

**TOWN OF
SOUTHWEST HARBOR, MAINE**

**FIRE APPARATUS
ASSESSMENT OF NEEDS
DRAFT REPORT**

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OVERVIEW

The Town of Southwest Harbor, which is located in Hancock County, Maine and on the island of Mount Desert, occupies approximately 35 square miles and is bordered by the towns of Tremont and Mount Desert. The current population according to the 2000 Census is approximately 2,000 year-round, with that amount at least doubling during the summer season. Of the landmass occupied by Southwest Harbor, about one-half is held and managed by the National Park Service as Acadia National Park. The community's assessed value is approximately \$335 million, however, an incalculable value of boats in land based storage during off-season can be assumed to be significant.

The Southwest Harbor Fire Department is a municipal department as identified by town ordinance. The department is housed in the municipal complex and is staffed by on-call fire fighters which currently numbers 42. Accordingly, the average number of fire fighters who respond to calls for service is estimated at ten members per call. The department is dispatched to incidents through the town's dispatch center also located at the municipal complex. Over the past five years, the department has answered an average of 82 calls for service per annum, with a high of 111 and a low of 59 during the period. Fiscal year 2004 budget for fire protection provides the following:

Fire department - Operations	@ \$ 38,824
Fire department - Special Purchase (grant match)	@ \$ 8,250
Fire department - Emergency Maintenance	@ \$ 5,000
	\$ 52,074
Fire Department - Capital Reserve: Apparatus	@ \$ 40,000
Fire Hydrant Rental (fixed cost)	@ \$125,000

The town recently was awarded a grant of \$87,252 through the United States Fire Administration's (USFA) "Assistance to Fire Fighters Grant Program." (The USFA is a division of the Department of Homeland Security and the Federal Emergency Management Agency (FEMA). These monies are earmarked for "Fire Operations and Fire Fighter Safety," to which the town is obligated to match at 10%. The premise of the grant application is to enhance personal protective equipment (PPE) used by fire fighters and to improve upon the delivery of water for fire fighting operations through large diameter hose.

An intergovernmental agreement between the fire departments in Southwest Harbor, Tremont and Somesville allows for these respective departments to respond "Automatically" to reported building fires within either community. Essentially, this region of Mount Desert is provided fire suppression by four strategically located fire stations operated within three different communities. The town is also a member of the Hancock County Mutual Aid Compact. This memorandum of understanding between all assigned departments provides additional resources in the event of a large-scale incident.

The (Insurance Services Office) ISO’s Public Protection Classification for Southwest Harbor was last conducted in 1994, and the town was eventually rated at “5/9.” The objective of this rating schedule is to provide a tool for the insurance industry to measure quantitatively the major elements of a community’s fire suppression system, of which the fire department is one of three key elements (the other two elements being the receiving and handling of alarms, and the public water supply). Measurements of these elements are then developed into a Public Protection Classification number on a relative scale from “1” to “10,” with a “1” representing the best possible fire suppression system and a “10” representing less than minimum recognized protection. This rating schedule is used to assign fire insurance premiums on many properties within communities throughout the United States. The rating “5” represents those areas within proximity of the fire hydrants, while those beyond are rated at “9.”

The most recent ISO survey was conducted in 1994 and as a result of that survey, the town was initially faced with a retrogression in rating due to a lack of sufficient pumping capacity and other noted deficiencies. The town’s previous rating was a 6/9, whereas the proposed rating was to be a 7/9. This could have increased insurance premiums on certain buildings within town. However, after the town sought out, found and purchased a used pumper, and made improvements where feasible and cost effective, and was actually successful in earning a rating of “5/9”. This improvement fundamentally enhanced fire protection and in some cases may have lowered fire insurance premiums on certain properties.

For the most part, the fire department can utilize the approximately 90 hydrants which cover about 80% of the built-up areas of the community for fire suppression. For those areas of town not serviced by hydrants, the fire department can draft from static sources and pump water through long hose lays. Water can also be transported through a tanker-shuttle operations using the large capacity tankers from Tremont (future purchase), the pumper/tanker at Somesville, and a pumper/tanker recently added to the Bar Harbor Fire Department at the Town Hill station.

