have 12 ARAs with our neighbors. Used not just for large incidents, but for something as simple as a "regular" ambulance call. When a neighbor's fire station is closer, we have them respond with a paramedic equipped assist vehicle while we bring an ambulance...allowing for a quicker response time.

LGFPD is a co-owner/operator of the Combined Area Fire Training (CAFT) facility, a state of the art, comprehensive training facility, along with Buffalo Grove FD, Lincolnshire-Riverwoods FPD, and Wheeling FD. Located on Krause Blvd in Buffalo Grove, it provides an economical, local site for fire related training (including live fire), special teams, and emergency medical training. We could never afford the initial investment and maintenance costs of such a versatile training facility on our own.

A jointly owned Hose Tender apparatus (with Country-side FPD and Wauconda FD) can provide a supply hoseline to attack/pumping fire apparatus. Ability to rapidly lay a long supply line in a rural fire setting, where water supplies may be thousands of feet away, can be critical. Carrying 4,000 feet *Continued on page 6...*

Interesting Calls

By: Deputy Chief Marc Small

In *September*, firefighter/paramedics assisted Countryside FPD with an ambulance for a motor vehicle crash at Route 83 and Westmorland Road in Long Grove. Our ambulance was assigned to render treatment to the 16 year old passenger trapped in a vehicle that had been struck by a pickup truck. The passenger was freed and transported to Advocate Condell Medical Center in Libertyville with life-threatening injuries. The driver of the vehicle, and mother of our passenger, died at the scene.

In *October*, we responded to a reported fire in an oven on Nichols Road in unincorporated Arlington Heights. The apartment's tenant met firefighters outside telling them the fire was out. Firefighters found some slight smoke in the apartment, along with a burned up cardboard tray that the tenant had forgotten to remove before cooking a pizza. There was no damage to the oven and the remaining smoke was removed from the apartment.

During *October through January*, firefighters responded to 11 out-of-town fires. Once each to Libertyville, Gurnee, Inverness, Lincolnshire, Highland Park, and Long Grove (in Countryside FPD's jurisdiction). Twice to

Lake Forest, Lake Zurich, and Prospect Heights.

In *January*, firefighter/paramedics responded to a Buffalo Grove residence to assist with a fall victim. A male subject was lying on the floor with a family member performing Cardio Pulmonary Resuscitation (CPR). Firefighters assessed the patient, confirmed he was not breathing, had no pulse, took over CPR, and started advanced life support (including using a defibrillator in an attempt to start his heart). When Buffalo Grove firefighters arrived, they all worked together as a team to restore his heart beat. The patient was transported to the hospital with a heart beat and is currently undergoing rehabilitation from his near death. Firefighters from both jurisdictions received a commendation from the Village of Buffalo Grove board members for their lifesaving efforts.

Due to *January's* severe cold weather, we responded to 15 calls for broken water pipes. Firefighters helped the residents remove water, checked for hazards, and when necessary, turned off power to areas of the homes with water dripping in electrical fixtures. Water was turned off to the homes, except when it was an isolated break.

Continued on page 7...

Congratulations Jim Monroe

LGFPD's Board of Trustees, officers, firefighters, administrative staff, and guests honored President James Monroe at a retirement ceremony held at the fire station on December 16, 2013. Jim served as a trustee of the District for 25 years with 15 years as President. His official retirement date was December 31.

President Monroe was the driving force behind the incredible amount of positive change and professional growth that has taken place inside the District. Under his direction, the Board enabled personnel to dream, develop, plan, implement, reassess, and improve all the components of operations, while keeping us grounded in reality, practicality, and overall good fiscal management.

Key accomplishments during Jim's tenure as President include: adding full-time personnel; increasing on-duty staffing levels; upgrading communications by joining the Regional Emergency Dispatch Center; entered numerous Intergovernmental Agreements with neighboring communities to improve responses and share resources; built a roster of highly trained and well educated personnel prepared to deal with all fire, emergency medical, and special rescue situations; improved insurance ratings for home and business owners; upgraded the entire fleet of apparatus/vehicles; maintained high funding level in District pension accounts; and renovated/expanded the District's only fire station

Thank you Jim, for all of these accomplishments and so much more. Be healthy, happy, and safe in your retirement; enjoy your time with your family.

