



CRYSTAL LAKE FIRE RESCUE

Annual Report 2010







Gary J. Mayerhofer, City Manager City of Crystal Lake

Dear Mr. Mayerhofer,

It is my pleasure to present to you the 2010 Crystal Lake Fire Rescue Department Annual Report. Once again, the Fire Rescue Department has made tremendous strides in the areas of emergency response, training, disaster preparedness, and fire and life safety. As you will see in this document, the men and women of the Crystal Lake Fire Rescue Department live the values of our organization.... "Serving Crystal Lake with P.R.I.D.E." (Professionalism, Readiness, Innovation, Dedication and Empowerment).

Thanks to the Department's dedication to organizational and personal development during the past several years, Crystal Lake Fire Rescue has enjoyed another year of great success.

While the Crystal Lake Fire Rescue Department's success cannot be traced to one single factor, as successful emergency services delivery is dependent on many interrelated factors, the Department could not have advanced this past year without the support of the Mayor, City Council, Fire District Trustees, City Manager, residents and business owners of the City of Crystal Lake.

Listed below are highlights of the Crystal Lake Fire Rescue Department's accomplishments for 2010:

- Continued Officer Development on a monthly basis.
- Continued to focus on training and professional development of all personnel.
- Conducted a functional exercise of the McHenry County Tactical Interoperability Communications Plan.
- Established a Marine Monitor Program to place a safety and support person on the water at the new Three Oaks Recreation Area.
- Transitioned to a new, county-owned, Fire Reporting Software (VisionFire).
- Revised the Contractor's Packet Distribution Policy in order to provide the development community with clear expectations of fire alarm/sprinkler system design and installation.
- Completed multiple, live fire-training sessions.
- Developed a proposal and solicited business community support to establish a Wireless Fire Alarm Network.
- Completed Life Safety Inspections of over 590 occupancies in the community.
- Updated the Department's comprehensive Policy and Procedure Manual to provide consistent direction to emergency response personnel.
- Continued the Observed Behavior Safety Training Program to place an increased focus on the safety of Fire Rescue personnel.





- Replaced Ambulance 353 with the support of the Crystal Lake Rural Fire Protection District.
- Became the lead agency for addressing within the City and developed a revised addressing ordinance with the cooperation of other City departments.
- Continued community support through active participation and donations to the Salvation Army, Crystal Lake Food Pantry and Muscular Dystrophy Association.
- Conducted a seminar for over 200 firefighters on "The Dangers of Wind Driven Fires" and "Hidden Dangers of Residential Fires" with Chicago Fire Department Battalion Chiefs Pete Van Dorpe and Keith Witt along with Research Coordinator James Dalton.

On behalf of the men and women of the Crystal Lake Fire Rescue Department, thank you for the opportunity to serve the Crystal Lake community.

Sincerely,

James P. Moore Fire Rescue Chief





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Department Overview

The City of Crystal Lake is located in Illinois, approximately 45 miles northwest of the City of Chicago, in McHenry County. The Crystal Lake Fire Rescue Department provides service for the City of Crystal Lake, the Crystal Lake Rural Fire Protection District and portions of Lake in the Hills. The area served is approximately 46.2 square miles, with a resident population of over 56,000 according to the 2000 census. Estimated current population is 60,000. Services provided include fire protection, emergency medical care (Advanced Life Support), fire inspections, public education, hazardous material response, water rescue, and special team responses such as trench, confined space, rope, and dive rescue. The City of Crystal Lake is the largest city in McHenry County, and the Crystal Lake Fire Rescue Department's service area includes three U.S. highways, a railroad (Union Pacific), two large lakes (Crystal Lake and Three Oaks Recreation Area), and McHenry County College. The Department also provides automatic aid to the Nunda Rural Fire Protection District, McHenry Township Fire Protection District and the Algonquin / Lake in the Hills Fire Protection District. Mutual Aid is frequently provided to communities in McHenry, Lake and Kane Counties through the Mutual Aid Box Alarm System (MABAS).

The Fire Rescue Department provides 24-hour emergency response, operating out of three stations with 71 personnel. Staffing is provided by three shifts of full-time firefighters on a 24/48-hour schedule, and is supplemented with paid-on-premise firefighters. Approved full-time positions include 3 Battalion Chiefs, 9 Lieutenants, and 47 firefighter/paramedics. Full-time firefighters and Lieutenants are members of the Crystal Lake Professional Firefighters Association, Local 3926, of the International Association of Firefighters. Minimum manning for emergency response is currently 15 firefighters per shift. Approved day positions (40-hour week) include Fire Chief, Deputy Chief, Bureau Chief of Training, Bureau Chief of Emergency Medical Services, Bureau Chief of Fire Prevention, Fire Inspector, Office Coordinator, and Administrative Assistant. In 2010, the Department responded to 5,069 incidents. 69% of the incidents involved emergency medical care.





2010 Year in Review

Deputy Fire Rescue Chief – Paul DeRaedt

2010 was filled with new challenges as the Crystal Lake Fire Rescue Department has continued to evolve as the benchmark organization in emergency services. The men and women of Crystal Lake Fire Rescue have given their very best each and every day to provide an exemplary level of service to the citizens of Crystal Lake.

Community Fundraising

Fire Rescue personnel participated in three fundraising events this year.

- The annual Muscular Dystrophy Association's Fill-the-Boot campaign coordinated by the Crystal Lake Professional Firefighters, Local 3926. The event took place August 7th, 8th, and 21st. Through the efforts of the City's fire rescue personnel, the Crystal Lake Fire Rescue Department was able to raise over \$6.298 for this worthwhile cause.
- For the fifth year, fire rescue personnel participated in the Salvation Army's Red Kettle fundraising campaign. In 2010, the Crystal Lake Fire Rescue Department raised \$16,250.94, which surpassed the past year's total by \$3,935.80.
- In lieu of holiday gifts, the Officers of the Crystal Lake Fire Rescue Department donated \$350.00 to the Crystal Lake Food Pantry as part of the Officers' holiday tradition.



McHenry County Tactical Interoperability Communication Plan – Functional Exercise

During 2010, the Crystal lake Fire Rescue Department hosted the McHenry County Tactical Interoperability Communication Plan Drill. This fast-moving functional exercise, the scenario for which was an occupied, Metra commuter train crash at the Pingree





Road train station during the afternoon rush, was designed to test radio interoperability, incident command, emergency medical operations, law enforcement, emergency management, traffic routing and the interface between the City and the McHenry County Emergency Operations Center.

This large-scale, functional exercise was the first of its kind in the State of Illinois and by all indications a success. The teamwork from all City Departments was incredible and was a noted strength, as voiced by the 45 exercise evaluators that were on-site.

Fireground Tactics Simulation

Officers of the Crystal Lake Fire Rescue Department attended two days of intensive and challenging fireground tactics training during the month of August. The training focused on the two common fireground challenges of communication and command. This training incorporates a computer simulator, unlike any other, that allows individual companies to see areas and issues that only their company will encounter, thus communication and coordination/command are practiced.