The Southwest Harbor Fire Department operates the following apparatus:

APPATATUS	FEATURES
Eng. #103 - 2002 Pumper	1500gpm/1000 tank
Eng. #105 - 1981 Pumper	1500gpm/500 tank
Eng. #101 - 1975 Pumper	750gpm/750 tank
Eng. #102 – 1968 Pumper	750gpm/750 tank
Eng. #106 – 1989 Initial Attack	350gpm/250 tank
Eng. #104 – 1980 Initial Attack	400gpm/250 tank
Pick-up truck – 1987 4WD	Utilitarian

The department's main fleet of four pumpers has an average aggregate age of 22.5 years. If the oldest pumper were removed, the average age for the fleet would drop to 17 years. During the past 36 years, the town has purchased three new pumpers and one used one.

The schedule to replace the major pumpers appears to have been thrown off track with the 1980 and 1989 purchase of the two "Initial Attack Vehicles." A new pumper was purchased in 1975, however, the town did not purchase a new replacement until 2002. In essence, the town did not purchase a new pumper for 27 years. The need became apparent when the ISO graded the community in 1994 and found significant deficiencies with regard to the fire department's pumping capacity. The procurement of a used 17 year-old pumper for approximately \$65,000 remedied the situation.

The Towns of Tremont and Somesville border Southwest Harbor. Those fire departments closest to Southwest Harbor have nearby fire stations with the following inventory of fire apparatus available:

Community	Fleet of Apparatus
Tremont	1 - Pumper (1250gpm/1250 tank) 1 - Pumper (1000gpm/1400 tank) 1 - Pumper (1000gpm/1000 tank) 1 - Pumper (750 gpm/750 tank)*
West Tremont	1 - Pumper (750gpm/750 tank)
Somesville	1 - Pumper (1250gpm/1000 tank) 1 - Pumper/tanker (1000gpm/3000 gal. tank) 1 - Medium Rescue (extrication/rescue services) 1 - Hose Wagon (3,300 feet of Large Diameter Hose)

** Notation: It is understood that the Tremont is in the planning stages of replacing this apparatus in the near future with a large capacity tanker. The addition of this vehicle will enable a better rural water supply in those areas of the region not serviced by fire hydrants or lack access to nearby static water sources.*

The National Park Service with headquarters in Bar Harbor has additional wildland/urban interface fire fighting equipment for suppressing fires not only in the National Park but is available to area communities through the Hancock County Mutual Aid Compact. This equipment includes a four-wheel drive pickup truck with a brush fire-skid module, a wildland fire fighting vehicle and a 2,500-gallon tanker.

RECOMMENDATIONS:

Update the “Automatic Aid” program: The current policy statement lists the Somesville Fire Company as that entity from Somesville providing fire protection services. The Town of Mount Desert now has a single municipal fire department comprised of four fire stations located in separate villages within the town. The fire station at Somesville is but one of those stations servicing the town of Mount Dessert as well as Southwest Harbor via the “Automatic Aid” program. The policy should conform to ISO criteria to achieve the maximum credit allowable in an effort to improve upon the fire suppression-rating schedule. Further, this policy must be strictly adhered to by the region’s emergency dispatch centers.

Southwest Harbor and its neighboring communities should assure the written “Automatic Aid” response program definitively meets the guidelines of the ISO’s *automatic aid* requirements. This program would have the regions fire departments basically respond to calls without regard to town boundaries. In many cases, an area of one town which is located some distance from the fire station may be better served by another community’s fire department solely due to the location of the proximal station. Elongated response times and travel distances, in addition to the “turn-out time” it takes for volunteer fire fighters to respond to their fire station upon receipt of an alarm, compounds fire fighting efforts and allows fires to free burn and grow in size, further exacerbating fire fighting efforts and diminishing the opportunity for positive results.

According to the ISO, in many cases, less apparatus are needed to provide adequate fire suppression under guidelines of the “Fire Suppression Rating Schedule” when communities operate under an automatic-aid program. This generalization needs to be carefully evaluated when reviewing and revising such a plan.

Definitions:

Mutual Aid: Mutual aid refers to outside assistance that is requested by one community from another *after* a fire has occurred. Assistance by the outside fire department is rendered upon request. Mutual aid can impact on the grading evaluations of water supply as derived in the ISO grading schedule.

Automatic Aid: Automatic Aid refers to outside assistance that responds immediately and without hesitation on the first alarm to (reported) building fires beyond their boundaries. Two or more departments that participate in an automatic aid arrangement operate as one fire department for dispatching fire apparatus to building fires.

Emergency Medical Services: The fire department should at a minimum certify the membership in basic first aid, CPR and in the use of Automatic External Defibrillation

(AED). The department would need to become licensed to the level of expertise the administration would decide upon. As indicated in the fire chief's annual reports, the types of calls the department is handling includes augmenting the emergency medical service provider.