What Everyone Should Know About Carbon Monoxide (CO)

By: Inspector Walt Lovelady

What is carbon monoxide? Carbon monoxide (CO) is an invisible, odorless gas. It is a common by-product of incomplete combustion, produced when fossil fuels (like oil, gas, or coal) burn. Because you can't see, taste, or smell it, CO can kill you before you know it's there. Exposure to lower levels over time can make you sick.

Where does CO come from? CO can be produced by the combustion that occurs from fossil fuel burning appliances like a furnace, clothes dryer, range, oven, water heater, or space heater. When appliances and vents work properly, and there is enough fresh air in your home to allow complete combustion, the trace amounts of CO produced are typically not dangerous. And normally, CO is safely vented outside your home.

Problems may arise when something goes wrong. An appliance can malfunction, a furnace heat exchanger can crack, vents can clog, or debris may block a chimney or flue. Fireplaces, wood burning stoves, gas heaters, charcoal grills, or gas logs can produce unsafe levels of CO if they are unvented or not properly vented. Exhaust can seep into the home from vehicles left running in an attached garage. All these things can cause a CO problem in the home.

Why is CO so dangerous? CO robs you of what you need most: oxygen, which is carried to your cells and tissue by the hemoglobin in your blood. If you inhale CO, it quickly bonds with hemoglobin and displaces oxygen resulting in flu-like symptoms, for example: headaches, fatigue, nausea, dizzy spells, confusion, and irritability. Since symptoms are similar to the flu, carbon monoxide poisoning can be misdiagnosed. As levels of CO rise or exposure time gets longer, victims may suffer vomiting, loss of consciousness, and eventually brain damage or death.

Who is at risk from CO poisoning? Everyone is at risk

because everyone needs oxygen to survive. Medical experts believe some people may be more vulnerable to CO poisoning: unborn babies, infants, children, seniors, and people with heart and lung problems due to higher metabolic rates.

How can I help protect against CO poisoning? Early warning is important: install one or more alarms. The Consumer Product Safety Commission (CPSC) recommends that every home have at least one CO alarm with an audible warning signal installed near the sleeping area. Choose a CO alarm that is tested and listed by a Nationally Accredited Lab such as ETL or UL.

Have your appliances checked regularly. Have a qualified appliance technician check all fossil fuel burning appliances, venting, and chimney systems at least once a year, or as recommended by the manufacturer.

Where should I look for potential sources of CO in the home?

- ◇ A forced air furnace is frequently the source of leaks and should be carefully inspected by a professional at least annually. The following checks are normally part of an annual furnace inspection:
 - * Check furnace connections to the flue pipes and venting systems.
 - * Check furnace filters and filtering systems.
 - * Check forced air fans for proper installation and to assure correct air flow of flue gases.
 - * Check the combustion chamber and internal heat exchanger for cracks, holes, corrosion, or dirt/debris.
 - * Check burners and ignition systems and pilot lights.
- ◇ Check fireplaces for closed, blocked, or bent flues, soot, and debris.
- ◇ Check all venting systems to the outside of your home. This includes checking flues and chimneys for cracks, corrosion, holes, debris, or blockage. Animals and birds can build nests in chimneys, preventing gases from escaping. Vibrations can shake vent

Continued on page 5...

Meet Our Fire Service Family...

By: Lieutenant Mark Gates

To do the best job possible you have to hire the best. We are proud of our top personnel, so in each newsletter we feature a few of our finest firefighters, who are part of our team and fire service family.



Firefighter/Paramedic Scott Humphries became a paramedic in 2012, worked for Superior Ambulance Service, and entered the fire service in 2013. Having completed fire academy and receiving certification, he came to LGFPD as a paid-on-premise firefighter/paramedic. Prior to developing an interest in the fire service, he earned a B.S. in Education and worked as a teacher.

When Scott is off duty he likes to play the guitar, camp, and fish. He also enjoys baseball and softball.



Firefighter/Paramedic Markus Rill entered the fire service in 2005. After completing the fire academy and paramedic school, he started working at Beach Park FPD. Seeking extra experience, he worked part-time at other local departments, such as Lincolnshire-Riverwoods FPD, Tri-State FPD, and Addison FPD. In 2008, he was hired full-time by Prospect Heights FPD and then came to Long Grove FPD in 2010, as a part-time firefighter/paramedic.

FF/PM Rill has continued his fire service education, having received certifications as a Hazardous Materials Responder Operations Level, Trench Rescue Technician, Confined Space Rescue Technician, Rope Rescue Technician, and Structural Collapse Technician. He helps train new paramedics and has been working in our Fire Prevention Bureau as a pre-planner and public educator.