Marine Monitor

With the opening of the Three Oaks Recreation Area (TORA), the Fire Rescue Department was given the opportunity to serve the Crystal Lake community in another way. The development of the position of Marine Monitor is intended to place a safety and support person on the lake during hours of operation at TORA.

Promotions

On June 15, 2010, the Department celebrated the promotions of Lieutenants Rick Kaiser and John Volenec.



Mayor Shepley administers the Oath of Office to Lieutenants Volenec and Kaiser. Pictured L-R: Mayor Shepley, Lt. Volenec, Lt. Kaiser, Terry Shimp, and Char Kaiser





Crystal Lake Wireless Alarm Network (CLWAN)

This initiative, which is intended to improve life safety while reducing the cost of the City's present fire alarm monitoring system to the Crystal Lake business community, was approved by the City Council on October 5, 2010. Project completion is expected by April 2011.

Replacement of Engine 340

On November 16, 2010, the City Council approved the purchase of a new fire engine from Crimson Fire. Delivery is expected in June 2011.

New Ambulance Ordered

The Crystal Lake Rural Fire Protection District placed an order with Foster Coach for a new Med-Tech ambulance. This ambulance, which was delivered and placed in service in January 2011, includes design changes recommended by the Crystal Lake Fire Rescue Department's Apparatus Committee.

Acting Company Officer Development Program

During January 2010, the Fire Rescue Department commenced a one-of-a-kind development program for personnel interested in serving in the role of an Acting Company Officer. Twenty-three members of the department participated in the program, which addresses the many challenges that a company officer will face and provides opportunities to plan and learn. This program includes classroom discussion, scenarios and a self-study element.

Life Safety Inspections

Three years ago, when the Life Safety Inspection Program (LSI) was initiated, the Department set a goal to inspect all businesses and multi-tenant properties within three years.

As the Department commences the next round of LSI's, it is anticipated that there will be fewer violations, due to the excellent job the fire rescue crews have done educating the business community on fire safety.

Annual Department Awards

Annual awards were presented to Fire Rescue personnel on December 14th-16th. Members were recognized in 3 award categories: Department Service Awards, EMS Service Awards, and Department Recognition Awards.

Service Awards:

Rick Stoddard	30 years
Tim Butler	20 years
John Buterbaugh	10 years
Ed Havemann	10 years





Service Awards (Continued):

Bob Kohley 10 years
Brian Menzimer 10 years
Bob Brechbiel 5 years
Joe Forsberg 5 years
Jim Moore 5 years
Linda Olszak 5 years
Dan Williams 5 years

EMS Service Awards (years certified with IL Dept. of Public Health)

Lloyd Laufer 25 years
Casey Cork 15 years
Bill Whyte 15 years
Brian Marino 10 years

Department Recognition Awards

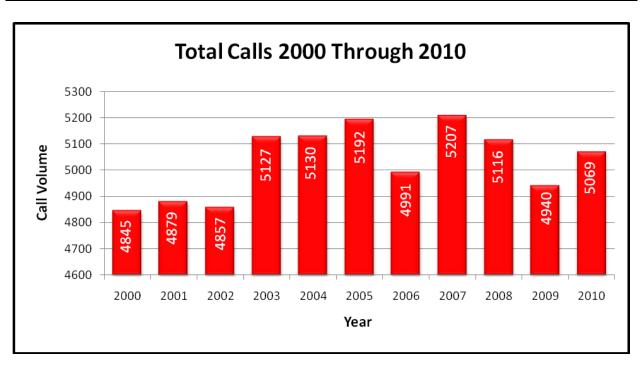
Type of Award	Date of Incident	Description	Crew Receiving Award
Award of Recognition	11/7/09	Full arrest with successful resuscitation. Critical patients of a vehicle accident.	FF/PM's Buterbaugh, Kownacki, Kreher, LeClercq, Szatkowski
Award of Recognition	5/30/10	Annual Memorial Day flag placement at the graves of Crystal Lake firefighters.	FF/PM's Cook, Kaltenbach, Rozhon
Unit Performance Award	1/2/10	Structure Fire	Lt. Tim Butler, FF/PM's Fowles, Gundlach, Kerley, Leuck, Marino
Meritorious Service Award	4/29/10	Tactical Interoperability Communications Plan Drill	Fire Rescue Chief Moore, DC DeRaedt, BC's Larsen, Olszewski, Pollnow, Whyte, Lt's Grischow, Kiermas, Olsen, FF/PM's Fowles, Landwer, Marino, Rozhon, Sypura, D. Williams

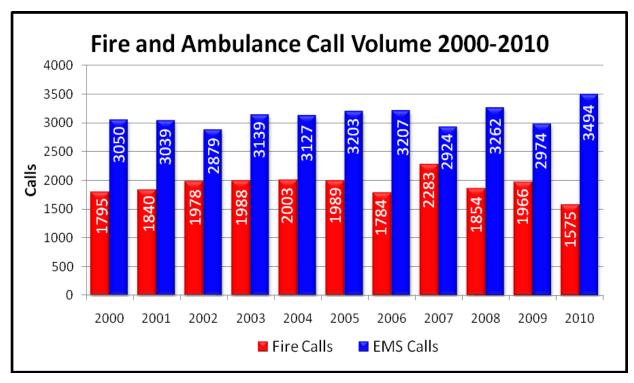




Incident Statistics - 2010

Bureau Chief Bill Whyte









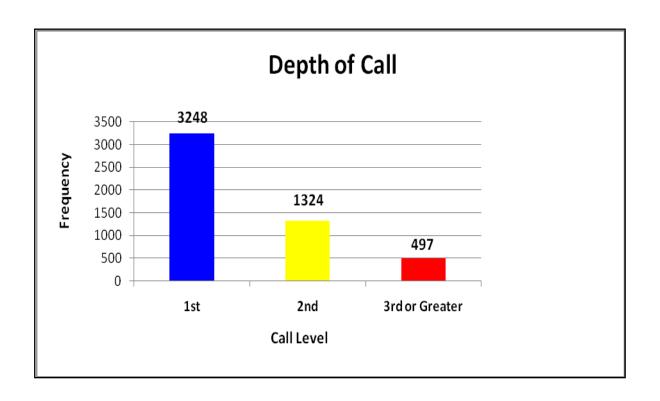
Fire Rescue Department Calls for Service 2008-2010