Design characteristics of future apparatus should match the operational methodology of the department: According to department policy, all fire fighters are required to come to the station, man fire apparatus and respond out to the call. This process profiles the "company function" concept in that a minimum number of personnel are expected to ride together and perform as a team upon arrival at an incident. To date, the department has purchased one used pumper that has multiple riding positions for fire fighters to be seated. The newest pumper that was recently placed in service can realistically seat only two fire fighters, as can the other apparatus. It is believed that the current fire station is not large enough to accommodate a larger chassis. Furthermore, the added cost of a four-door cab style chassis likely nullified the opportunity to provide additional seating for personnel.

Should the department and the town not support the concept of "four door" cabs, then a personnel transport vehicle should be considered. Such a vehicle would be capable of conveying four to six personnel with their personal protective equipment to an incident. Again, it is the culture of the department not to clutter an incident scene with a multitude of personally operated vehicles. When the department goes to replace the current full-size pick-up truck at the end of its expected life cycle, a four-door pick-up truck or like designed vehicle could be considered.

Maintain and/or improve upon the ISO Rating of 1994: The town should anticipate the return of the ISO within the next few years. In the last report on the fleet of apparatus, the pumpers did not receive full credit due to the lack of equipment. The ISO's equipment inventory list should be followed closely in an effort to garner the highest score possible in this category.

The ISO has also recognized the value of a well-grounded plan that will have water conveyed in a rural setting through sources other than supplied hose lines connected to fire hydrants. Either through tanker-shuttle operations or long hose lays using large diameter hose with in-line relay pumpers, the department may well be able to deliver required fire flows to non-hydranted areas and possibly improve upon the ISO rating, thus reduce fire insurance premiums on certain types of properties. Such a well-devised plan would lend itself to effective fire suppression operations and hopefully minimize the consequences of potential large fire losses.

Dry-Hydrant Program: The community should implement a formal program of identifying, constructing, maintaining, and in cases of new developments mandating the construction of fire ponds and requisite dry-hydrants for fire pumpers to draft water from.

Extrication and Rescue Services: The fire department is currently equipped to with two hydraulic extrication tools, however, they are located on two separate apparatus. Not only are these tools relied upon to disentangle victims from automobiles, but may be needed for industrial accidents, construction site mishaps and other atypical rescue scenarios. The department should consider expanding its inventory of equipment to include a set of air bags, a gasoline-powered cut-off saw, a come-along, a stokes basket, emergency medical equipment to include an AED, etc. The assemblage of rescue tools should be carried on a single vehicle.

Reexamine the use of the Initial Attack Vehicle(s): The fire department has two similar vehicles that have limited capabilities. The department has indicated they have enjoyed the maneuverability of the small vehicle, however, the need for two is questionable. This type of vehicle has significant limitations and fire fighters must be keenly aware of those constraints. The newer vehicle, Engine #106 is becoming overloaded with equipment as the department expects this vehicle to address a vast majority of its emergency service calls. It must be understood that the array of tools and equipment used in rescue evolutions is ever changing and apparatus must be designed with that in mind.

In order to carry out extensive fire fighting and rescue operations, this type of vehicle must quickly be augmented with full service pumpers that carry more water on board, can deploy lengthy hoselines from hydrants to areas of need, generate sufficient fire streams with adequate pressure and volume for full penetration of free burning fires, and carry a full compliment of tools and equipment utilized by a multitude of fire fighters.

Ladder Service: The fire department relies solely on extension ladders to rescue imperiled civilians who may be trapped in a fire or other calamity, and for fire fighters to ascend rooftops, upper story windows, chimneys and to gain access other threatened buildings during fire ground operations. The first due fire apparatus, which are the most recent acquisitions, have ground ladders of 24 feet in length. The department does have other ladders of 28 and 40 feet in length, however, they are located on the two older pumpers that will likely arrive later in an incident or may be positioned at a distance from the incident.

Although the Town of Southwest Harbor does have a building height restriction of 40 feet, the layout, dimensions and proximity of some buildings throughout the community and in many cases the topography could prevent the safe utilization of ground ladders. Furthermore, these aspects negate the access to upper portions of buildings for the department to carry out fire suppression and rescue tactics.

Aerial Ladder: The complexion of the community especially within the built-up areas meets ISO's criteria regarding the need for an aerial ladder. This too is recognized in the "Southwest Harbor Comprehensive Plan." There are a number of large buildings that in

order to effect sound fire fighting operations, an aerial device may make a significant difference between a positive result or a large-loss incident.