When not working, Markus enjoys spending every moment possible with his wife and three children. They like camping, hiking, and swimming together and also enjoy German folk dancing. He sings at his church and has earned the Eagle Scout, the Boy Scouts of America's highest achievement.

LGFPD Mission Statement

To provide residents, owners, businesses, and visitors within the Long Grove Fire Protection District, and any recognized emergency agency requesting automatic/mutual aid, with the safest, effective, efficient, comprehensive, and customer focused Fire, Rescue, and Emergency Medical Services possible. This high level of professional services will not be limited in scope to emergency situations only, but will encompass the broader spectrum of public safety, to include Public Education, Fire Inspections, and all other support services.

...continued from page 3

pipes lose from gas dryers or water heaters, preventing CO from being vented properly outside.

- ◇ Check all other appliances in the home that use fossil fuels such as natural gas, oil, propane, wood, or kerosene. Appliances include:
 - * water heaters
 - * clothes dryers (Check the clothes dryer vent opening. Lint may block proper venting outside the house.)
 - * kerosene heaters
 - * ovens or cook tops (Stove tops or ovens that operate on fossil fuels should never be used to heat a residence.)
- ◇ Wood-burning stoves, alternative power sources (such as gas or diesel generators).
- ◇ Barbecue grills should never be operated indoors under any circumstances.
- ◇ Never run a generator indoors or in a poorly ventilated area such as a garage, basement, or porch.
- ◇ Use the appropriate-size power cords to carry the electric load.

What do I do if my CO alarm goes off?

- ◇ Never ignore an alarm! It is very possible that you won't be experiencing symptoms of CO poisoning when the alarm sounds. That doesn't mean there is no CO present. The alarm is designed to go off before you feel sick, so you have time to react and take action.
- ◇ Don't panic. Press the mute button to temporarily quiet the alarm; then call 9-1-1. Immediately move everyone to a source of fresh air. Moving outside is the safest solution.
- ◇ Leave the CO alarm where it is (emergency responders will want to check it when they arrive). Do not re-enter your home until the emergency responders have arrived, your home is aired out, and your CO alarm returns to normal operation.
- ◇ Ensure that CO alarms have working batteries installed.

How does a CO alarm work? It's not a smoke alarm.

CO alarms are not a substitute for a smoke alarm. Although fire is a source of CO, a CO alarm does not sense smoke or fire. Warning of fire requires the installation of smoke alarms. While a smoke alarm triggers an alarm when it detects particles of smoke, a CO alarm triggers an alarm based on exposure to CO over time. It is designed to sound an alarm before an average, healthy adult may experience symptoms.

Remember, with CO, it is the concentration of CO over time that poses a threat. Since CO displaces oxygen in your blood, it can harm you if you are exposed to either high levels of CO in a short period of time, or to lower levels of CO over a longer period of time. Current UL Standard 2034 limits for CO alarms to activate are:

- ◇ 30ppm for 30 days
- ◇ 70ppm for 60 to 240 minutes
- ◇ 150ppm for 10 to 50 minutes
- ◇ 400ppm for 4 to 15 minutes

A national survey reveals nearly three quarters of Americans think CO can be "very dangerous" in the home, and their fears are warranted. CO is the leading cause of accidental poisoning in the US, according to the Journal of the American Medical Association. Often referred to as the silent killer because one can't see, smell, or taste it, CO is a by-product of combustion. Exposure to CO causes many flu-like symptoms and can be fatal. That's why it's so critical for consumers to identify potential dangers and take measures to help protect themselves and their families against this serious threat. For your own safety, and that of your family, please install a minimum of one battery-operated CO alarm (or AC-powered alarm with battery backup) outside each sleeping area, and for maximum protection install at least one CO alarm on each level of the home. Illinois law has required working CO detectors in all dwelling since January 2007. CO detectors AND smoke detectors are essential safety equipment for every home. Please make sure you install them in your home for safety's sake.

...continued from page 1

of 5" large diameter supply hose, it was built by modifying an ambulance chassis and fabricating the body. Costing the District just \$13,632 compared to an estimate of \$138,000 for a new apparatus... a huge cost savings.