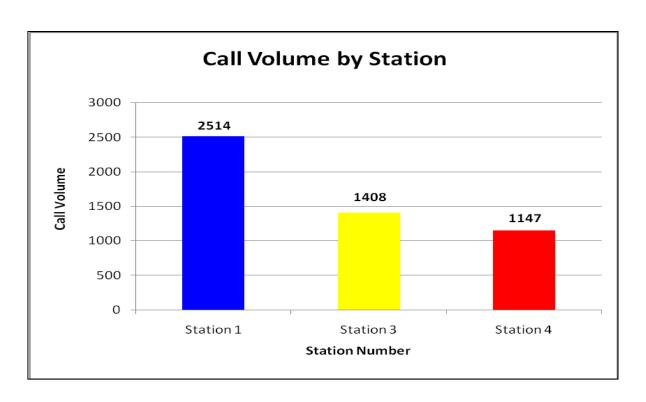
Incident Type	# 2008	% 2008	# 2009	% 2009	#2010	% 2010
Fire	67	1.31%	68	1.38%	65	1.28%
Rescue and EMS Incidents	3,262	63.76%	3,334	67.49%	3,503	69.11%
Hazardous Conditions (No Fire)	265	5.18%	184	3.72%	204	4.02%
Service Call	558	10.91%	405	8.20%	440	8.68%
Good Intent Call	295	5.77%	218	4.41%	136	2.68%
Fire Alarms	669	13.08%	731	14.80%	721	14.09%
Total	5,116	100.00%	4,940	100.00%	5,069	100.00%

Jurisdiction	# 2008	% 2008	# 2009	% 2009	# 2010	% 2010
City of Crystal Lake	4,402	86.04%	4,292	86.88%	4,432	87.43%
CL Rural FPD	545	10.65%	534	10.81%	541	10.67%
Out of District	169	3.30%	114	2.31%	96	1.89%
Total	5,116	100.00%	4,940	100.00%	5,069	100.00%













Crystal Lake Fire Rescue Department <u>Fire Suppression</u> Response Times Within Each Response District

	Station 1	Station 3	Station 4
Average Alarm Processing Time	1:13	0:55	1:09
Average Turn Out Time	1:08	0:49	0:52
Average Travel Time of First Arriving Unit	5:04	4:44	6:09
Total	7:25	6:28	8:10

Crystal Lake Fire Rescue Department <u>EMS</u> Response Times Within Each Response District

	Station 1	Station 3	Station 4
Average Alarm Processing Time	1:12	1:10	1:00
Average Turn Out Time	0:38	0:38	0:38
Average Travel Time of First Arriving Unit	4:13	4:07	5:15
Total	6:03	5:55	6:53





Public Education - 2010

Public Education Coordinator - Lieutenant Joyce Stevenson

A goal of the Crystal Lake Fire Rescue Department is to provide fire safety messages to the community in order to reduce the incidence of fires. The Fire Rescue Department receives many requests from schools and community groups for fire safety talks and station tours throughout the year. In 2010, the Crystal Lake Fire Rescue Department presented 196 programs to over 25,000 participants. The Department's fire safety programs teach children the proper way to STOP, DROP, and ROLL if their clothes catch on fire, what to do when the smoke detector sounds, how to stay low if there is smoke to escape a fire, and where to meet outside if there is fire. Children are encouraged to take this safety message home to share with their families.



Since purchasing a safer, environmentally friendly extinguisher training system, the Department has been able to conduct more classes for citizens and businesses. In 2010, 16 fire extinguisher classes were conducted with a total of 354 students participating. Proper use of a fire extinguisher can keep a small fire from spreading.

Each year, the Crystal Lake Fire Rescue Department holds two open houses. The Emergency Medical Services (EMS) Open House is held on the third Saturday in May and the Fire Rescue Department Open House is held on the first Saturday of October. In 2010, both events enjoyed over 400 attendees.

At the EMS Open House, there were hands-on activities and demonstrations of some of the equipment used to treat patients. There were many interesting displays on the prevention of heart attacks and strokes, as well as ways to make healthy living choices.

The Fire Rescue Department Open House kicked off Fire Prevention Week with a display of fire rescue equipment and activities for adults and children, which included a station for children to spray a fire hose and test their skills on a firefighter challenge course.

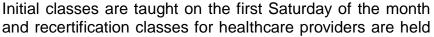




CPR Coordinator - Lieutenant Joyce Stevenson

Crystal Lake Fire Rescue offers CPR classes to the community. These classes include:

- Heartsaver AED (Automatic External Defibrillator) for the lay person
- Healthcare Provider
- Heartsaver AED / First Aid





on the fourth Tuesday of the month. All classes are taught to American Heart Association standards. In 2010, the Department conducted 67 CPR classes to 633 people. Listed below is a breakdown of various groups that received initial or recertification training in 2010:

Group	Number of Students	Type of Certification
Crystal Lake Public Works	52	Heartsaver AED /First Aid
Three Oaks Recreation Area Staff	40	Heartsaver/First Aid
Crystal Lake Police Department	66	Heartsaver AED
Crystal Lake Fire Rescue	73	Healthcare Provider
Crystal Lake School District 47	150	Heartsaver AED
Businesses, Churches, Scouting	90	Various
General Public	162	Various
Total	633	

Information regarding CPR training classes can be found in the City's newsletter, on the City's Government Access Channel, Channel 17, and on the City's website at www.crystallake.org.



Quick actions can save lives with the Chain of Survival:

- Early access: Call 911
- Early CPR
- Early Defibrillation
- Early EMS response.





Fire Prevention Bureau-2010

Bureau Chief of Fire Prevention - Jerry Larsen

Fire Prevention Programs focus on the three E's of Fire Prevention - Education, Enforcement, and Engineering. Providing education to building designers, contractors, and business owners and their employees about safe practices can reduce the chance of fire in their buildings. Enforcement is aimed at reducing fire hazards, as well as mandating the proper installation and maintenance of a building's fire and life safety features. Engineering is about designing buildings properly with respect to fire and life safety. Plan review is part of this process. The Crystal Lake Fire Prevention Bureau's continued focus on the three E's of Fire Prevention is a critical step in helping ensure the safety of the Crystal Lake community.

Contractor's Packet

The Contractor's Packet is distributed to contractors to assist them in identifying what fire protection permits are required for their project. The information contained in the packet lists all of the information needed by the Fire Prevention Bureau to complete a plan review of fire protection systems. The packet then identifies the steps required during inspections or acceptance testing. The Contractor's Packet is also available on the City's web-site.

The Fire Prevention Bureau implemented a Contractor's Packet in 2009. In 2010, the distribution policy for the Contractor's Packet was revised to allow a contractor to receive the Contractor's Packet when a building permit is obtained from the Building Division. This change allows the contractor to obtain the packet as early in the project review process as possible.

City Addressing

The Fire Rescue Department has assumed responsibility for the addressing of properties within the City. The Fire Prevention Bureau has been working with members of the Community Development Department and Police Department to identify needed changes to the City's addressing practices. The result of this collaborative effort is a revised Address Ordinance, adopted by the City Council, which will allow future projects to be addressed in a systematic and understandable method.



Pre-Incident Plan Program

During calendar year 2010, a Pre-Incident Plan Program was initiated. The program requires each Fire Rescue shift commander to develop a pre-incident plan for one high-





hazard building each month. During each month's Fire Officers' Development meeting in 2010, the shift commander presented a pre-incident plan to the group. The Training Bureau then assigned the pre-incident plan for training during the month for presentation to the Department. The plans are logged into the vehicle computers for easy access at the scene of an incident. A pre-incident plan identifies special building features and occupancy hazards that may be encountered during an emergency incident.