The town should consider purchasing an aerial ladder. Let it be known that an aerial is an expensive piece of equipment and that Southwest Harbor fire fighters must learn an whole new aspect of fire fighting, but the results in well-grounded strategies and tactics can make a marked difference in fire suppression efforts, rescue evolutions, and all around fire fighter safety.

House the National Park Service Tanker: It is understood that the large capacity tanker at the National Park is not under cover during the wildland fire season, and is otherwise stored away in Winter Harbor. Either the Southwest Harbor Fire Department or one of the other island communities should work towards providing space within a fire station either permanently or at least during the winter season. This vehicle should be made available to the host community for use in fire suppression and respond to calls for service as needed anywhere on Mount Dessert. The 2,500 gallons of water carried onboard should be consider part the region's fire defenses all year long and not just for wildland fires within the park.

CONSIDERATIONS:

For many small communities, the idea of elongating the life of older fire apparatus seems a prudent venture. However, this perspective in most cases is outmoded. Many departments keep a fleet of aging apparatus, and too often, retain older vehicles just in case one may breakdown they have a backup piece. And in many cases, outmoded apparatus has limited application in a modern fire department.

The town of Southwest Harbor systematically puts money aside each year for the future purchase of fire apparatus, however, there is no specific long-term apparatus replacement program in place. The town has been putting \$40,000 per year away in a capital account, which funded the purchase of Engine #103 in 2002.

According the National Fire Protection Association, front line fire apparatus in small communities should not exceed 25 years of service. Unreliability and obsolescence are the major factors that determine the need to eliminate older apparatus. Furthermore, new technologies, design concepts and features of modern apparatus lend to more efficient and effective use of resources and enhance the tasks associated with mitigating emergency incidents.

The ideal configuration of apparatus for Southwest Harbor would include three main pieces of apparatus, an initial attack vehicle and a utility vehicle. The three major pieces of fire apparatus should comprise the following:

- **Rescue/Pumper:** This vehicle would be full size pumper and respond to fire calls, automobile accidents and other types of rescues services. It should have a large capacity pump and water tank, carry a sufficient load of water supply hose and ground ladder
- **Conventional Pumper/Hose Wagon:** This pumper would be responsible for carrying a significant amount of “large diameter hose,” have a large capacity pump and all the features of a standard pumper.
- **Quint:** This vehicle would meet the full criteria of a pumper and have a 75’ aerial ladder with a pre-piped waterway.

The smaller vehicles would consist of the following:

- **Initial Attack Vehicle (AKA “mini-pumper”):** As previously stated, the fire department has utilized this type vehicle for a number of years. The newest unit was built in 1989 and should serve the town for the foreseeable future. The fire department needs to fully understand the limitations of this vehicle and how it fits into the “Respiratory Protection Law,” also known as two-in, two-out, and NFPA #1720, the standard for the “Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.”

The town needs only one of these. As previously stated, the fire department has indicated that having a smaller vehicle allows them to locate, gain access to and initiate action in a variety of scenarios without having to, perhaps erroneously, commit larger fire apparatus. Because of long obscure driveways, incorrect addressing and a host of other circumstances, the first-due fire apparatus, the “mini-pumper” can respond to and assess the situation as other fire fighters assemble and respond to the call. The exact address can be qualified and a strategy can be initiated based upon the initial report. As tactics are implemented, the proper equipment can be directed to the best-suited function.

- **Utility Vehicle:** The department has a full-size pick-up truck used to transport equipment, run department errands, and to address a myriad of fire department service needs. When this vehicle is replaced in the future, consideration should be given to carrying more personnel than just two. The design criteria should be based upon what the needs and expectations for the future would entail at that time.

CAPITAL REPLACEMENT PROGRAM:

- **Purchase a new rescue/pumper in 2005:** This project would replace the two oldest pumpers, Engine #101 which will be 30 years old and Engine #102 which will be 37 years old, with a single unit. *(Note: Should the 1968 pumper suffer a catastrophic*

failure or require moderate sums of money for repairs before this project can be addressed, it should be removed from service instead of being repaired. At the same time, the status and functionality of unit #104, the 1980 quick attack should be assessed. It may behoove the department to delete this vehicle while it has some value or simply maintain it as a wildland fire apparatus until it is scrapped in the future).