In February, an intergovernmental agreement was signed with the Village of Barrington for cooperative storage and use of certain vehicles. Instead of selling a 1994 Pumper in good mechanical condition but with a fairly low resale value, we are able to retain it as a mechanical reserve for use by both jurisdictions. We have no room to store the apparatus; it will be stored at Barrington FD while we retain ownership. Maintenance costs will be shared and insurance is covered by the department storing it or has it in service when a front line apparatus is out of service for repair. This prudent solution will grow to include an ambulance when we finalize the purchase of a new one later this year. A rotation of fire/EMS apparatus into reserve status will take place as new equipment is purchased.

I say, "every little bit counts," when it comes to saving money on purchases. That's just what happened with our new ambulance. LGFPD, Beach Park FPD and Zion FD jointly agreed to purchase ambulances at the same time. The manufacturer, already the lowest bidder, passed on savings of \$3000 for building 3 similar ambulances at the same time.

LGFPD is a member of the Lake and McHenry Counties Fire Departments Specialized Response Teams (LMCFDSRT) that encompasses MABAS Divisions 4 and 5 (explained later). Teams include Ice and Open Water Divers, Hazardous Materials Technicians, Technical Rescue Technicians (multi-disciplined: Confined Space, High Angle, Structural Collapse, & Trench), Side Scan Sonar Technicians, Swift Water Rescue Technicians, and Wildland Firefighters. Member organizations pay \$4975 per year to utilize the Team's technicians and special equipment. Supplying technicians isn't required but encouraged. We have 3 divers certified in open water and ice diving, 4 Hazardous Materials technicians, 4 Technical Rescue technicians, and 2 Wildland firefighters. The LMCFDSRT has a long list of specialized assets to properly equip these special teams. They include a dive rescue support trailer, Hazmat equipment truck, Hazmat spill container, Hazmat decon vehicle, Hazmat trailer, a hook lift truck, mechanics truck, deployment support trailer,

side scan boat, two air compressor units, deployment bus, USAR (Urban Search and Rescue) 4 and 5 container, trench/below grade container, lumber container, wildland firefighting container, side scan sonar equipment, inflatable boat, work shop container, two light and generator units, two 6 wheel ATVs, a shelter unit, and a roll off truck. Some of these assets are owned by LMCFDSRT and the rest was provided by MABAS Illinois (explained below). As a side note, the team controls the use of a sprinkler side by side trailer used for public education, a pump demonstration trailer, and a self contained breathing apparatus training trailer. There is no way a suburban fire department could have access to so many highly trained technicians with advanced technology if it was not for the joint team concept; the annual fee is an incredible bargain. This concept allows us to be able to staff a special rescue incident with the proper amount of trained and well equipped technicians in a timely manner.

Lastly, we are a member of MABAS Division IV (Lake County) and, in turn, the parent organization MABAS Illinois. The Mutual Aid Box Alarm System (MABAS) was created in the Chicago suburbs in 1970 and grew into a state wide non-discriminatory mutual aid response system for fire, emergency medical services, and specialized incident operational teams. About 1000 of the 1200 fire departments in Illinois are members of MABAS, distributed into 67 Divisions. MABAS provides a template for pre-designated and numbered response cards above the first two initial levels provided by ARAs. MABAS Box Alarm requests are made on an incident scene by the Incident Commander requesting more help than his local ARAs are set-up to provide. On a Box Alarm, a change is made from the local dispatch radio frequency to the designated dispatcher for the MABAS Division, taking place on the common Illinois Fire Emergency Radio Network (IFERN). Incident Command requests that the dispatcher activate a numbered box card for a given level of help; the higher level, the more help that is obtained. The incident then continues to run through the MABAS Division's dispatch center.

MABAS Illinois has taken on additional responsibilities over the years and now coordinates statewide responses (tornados in 2013) and out of state responses (Hurricane Katrina). MABAS researches, purchases, stocks, and supplies special equipment to the different MABAS Divisions within the state in addition to staffing its own Operational Readiness Center in Wheeling.

Continued on page 8...