Life Safety Inspections

With feedback from the City's Economic Development Committee and the Crystal Lake Chamber of Commerce, the Fire Prevention Bureau has revised the process for assigning Life Safety Inspections (LSI). The new process allows the business community to view the anticipated schedule of a Life Safety Inspection on the City's website. An LSI identifies potential hazards to occupants, such as blocked exits, improper use of extension cords that could lead to the start of a fire, and improper flammable liquid storage, emergency lighting, and fire extinguisher placement.

Plan Reviews

The Fire Prevention Bureau completed the following plan reviews for the calendar year 2010:

Type of Review	Number
Planned Unit Development (PUD)	16
Special Use Permit (SUP)	14
Temporary Use Permit (TUP)	54
Sprinkler System	66
Fire Alarm System	75
Wet Chemical/Ansul	11
Building Permit	105
Building Permit Occupancy	54
Cursory	19
Variation	9
Façade Grant	15
Freedom of Information (FOIA)	37
County - Residential	2
Total	477





Inspections

The Fire Prevention Bureau completed the following inspections or acceptance testing for the calendar year 2010:

Inspection Type	Number of Inspections
Construction / Status	94
Fire Alarm	133
Sprinkler System	98
Hood Suppression	18
Life Safety Follow-Up / Target Hazard	347
Occupancy	277
Concerns / Condition Report	172
Total	1,139

The Fire Rescue Department conducted the following Life Safety Inspections for the calendar year 2010:

Life Safety Inspections	Calendar Year 2010
Initial Inspections	592
Re-Inspections	287
Total	879





Specialized Rescue Teams – 2010

Divemaster - Lieutenant Kirk Kiermas

During 2010, the Crystal Lake Fire Rescue Dive Rescue Team (DRT) continued to be active in training and incident response. DRT personnel regularly train on basic and advanced dive techniques. Team training is essential for the safe and efficient performance of all DRT members. Additionally, all Fire Rescue Department personnel have been trained to assist in dive operations, boat operations, surface water rescue and communications.

Dive training is designed to build and maintain team efficiency. Several of the training areas the DRT focused on during the year are as follows:

- Annual basic skills refresher
- Boat operations
- Compass navigation
- Dead reckoning navigation
- Underwater hardwire communication
- Underwater wireless communication
- Rope signal communication
- Search and recovery techniques
- Ice diving
- Sonar operations
- Surface water rescue



FF/PM Dan Williams assists a Crystal Lake DRT member before entering the water.



DRT members enter the water during an ice diving training session.

All DRT personnel have to achieve minimum training certifications in order to meet Department standards. Minimum certification requirements are as follows:

- Public Safety Diver I
- Dive Rescue I
- Ice Rescue Diver





The Crystal Lake Fire Rescue Department is a member of the Mutual Aid Box Alarm System (MABAS) and the Lake / McHenry Counties Specialized Rescue Team (LMCSRT) and, as such, can be requested to assist other departments with water related incidents. To maintain these memberships, all DRT personnel must complete a minimum number of training dives each year, including open water, ice dive and annual basic skills.

Over the years, most of the training for the Crystal Lake Fire Rescue DRT has taken place on Crystal Lake. With the opening of the Three Oaks Recreation Area (TORA), the Department's focus has now changed somewhat in order to be more familiar with this new recreation area. Even though training exercises have been held in the former Vulcan Lakes over the years, the development of TORA has required a new review of both the lakes on the property and the access to each. Divers have found that the water and bottom conditions vary from lake to lake and can be different depending on the entry points, weather conditions and time of year.





DRT members training at Three Oaks Recreation Area.

Another tool for dive operations is Side Scan Sonar, which has become an increasingly important asset for departments who find a need to search a large area in a short period of time. Side Scan Sonar can be requested through MABAS to respond to and search any water body. This ability to search from a boat without the immediate deployment of divers greatly improves safety and reduces the number of divers needed to perform a recovery. The Department's response policy is made up of three parts.

- Surface Water Rescue is the initial response for any victims on the surface of the water. All Department personnel are trained to perform this procedure.
- Rescue Mode for the first 90 minutes of a victim under water. This is the time
 when saving a life is most feasible. DRT personnel are required for this type of
 incident.





• Recovery Mode is initiated when the victim has been under water for 90 minutes or more and the likelihood of a rescue is no longer possible.





Side Scan Sonar team members mapping the Three Oaks Recreation Area lakes.

Equipment

Divers are provided with individual equipment in order to perform their assignments safely and efficiently. Properly fitted equipment is essential for safe dive operations. The Crystal Lake Fire Rescue Department follows the National Fire Protection Agency (NFPA) 1670 guidelines for equipment and maintenance standards. These national standards help to ensure diver safety.

The Crystal Lake Fire Rescue DRT strives to maintain all equipment in a state of readiness. In 2010, the DRT replaced seven SCUBA tanks that were originally put in service in 1988.





Dive Rescue Team Members clean and check their gear after a dive to ensure readiness for the next event.





Team Responses

Crystal Lake Fire Rescue and DRT personnel responded to several incidents in Crystal Lake's jurisdiction during this last year. Emergency calls were received at Crystal Lake several times requiring Department personnel to prepare for surface water rescue. In each incident, the potential victims were located or removed from the hazardous situation they were in and did not require any additional emergency intervention. The rapid response from initial rescuers was essential and appropriate for the situations.

A vehicle into a pond on the west side of Crystal Lake created an unusual rescue scenario. Once again, divers were put on alert and responded while Fire Rescue personnel were able to remove the victims to safety.

Mutual aid responses were requested by Woodstock Fire Protection District and Twin Lakes (WI) Fire Protection District. The DRT responded to a small remote pond in Woodstock's district where a stolen vehicle had been driven into the pond. Divers were able to determine that there were no victims in the submerged vehicle and attached a cable to the axle for the vehicle to be removed. At Lake Elizabeth in Twin Lakes, WI, divers from Crystal Lake Fire Rescue and departments across the area searched for a drowning victim who went under the water after rescuing another person.

Specialized Rescue Team Coordinator - Lieutenant Dan Grischow

The Crystal Lake Fire Rescue Specialized Rescue Team (SRT) was very active in training in 2010. The Crystal Lake team is also a part of the larger Lake / McHenry Counties SRT Team, which prepares for high risk, low frequency events. As no one department can provide all of the necessary equipment and manpower to handle these types of events, the combined manpower and specialized equipment from Lake and McHenry Counties handle these calls for service when they occur.