The new pumper should have a pump capacity of no less than 1,500 gpm (gallons per minute), and a tank capacity of no less than 1,000 gallons. The compliment of ladders (and possibly hard suction hose) should be stowed either beneath the hose bed or on a hydraulic ladder rack that would position them above the hose bed. The intention is to provide as much compartment space on the exterior sides of the truck as possible, and to employ a margin of safety that minimizes the risk of injury to fire fighters. A front intake suction would better suit drafting evolutions from portable tanks and other static sources. The pumper should also be designed to carry the department's current and future compliment of rescue, emergency medical, and extrication equipment suited for the community

Serious consideration should be given to the acquisition of a four-door cab. Although designed to carry at least four firefighters, it is understood that it would be unusual for the department to routinely respond to calls for service with that many personnel on board. The value of this space is not just for transporting additional personnel, however. The space should be considered multifunctional. Specialized seats (except for the driver's seat) can be ordered from the manufacturer that allow for storing the "Self Contained Breathing Apparatus" (SCBA) in the passenger compartment. This keeps these critical units in a dry, clean atmosphere, and readily accessible for use. Furthermore, it frees up storage space, which is at a premium on fire apparatus. The cab space, which is primarily designated for seated personnel while responding to and returning from incidents, can also be used as a "rehab" area where fire fighters can retreat from the elements or be rehabilitated after physical exertion. What's more, the manner in which the fire department operates today may likely change over the course of the vehicles life and not having the additional personnel space available could hamper efficiency. Currently, when the fire department is called upon to assist other communities, more than one apparatus must respond just to transport personnel. A well designed pumper could negate the need for additional vehicles, plus it would have the fire fighters respond as a "company" ready to work as a unified team. When designing apparatus, first and foremost in the design committee's perspective is the adage: "form follows function." Apparatus purchased today must be designed with tomorrow in mind.

- **Purchase a new “Utility Vehicle” in 2007:** The current pick-up truck will be 20 years old and may need to be replaced at that time. The design characteristics of a new vehicle will depend upon the future direction of the department. As stated elsewhere in this report, transporting fire fighters to and from incidents may need to be addressed should the department not purchase pumpers with four-door cabs. Should the department stay with a pick-up truck, then a wildland fire skid unit should be considered. This would address brush and forest fire fighting without having to add another vehicle to the fleet. On the other hand, the fire department may wish to embark on an entirely new concept and order a sport utility vehicle. The objectives would remain, however, the wildland fire fighting aspect would not be addressed.
- **Purchase a “Quint” in 2011:** This program would have Engine #105 replaced after 30 years of service. *(Note: This pumper saw service in another community before being sold to Southwest Harbor as a used vehicle).* Not only would this project put a new pumper into service, but would have the added feature of an aerial devise. This would enhance fire suppression and rescue capabilities, and improve upon fire fighter safety when tasked with operating at or above structures more than two stories in height, suppressing fires requiring elevated streams, conducting roof-top operations including ventilation and quelling chimney fires, as well as carrying out a variety of rescue functions as the department becomes astute in aerial operations.
- **Replace the “Quick Attack” Vehicle in 2015:** The current in-service vehicle will have seen approximately 25 years of front line service. Should the recommendations put forth in this report be adopted, the reliance on this vehicle for all initial calls will be reshuffled to different apparatus. As an example, the rescue-pumper would respond to all motor vehicle accidents exclusively, negating the response of the smaller vehicle. Building fires within the built-up area on well traveled roads and in the hydrated district would have the quint respond first. In essence, the response profile promulgated by the fire department may depend on the situation at hand. The quick attack may not necessarily be the best first due piece of apparatus on every call for service should a different configuration of new apparatus be infused over the next decade and beyond.

ADDITIONAL INITIATIVES:

Require sprinkler systems in all new construction, with a special emphasis on residential properties.

An important part of a community's fire protection system as we enter the 21st century is the advent of fixed fire protection devices. Over the last 25 years, the United States has done a notable job of reducing fire deaths and injuries through an aggressive smoke detector campaign. To continue our quest to further reduce those losses, the fire service, community leaders and municipal management must push for all new and substantially renovated buildings be equipped with sprinkler systems. Not only will more lives and property be saved the impact and demand for manual fire suppressions services provided for through tax appropriation to support a fire department may level off and hopefully decrease in time. As communities continue to build-out adding more new structures and increasing the population base, the need for more fire apparatus, fire stations, personnel and all those associated costs continually climb as well. It is a known fact that fire sprinkler systems are a cost effective way in which to hold those added increases in check. The standing argument has been that it is too costly for someone building a new home to bear the burden. The fact of the matter is that over time, it is the least expensive manner in which to address fire protection needs community wide.