Analysis of 2013 Responses

By: Firefighter/Paramedic Jeff Baygood

LGFPD had another busy year running 1,527 responses in 2013. Although that is a 9% reduction from the total of calls in 2012, we have been very busy nonetheless. Often times (18.5%), multiple responses were going on simultaneously. We are able to handle 89% of responses with on-duty personnel, without needing to call back off-duty personnel. Over half of our calls occurred within the Village of Long Grove and the summer months of May, June, and July were the busiest. The District was busy with structure fires; responding to more structure fires this year compared to last year. Ten working structure fires were within a mix of commercial, residential, and multi-family buildings. Our ambulances continue to be very busy running 56% of total calls. The ambulances continue to mostly transport patients to Northwest Community Hospital. We do also transport patients to Good Shepherd Hospital, Condell Hospital, Highland Park Hospital, Lake Forest Hospital, Glenbrook Hospital, and Lutheran General Hospital. We also responded to a greater amount of motor vehicle accidents than in previous years. Calls were divided quite evenly between the three shifts. Red Shift ran the most at 531 calls, Gold Shift ran 500 calls, and Black Shift ran 498 calls. In addition to fire and ambulance calls, we had some Specialized Response Team responses as well. Hazardous Materials Technicians responded to 4 calls. Divers responded to 3 calls, and Technical Response Team members responded to 1 call within our MABAS Division.



The Community Emergency Response Team of South Lake County
(Serving Hawthorn Woods, Kildeer, Lake Zurich, Long Grove and Ela Township)



Welcomes you to the
7th Annual
ALL-U-CAN EAT
Pancake
Breakfast



\$5 per person
Kids 3 and Under FREE

Sunday, May 18th, 2014
8:00am - 1:00pm



LAKE ZURICH FIRE STATION #1
321 S BUESCHING ROAD

Fire Prevention Skits, Mini Firefighter Challenge, Antique Firetruck Rides
Silent Auctions - Raffles - Music & FUN
All-you-can eat fluffy pancakes, sausages, Starbucks Coffee, juice & more.
Please come support a great community cause!

Bring Family & Friends! Rain or Shine!

(847) 208-1621 slcert@gmail.com

...continued from page 2

In February, firefighters responded to a roof that had collapsed due to accumulation of heavy snow. The pole barn style, detached garage was empty of people; two work vans and several tractors were inside. ComEd was requested to the scene since there was electricity running to the garage. Following inspections by LGFPD and the Building Department, the area was isolated using barricade tape until the homeowner could make repairs.

In Memory Of...

It is with the deepest regrets the Long Grove Fire Protect District announces the sudden passing of former part-time Firefighter Wayne "Hank" Kos on February 26, 2014. Please keep Hank and his family in your thoughts and prayers.



Fire Line
 A newsletter of
 Long Grove Fire Protection District
 1165 Old McHenry Road
 Long Grove IL 60047
 847-634-3143

Presorted Standard Mail
 US Postage Paid
 Permit No. 1111
 Palatine P&DC



*Emergency always dial 9-1-1
 Non-emergency 847-634-3143*

*Board of Trustees
 John Didier, Treasurer
 David Klein, Secretary*

*Board of Commissioners
 Don Biciste, Chairperson
 Gary Morris, Secretary
 Marsha Forsythe-Fournier, Commissioner*

*Staff
 Robert Turpel, Chief
 Brian Beck, Deputy Chief
 Marc Small, Deputy Chief
 Karyn Rios, Administrative Assistant*

...continued from page 6

LGFPD pays annual dues of \$300 to MABAS Division IV and \$250 to MABAS Illinois. Equipment provided to the various divisions or available via request by MABAS includes decontamination vehicles, fleet maintenance and repair unit (self-contained with a field drop box), 2000 gallon fuel tanker towed by the mobile field maintenance and repair unit, electric generators and light tower trailers, mobile ventilation units, mobile warehouse semi-tractor trailers, air compressor/cascade units, 6x6 ATVs with trailers, expedient field shelter trailers with tents and accessories, water rescue packages with boats and equipment, mission support vehicles, logistical supply vehicle (can support 500 personnel for 72 hours), semi trailer tent city systems (can house 220 personnel for 72 hours), and EMS Mass Casualty support vehicles. Again, how could a small department afford to have access to such expensive equipment and expansive operational and administrative oversight on their own?

The answer for that question is they can't. I hope this article demonstrated, without a doubt, the District's intention to provide you with high quality, broad based, realistic services that are basically affordable. Also, the benefits of joint ventures should be more than apparent.

Calendar of Events

- April 10 CPR/AED Class
- May 1 CPR/AED Class
- May 18 CERT Pancake Breakfast
held at LZ Fire Station
- June 3 First Aid Class
- June 5 CPR/AED Class
- July 10 CPR/AED Class
- August 7 CPR/AED Class
- September 4 CPR/AED Class
- September 9 First Aid Class

Classes begin at 6 pm. Class fees are \$15 for residents of LGFPD, \$30 for non-residents. Call Katie Hayes for additional information at