Team members train in four major specialties:

- Structural Collapse
- Trench Rescue
- Confined Space Rescue
- Vertical Rescue

Equipment

Crystal Lake Fire Rescue houses the Lake / McHenry Counties Urban Search and Rescue truck and roll-off container (USAR 5) at Station 3. The USAR 5 contains tools and specialized equipment that team members can use to handle almost any type of incident. This year, a newer canister truck, along with a second canister to hold additional equipment, was delivered to Crystal Lake as part of the Lake / McHenry Counties' SRT team allocation of resources. The increased equipment and truck were obtained at no cost to the City. All Crystal Lake Fire Rescue members have been





trained to drive the vehicle in case they are needed to respond to an incident with a canister.

The original canister still contains the equipment needed for vertical rescue, confined space, and structural collapse rescue. Chain saws and a ring saw, along with other equipment, were also added to the canisters this year. A ring saw is a special concrete saw that can cut through over a foot of concrete, if needed, to make a rescue.

The second canister was designated as a trench rescue canister because it can hold the large amount of equipment and lumber needed in this type of incident.

Training

Crystal Lake technicians attended over 170 hours of additional rescue training this year. Along with hosting an equipment familiarization drill in January and a trench drill in May, Crystal Lake technicians provided manpower and equipment for several other drills around McHenry County. Crystal Lake technicians also attended drills throughout Lake and McHenry Counties. Trainings included Structural Collapse Rescue, Slope Evacuation, and Trench Rescue, along with Confined Space scenarios. These drills give team members valuable insight on how to react when a real incident occurs.

Members

Crystal Lake added two new technicians to the SRT team. Lt. Chris Kopera joined the team in 2010 along with Firefighter/Paramedic Patrick Rozhon.

Hazardous Materials Team Coordinator - Lieutenant Dan Grischow

Crystal Lake Hazardous Materials Team Members, like the SRT Team Members, are part of the larger Lake / McHenry Counties Hazardous Materials Team. Team members respond to and mitigate hazardous material spills/leaks. Crystal Lake has five team members who are certified to the Hazardous Materials Technician B level, which is the highest level of training as identified by the Office of the State Fire Marshal. This involves an annual commitment of at least 40 extra hours of hazardous materials training. Technicians drill with specialized monitors, fully encapsulated suits and a host of specialized equipment.

Team Responses

Hazardous Materials Technicians responded to three incidents this last year. Two incidents in McHenry County were relatively minor. Crystal Lake technicians worked with other McHenry County technicians on both of these incidents. One incident involved a vehicle stopped by the Woodstock police that had a portable methamphetamine drug lab in the trunk. Another incident in Wonder Lake involved testing for radiological materials in a van outside a home. These incidents both came to a successful conclusion due to the knowledge and expertise of team members.





Training

Crystal Lake Hazardous Materials Technicians hosted three Level A (fully encapsulated) suit drills in September and October. These drills are an effort to simulate skills that a technician will use during a live incident. Members have to perform a variety of tasks, including stopping a simulated chlorine leak, testing and identifying different chemicals with the HazMat ID sensor, working with the necessary tools to stop liquid leaks and performing a rescue in a Level A suit. This drill helps the technician achieve the comfort level needed when a real incident occurs.



Technicians in Level A suits

Crystal Lake technicians attended over 200 hours of continuing education during 2010. Along with monthly drills, the technicians attended seminars and classes in Hazardous Materials Identification, Incident Management and Emergency Planning. Crystal Lake technicians also train Department personnel on Hazardous Materials Awareness and Operations level training.

In September, Crystal Lake housed HazMat 5 for three days to educate all Fire Rescue personnel in decontamination. HazMat 5 contains equipment needed to mitigate a hazardous materials incident and is the primary initial response vehicle for McHenry County. This yearly training reviews with all Crystal Lake members the equipment kept on HazMat 5 and the duties they may have to perform should an incident occur.



Hazmat Technician Tom Linneman instructs fellow Crystal Lake Fire Rescue members on proper decontamination equipment set up.





Emergency Medical Services (EMS) – 2010

EMS Coordinator – Lieutenant Chris Kopera

Equipment

An IV arm trainer was purchased in 2010. This adjunct resembles real human anatomy and provides an excellent tool to practice and evaluate personnel in the skill of obtaining intravenous access. Most medications and fluids are given through intravenous access in the ambulance setting.



Basic Life Support (BLS) equipment for Engine 340 and Truck 381 was installed in the

beginning of April. Both vehicles will function to support EMS personnel in delivering a high quality of care to the community at the BLS level in vehicles that previously had no EMS equipment. Department vehicles are now equipped with Automatic External Defibrillator (AED) and splinting and bandaging equipment.

12-lead electrocardiogram (EKG) transmission equipment has been incorporated in each ambulance. This equipment allows paramedics to send diagnostic quality EKG cardiac rhythm strips to the receiving hospital the crew is transporting to. This component is key to activating a "cardiac alert", which will free up critical hospital resources and enable fire rescue crews to continue to provide improved services to the Crystal Lake community.

Commercial hair clippers were purchased with the assistance of the Crystal Lake Rural Fire Protection District for each primary response vehicle. This tool will expedite the ability of medical crews to obtain a potentially lifesaving 12-lead EKG to initiate further medical care to a critically injured patient.

Thanks to the Crystal Lake Foreign Fire Insurance Board, funds were approved to purchase a winch and a ramp to retrofit an existing ambulance for bariatric needs. The new equipment was installed and, after training Department personnel, the new equipment was placed in service in January 2011.

EMS Validation Training

EMS Validation Training was instituted this year after a successful Fire Validation Training Program was initiated in 2009. Skills validation confirms job specific elements to a given position. This validation may also identify deficiencies and provides opportunities for education. Personnel are evaluated to perform job specific tasks per





policy to ensure their knowledge of those specific job functions. Following are some EMS drills that were conducted in 2010:

- Spinal Injuries
- Medication Calculations
- EKG Interpretation
- Emergency Childbirth
- Mass Casualty
- Intravenous Access
- Burns

EMS Station Liaisons

The position of EMS Station Liaison was instituted this year. EMS Station Liaisons assist in ensuring that the essential job related issues, whether maintenance, documentation, or stocking of EMS materials are completed at each fire station.

Procedure Updates

A trial for mobile patient care reporting was completed in early 2010. The goal was to reduce down time for ambulance personnel at hospitals in order to return the ambulance to service sooner. Crews were able to decrease down time at the hospital by an average of 10 minutes per transport.

EMS Statistics

EMS Incident Outcome	Number of Patients	% of Patients
Hospital Transport	2,598	69.60%
Non-Transport	1,121	30.03%
Other Agency Transport	14	0.37%
Total	3,733	100%

Transport Services Provided	Number of Patients	% of Patients
Advanced Life Support	1,788	47.90%
Basic Life Support	810	21.70%
Non-Transport	1,135	30.40%
Total	3,733	100%

Transport Destination	Number of Patients	% of Patients
Centegra-McHenry	924	24.75%
Centegra-Woodstock	1,236	33.11%
Good Shepherd	324	8.68%
Sherman	114	3.06%
Non-Transport	1,135	30.40%
Total	3,733	100%





Training Bureau - 2010

Bureau Chief of Training – William Whyte

As in previous years, the Crystal Lake Fire Rescue Department has continued its emphasis on fire rescue personnel development. Training requirements are outlined by several organizations, such as Occupational Safety and Health Administration (OSHA), the Illinois Department of Labor (IDOL) and the National Fire Protection Association (NFPA). Crystal Lake Fire Rescue Department (CLFRD) personnel participated in over 20,000 hours of training in order to remain proficient in all areas of emergency operations.