Improve upon the ISO Fire Suppression Rating Schedule.

As a long-term goal, the department should attempt to improve upon the Town's fire rating schedule. The department should craft a plan that will assure the delivery of a sustained supply of water, either through tanker shuttle operation and/or by conveying water through large diameter hose lays. Should the fire department put together a well-grounded plan that can deliver a uniform flow of water for a period of time, and they challenge the ISO criteria successfully, the rating for the town could drop in those areas beyond the hydranted district and in some cases a reduction in fire insurance premiums be realized.

Southwest Harbor will be revisited in the near future by the ISO to review the community's fire protection services. With proper planning and new initiatives, the rating should at least continue at the current value or possibly improve.

SUMMARY

The town of Southwest Harbor has been fortunate during the recent past in that the frequency and severity of losses due to fire have not been excessive. The town must however, continue to maintain and should attempt to improve upon its service delivery capability as identified and resources allow.

The current fleet of major apparatus is “single function utility.” All four of the pumpers are for the most part similar in design features. The crux of the fleet, as future procurements are made, could become more multipurpose, a move in which the American Fire Service in general is adopting. Today’s apparatus is being designed as “versatile” and “multifunctional.” A minimal number of firefighters will be handling a variety of functions at emergency incidents, and apparatus and equipment must be designed around those limited resources.

The fire department could operate reasonably well with three pumpers should they be designed to serve other functions as well. Initially, the cost of developing such a fleet may be expensive however, the benefits realized would include: increased efficiency and effectiveness, reduction in the fleet from four to three major pieces, potential cost savings in vehicle maintenance and rehabilitation, and eventual replacement.

Due to the fact that the Town of Southwest Harbor is somewhat static regarding potential future build-out, the fire department should not need to expand. A configuration of apparatus including a quick attack vehicle, a utility vehicle, a rescue-pumper, a quint and a pumper-hose wagon should adequately address the fire protection needs of the community for the foreseeable future. Again, this consideration is based on the assumption that the two neighboring fire departments work in conjunction with one another and foster a regional approach in delivering emergency services.

Ideally, the town should cycle-out the major pieces of apparatus after 25 to no more than 30 years of service. Currently, the town has two pumpers; one is 35 and the other 28 years old. According to the National Fire Protection Association, these two pumpers should be replaced. However, the town could in effect implement a new replacement program that would have only one well-designed vehicle blended into the current fleet. The town’s next capital expenditure for the fire department could either have a rescue pumper or a quint added to fleet. By infusing aerial ladder service to the department’s arsenal or enhancing rescue capabilities with the rescue pumper, all the time improving upon the fire flow capabilities with the new large diameter hose and necessary increased pump capacity with diesel driven fire pumps of no less than 1,500 gallons per minute flow.

As the town explores the feasibility of adding aerial ladder service to the fire department’s fleet, in all likelihood a used ladder truck may be considered. I would urge

to town to be wary of such a move. Generally, used aerials are problematic, worn out, unreliable and a maintenance nightmare. Furthermore, in a remote area such as Southwest Harbor, qualified aerial apparatus maintenance technicians are difficult to come by. The down time for older aerial devices awaiting repairs can be lengthy. In essence, it may not be a prudent expenditure, although the initial purchase price may seem a good deal in light of what a new one costs. Again, the idea to have a specific number of well designed, high quality pieces of apparatus and not a collection that continues to grow over time as one may be unwilling to discard older equipment that has little if any service life left.

A “quint” addresses the need for aerial ladder service and pumper capacity all in one vehicle. With limited manpower, a quint allows fire fighters the opportunity to perform “ladder company operations” which may include rescue, ventilation, elevated water stream application, and at the same time, pump water through hoselines.

Another design taking a strong position in the American fire service is the “rescue/pumper.” These vehicles are designed to fully perform as a pumper and contain the essential equipment for auto extrication, cold water rescue, and a variety of other locally identified rescue needs.

When the Southwest Harbor Fire Department goes to replace a pumper in the future, the opportunity to blend two or more functions into a single well designed “apparatus” could be extremely beneficial. Many small to medium fire departments are purchasing single vehicles to achieve more than one objective. Although there appears to be no need to increase the fleet of apparatus, it is incumbent upon the town to design new vehicles that will allow the fire department to evolve. Changes in the fire service over the past two decades have been rampant and have required the services find new processes in which to deliver those services. To that end, our equipment must meet those challenges as efficiently and effective as possible.