In 2010, the Training Bureau accomplished the following goals:

- Provided live fire training at the Huntley Fire Protection District training facility.
- Prepared and presented a Fire Officer Development seminar with a qualified and well-known fire service speaker at McHenry County College.
- Implemented an EMS validation program to determine if the training being conducted on a daily basis provides the expected or desired results in improved performance from personnel.
- Hosted a State certifying class conducted by the Illinois Fire Service Institute or the Illinois Society of Fire Service Instructors.
- Implemented an Acting Company Officer development class to assist our personnel who occasionally work in a supervisory role. This is a pilot program that has been very beneficial to personnel in this capacity.
- Established a Training Committee for review of current training and development of new training to better meet the needs of Department personnel.
- Established a Probationary Training Committee to review the current training of new personnel and institute changes as needed.

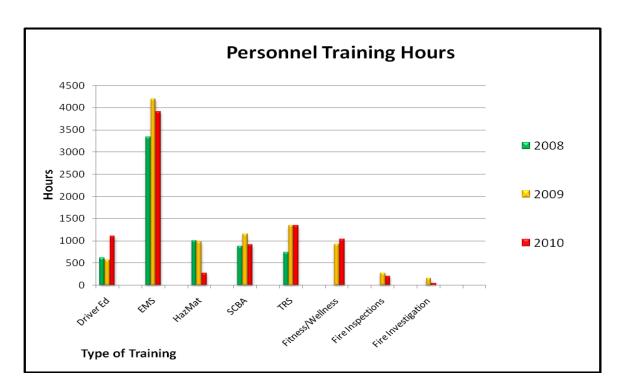
These goals were accomplished through the commitment, hard work, and support of the Crystal Lake Fire Rescue Department personnel.





2010 Training Bureau Statistics









In 2010, Crystal Lake Fire Rescue Department personnel logged over 20,000 hours of training. On average, each of the Department's Sworn and Paid on Premise personnel participated in over 285 hours of training annually, or 23.75 hours of training monthly. The training categories for Fire Rescue personnel are:

Training Course	Hours
EMS	3,904
Fire Prevention/Inspections	207
Fitness/Wellness	1,042
HazMat	282
Specialized Rescue	707
Drivers Classroom	197
Drivers Road Course	374
Drivers Competency Course	361
New Drivers	176
Apparatus Engineers	1,215
Firefighter Safety	1,450
Fire Investigations	50
SCBA	914
Incident Command	546
Officer Development	3,430
Fire Training	5,503
Total Training Hours	20,358

Department personnel spent the above hours both in the classroom and on the training ground. The following list reflects some of the different types of educational opportunities that have been made available to fire rescue personnel:

- Live fire suppression drills
- Water supply drills
- Forcible entry/exit drills
- Ventilation drills
- Building tours/Pre-incident plans
- Building construction training
- Auto-aid training with neighboring fire departments
- Aerial operations drills
- Ladder drills
- Incident Command training
- Officer Development training
- Specialized Rescue
- Fire Investigation





Professional Development

The following is a list of professional development courses attended by CLFRD personnel in 2010:

Course Name	Number of Attendees
Firefighter II	1
Firefighter III	7
Fire Officer I Courses	13
Fire Officer II Courses	9
Structural Collapse Operations	1
Vehicle Machinery Operations	6
Fireground Company Officer	2
Acting Officer Development	23
Wind Driven Fire Seminar	40
Apparatus Design Course	4
Fire Pump Testing	1
Fire Apparatus Engineer	5
HazMat Incident Command	3
Bloodborne Pathogen	2
Rope Operations	2
Truck Operations	17
Communication With Tact	1
Live Fire Training	45
Senior Officer Development	2
CPR Instructor Update	3
Advanced Firefighter	2
Advanced Fitness Program Design	2
Fireground Command School	1
Public Safety Awareness	1
Large Vehicle Extrication	4
Scott SCBA Technician	4
Advanced Cause and Origin	1
Incident Safety Officer	1
Cardiac Diagnostics	1
Basic Assessor Certification	1





Certifications

The following is a list of certifications that were obtained by CLFRD personnel in 2010:

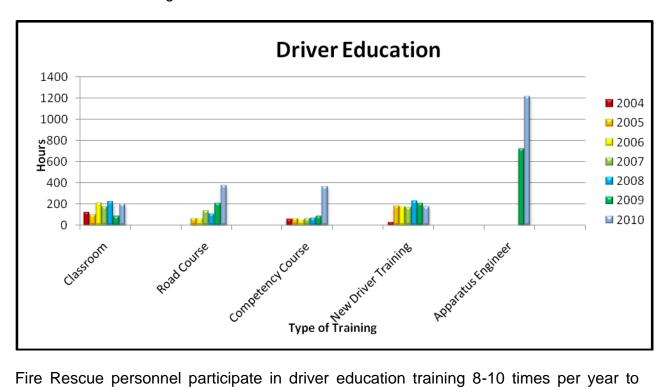
Certification	Number of Personnel
Firefighter II	1
Firefighter III	7
Provisional Fire Officer I	2
Fire Apparatus Engineer	7
Fire Instructor I	2
Fire Instructor II	3
Hazardous Materials Incident Command	2
Hazardous Materials Operations	1
Hazardous Materials Awareness	1
Water Operations	1
Rope Operations	2
OSHA Bloodborne Pathogen Train-the-Trainer	2
Fire Service Vehicle Operations	2
Vehicle Machinery Operations	2
Structural Collapse Operations	1
Incident Safety Officer	2
NIMS 100	1
NIMS 200	1
NIMS 300	1
NIMS 700	3
NIMS 701a	18
NIMS 702a	17
NIMS 703a	9
NIMS 704	63
NIMS 800	34





Driver Education

Driver education continues to be a focus for the Department. Approximately 25% of firefighter line-of-duty deaths annually are a result of driving accidents involving fire apparatus or personally owned vehicles responding to or from an emergency incident. All Fire Rescue personnel are required to show proficiency in driving approved apparatus annually. In 2010, Crystal Lake Fire Rescue personnel logged over 1,100 hours of driver training.



Fire Rescue personnel participate in driver education training 8-10 times per year to remain proficient in driving fire apparatus. This year, an additional training opportunity of driving with a trailer was added to the Department's curriculum.

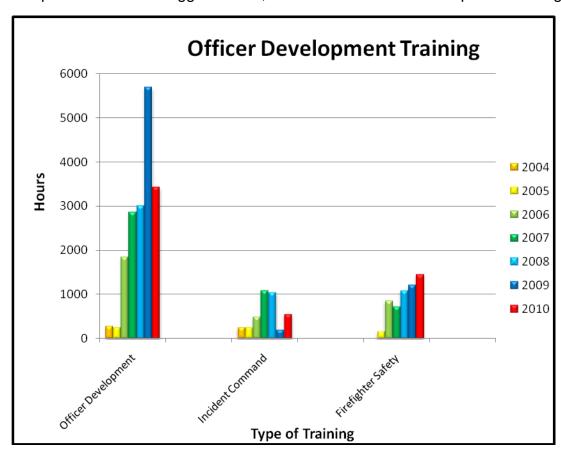






Fire Officer Training

Officer Development continues to be a priority for the Crystal Lake Fire Rescue Department. Each officer is required to attend outside training classes that will educate, enhance, or supplement their own knowledge and experience levels. In 2010, Fire Rescue Department officers logged over 5,695 hours of Officer Development training.



In addition to attending Fire Officer I and II courses, other courses or seminars attended by Fire Rescue officers included:

- · The Dangers of Wind Driven Fires
- The Art of First Due Company Officer responsibilities
- Fireground Company Officer at the Illinois Fire Service Institute
- Incident Safety Officer

The Dangers of Wind Driven Fires

On February 17, 2010, the Crystal Lake Fire Rescue Department hosted the "Dangers of Wind Driven Fires" and "Hidden Dangers of Residential Fires" seminar with Chicago Fire Department Battalion Chiefs Pete Van Dorpe and Keith Witt at McHenry County College. Over 200 firefighters from around Illinois attended this informative seminar. The Crystal Lake Fire Rescue Department had 40 personnel in attendance at the seminar.





Voluntary Physical Fitness Program

In 2010, Crystal Lake Fire Rescue Department personnel completed over 1,000 hours of physical fitness training. This represents an increase from the previous year.

Firefighters continue to respond to emergency incidents that require extreme physical output and often result in physiological and psychological outcomes. Such situations over time can and do affect the overall wellness of the firefighting and emergency response system.

The voluntary physical fitness program seeks to improve firefighter fitness over time to maintain a fit, healthy, and capable firefighter throughout his/her career and beyond.



Fire Station One Fitness Room

SCBA Training Trailer

The Self-Contained Breathing Apparatus (SCBA) trailer is owned by Crystal Lake Fire Rescue and is utilized by five McHenry County fire departments through a cost-sharing and cooperative agreement. The participating Fire Rescue Departments include:

- Cary Fire Protection District
- Huntley Fire Protection District
- McHenry Township Fire Protection District
- Richmond Fire Protection District
- Woodstock Fire/Rescue District

The trailer provides a confidence course for members wearing SCBA, as well as the opportunity to practice various rescue scenarios.





Fire/EMS Safety, Health and Survival Week

The Crystal Lake Fire Rescue Department participated once again in the annual Fire/EMS Safety, Health and Survival Week. This program is sponsored by the International Association of Fire Chiefs (IAFC) and the International Association of Firefighters (IAFF).

During this week, fire departments are encouraged to suspend all non-emergency activity and instead focus entirely on safety, health and wellness-related training and education until all shifts and personnel have taken part. An entire week is provided to ensure each shift and duty crew can spend one day focusing on these critical issues. This year's theme was "Fit for Duty". While departments are encouraged to identify activities tailored to their specific community, recommended areas of concentration include:

- General Health and Wellness
- Food and Nutrition
- Fitness
- Stress Management
- Smoking and Smokeless-Tobacco Cessation
- Alcohol and Other Drugs
- Infectious Diseases
- Suicide Prevention

Validation Training

Throughout the year, validation drills were conducted with all three shifts. Validation drills are an essential part of any training program to ensure that the skills being taught are accomplishing proficiency by all personnel.

The validation drills consist of 14 areas of job function from which the company officer picks a drill. The station assigned to perform the validation drill then gathers the equipment necessary to perform the drill, re-locating to a specific training site, if necessary. Most of the validation drills have a time standard in which the drill must be completed. Some of the validation drills are:

- Hose advancement for fire suppression.
- Search and rescue for victims.
- · Ground Ladder placement.
- Vertical ventilation.
- Water Supply/Drafting
- Foam Operations





Safety Committee – 2010

Bureau Chief William Whyte - Fire Rescue Safety Officer

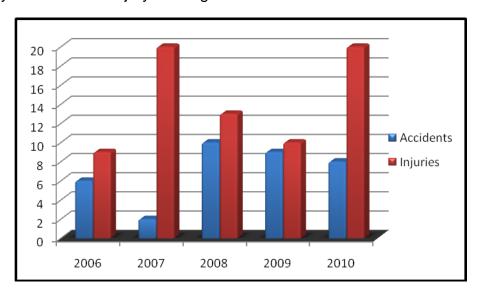
The Crystal Lake Fire Rescue Department Safety Committee continues to be an integral part of the City of Crystal Lake's overall risk management plan and program. Through the Department's Safety Committee, management and employees can communicate safety concerns and ideas to promote a safe work environment for Department employees.

The Crystal Lake Fire Rescue Department Safety Committee developed goals and objectives for 2010 to help provide direction for the Committee. Some of the 2010 goals and objectives were:

- Reduce the number of preventable vehicle accidents by 50%.
- Reduce the number of preventable employee injuries by 50%.
- Implement a hearing protection policy.
- Conduct live fire training for all personnel.
- Continue quarterly driver education training.
- Investigate safety equipment purchases.
- Continue to promote the Department's Behavior Observation Program.
- Promote the use of physical fitness equipment to improve personal strength and health.
- Promote stretching and flexibility exercises prior to practical training drills.

Accident/Injury Investigations

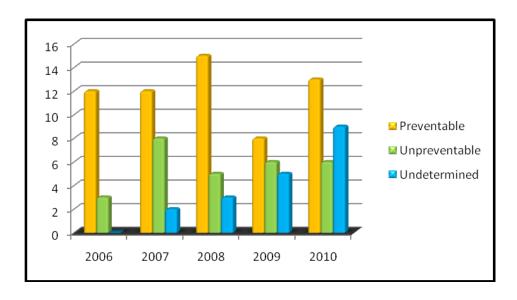
The Fire Rescue Department Safety Committee conducted a total of 28 accident/injury investigations for the year 2010. The following graph shows a comparison between previous years' accident/injury investigations:





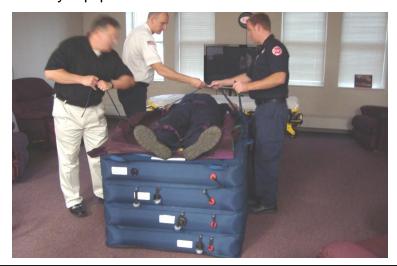


Reducing the number of preventable accidents was a major focus for the Safety Committee during 2010. This will continue to be a priority for the coming year. The Observed Behavior Program has continued with a commitment to realizing a significant decrease in all accidents and injuries. The following graph shows a comparison between preventable, unpreventable, and undetermined accident/injury investigations from 2006 to 2010:



New Safety Equipment

The Crystal Lake Rural Fire Protection District purchased two new devices called the HoverJack and HoverMatt for lifting and moving bariatric patients. The objective of this device is to prevent injury to the patient and reduce the amount of back injuries to our personnel due to lifting. Fire Rescue personnel are very grateful to the District for this important piece of safety equipment.



Crystal Lake Fire Rescue personnel train with the new HoverJack.





Fire Investigation Team - Lieutenant Chris Olsen

This year, the Crystal Lake Fire Rescue Department investigated eight fires. Of these fires, six were accidental in nature, one was undetermined, and one was classified as arson. The arson case partnered Fire Rescue investigators working in close cooperation with the Crystal Lake Police Department. The Department continues to work closely with other fire departments in McHenry County during these investigations, along with local police agencies and the Office of the State Fire Marshal.

Department investigators have logged numerous hours of training through both classroom and hands-on investigations. The fire investigators are on track to accumulate the required number of hours for recertification through the Office of the State Fire Marshal.

Quartermaster - Lieutenant Robert Lutherus

Crystal Lake Fire Rescue is dedicated to providing NFPA compliant bunker coats, pants, boots, gloves, helmets, hoods, eye protection and SCBA to its members.

In 2010, the Department researched and implemented a second option to its current eye protection. The ESS (brand) – "ICE" safety glasses were chosen for their protection while preventing fogging of lenses when used. Continued research of available products ensures that members are provided with the latest technology in personal protection. The following was also achieved in 2010:



- Training for all members on conducting routine bunker gear inspections.
- Replacement of 8 sets of bunker gear that had reached their serviceable life.

Juvenile Firesetter Coordinator - Battalion Chief Thomas Pollnow

The Juvenile Firesetter Program is an educational program designed to assist juveniles in understanding the dangers and consequences of fire play. This program is voluntary and can also be assigned as part of a judgment by the juvenile court system.

Three Juvenile cases have been addressed this year. The three cases involved males ages 10, 11, and 14.





Air-Monitoring Equipment Coordinator – Lieutenant Rick Kaiser

Air-monitoring equipment is used by fire rescue personnel on a daily basis for natural gas leaks, carbon monoxide incidents, and odor investigations.

The two types of meters that are used most frequently are Carbon Monoxide (CO) meters and explosive meters. The importance of these monitors is paramount, as they are the first line of identifying a natural gas leak or a CO leak in a residence.

SCBA Coordinator – Lieutenant Rick Kaiser

Self-Contained Breathing Apparatus (SCBA) are vital pieces of equipment and are used on a daily basis by fire rescue personnel as part of their personal protective equipment. The technology that is used to operate this equipment requires an active preventative and regular maintenance program. As a cost-saving measure, several of the Department's firefighters are trained to make certain repairs to the SCBA.

Fit Testing

Fit testing of face pieces for employees in the Fire Rescue Department and Police Department, as well and certain Public Works employees, is conducted on an annual basis to ensure that the face piece an employee is wearing fits correctly and does not allow any contaminated air into their respiratory system. There are two types of face pieces/masks that are worn by Fire Rescue personnel. The first is the SCBA / CBRN (Chemical, Biological, Radiological, and Nuclear) mask. This is a dual purpose mask that not only allows the firefighter to perform regular firefighting duties but can also be converted to a CBRN mask with a quick adapter fitting. When the mask is adapted, a special canister is installed on the mask to "clean" the contaminated air at a CBRN incident while the firefighter breaths the ambient air. Police Department members carry a CBRN only mask. Public Works employees utilize a SCBA mask for their confined space work.







Retired Members - 2010

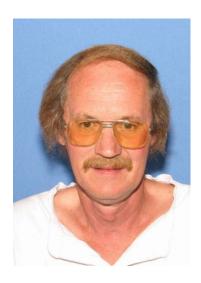
In 2010, the following members of the Crystal Lake Fire Rescue Department retired after over 18 years of dedicated service to the residents and business owners of our community.



FF/PM David Ling 18 Years



Lieutenant James Kalisik 22 Years



EMT Gary Svejar 27 Years



Lieutenant Rob Martel 24 years





In Memoriam JIM BEHRENS

For over 42 years, Jim Behrens diligently served the residents of Crystal Lake, helping ensure their safety and well-being on a daily basis. His professionalism, dedication and exemplary service were an invaluable asset to the Crystal Lake Fire Rescue Department and a testament to his unwavering commitment to the Crystal Lake community.















Station Locations

Fire Station One 100 W. Woodstock Street





Fire Station Three 844 Virginia Road

Fire Station Four 8705 Bard Road







Pace, Palmer

Pireh, Martin

Perenchio, Marty

Pierce, Rebecca

Department Roster

Officers

James Moore Fire Rescue Chief

Paul DeRaedt Deputy Fire Rescue Chief

Jerry Larsen

Bureau Chief of Fire Prevention

William Whyte Bureau Chief of Training Robert Olszewski Bureau Chief of EMS

Tom Pollnow Battalion Chief

Robert Kohley Battalion Chief
John Larding Battalion Chief

John Lardino Battalion Chief James Kalisik/Rick Kaiser Lieutenant

Kirk Kiermas Lieutenant Robert Lutherus Lieutenant Lieutenant Lieutenant Lieutenant

Chris Olsen Lieutenant
Dan Grischow Lieutenant
Rob Martel/John Volenec Lieutenant

Casey Cork Lieutenant
Chris Kopera Lieutenant
Joyce Stevenson Lieutenant

Members

Aiello, Mike

Angelo, Chris

Bedore, Chris

Behrens, Jim

Beyer, Tracy

Jakubowicz, Ray

Kaltenbach, Dave

Kauke, Bryan

Kerley, Tim

Kownacki, Kevin

Beyer, Tracy Kownacki, Kevin Rozhon, Patrick Borst, Nick Kreher, Rich Ryan, John Brechbiel, Bob Laufer, Lloyd Schmitt, Kim

Bucheger, Adam LeClercq, Dave Shipley, Carolyn Buterbaugh, John Landwer, Mark Spivey, Jim

Cook, DarrellLeuck, MattStoddard, RickColucci, GinoLinneman, TomSustek, JimForsberg, JoeLing, DavidSypura, AndrewFowles, AdamLucas, MikeSvejcar, Gary

Gabrielson, Toby

Geyman, Michael

Lutherus, Art

Tamason, Brian

Marina Brian

Thurse Mart

Gundlach, Amanda Marino, Brian Thuma, Matt Hagen, Scott Menzimer, Brian Williams, Chris Havemann, Ed Odishoo, Tim Williams, Dan

Howell, Todd Olsen, Heidi Wisz, Rob Hurley, Mike Olszak, Linda



