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Stephan Hittmann
President

6 June 2011

Bruce Broughton-Tompkins
Will Broughton-Tompkins
Hopkins Village, Belize

Dear Bruce and Will:

Thank you for your hospitality during my recent visit to Belize. I'd also like to thank Chef Rob and the others with whom we met for their availability and support of this initiative.

The trip was an important educational experience since I was able to witness many of your needs first-hand. I applaud your recognition that there are challenges to be met, and your effort to enhance fire protection in Hopkins Village and the surrounding area. As promised, I have summarized my observations and recommendations in the attached report. I look forward to your comments and to continuing this collaboration in the realization of your efforts to enhance civilian health and safety, and minimize property loss from fires and other emergencies.

Sincerely,

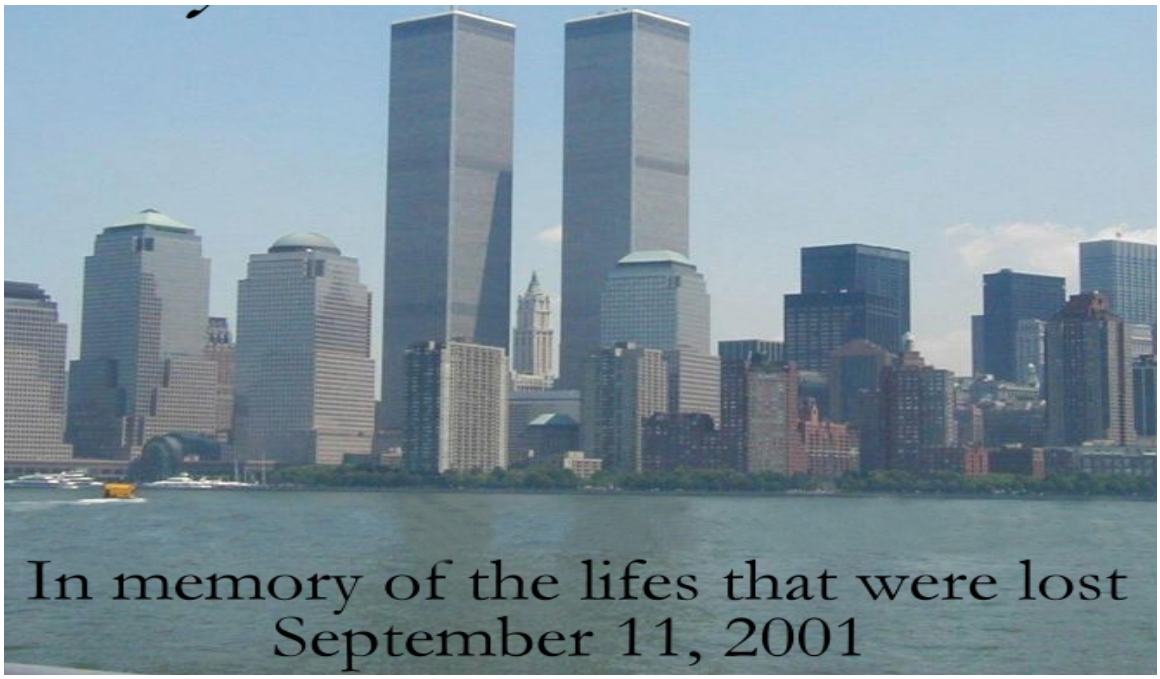
Stephan Hittmann

Establishing a Fire Department in Hopkins Village, Belize

Observations, Recommendations and Topics for Further Discussion
following my visit
of
May 2011

Contents

History and Background of the 911 FUND



Created in the aftermath of the tragedy that occurred on September 11th, 2001, the 911 FUND was born from the personal, hard-won experience and first-hand knowledge of New York City firefighters and emergency personnel, all-of-whom worked on September 11th at the World Trade Center, and for countless days thereafter. As we watched brother firefighters commit their efforts, and in 343 cases their lives, to the rescue of 25,000 innocent civilians, we became convinced of the need to enhance our own systems of emergency management and preparedness, and to share this understanding, along with our skills and lessons-learned, domestically and with friends and allies the world over.

Ever since September 11th, we have worked to acquire fire trucks, ambulances and related equipment, then to donate them, along with training, to fire departments, emergency responders, medical facilities, industry and others, as part of a continuing effort to build preparedness, reduce risk, enhance civilian safety, and minimize property loss from fire and other types of disasters, be they natural or man-made.

Firefighters routinely put themselves in harms way to protect the citizens of all nations. Service, solidarity, fraternity, brotherhood, and the willingness to accept risks and make sacrifices is the common bloodline of firefighters worldwide.

That said, however, our experience is that firefighters in far too many places have profound training and equipment deficiencies, yet typically assume the same risks as those taken by American firefighters. The training, equipment and/or apparatus that we donate are gifts that keep on giving, while adhering to the best principles and highest traditions of the international fire service.

Over the past nine years, the 911 FUND has donated dozens of fire trucks and/or ambulances, as well as millions of dollars of firefighting equipment, medical supplies and/or training to Argentina, Chile, Colombia, the Dominican Republic, Ecuador, El Salvador, France, Haiti, México, Panama, Paraguay, South Africa, etc. All of our efforts in support of the 911 FUND are voluntary and unpaid; we neither request nor accept financial contributions for the work that we do; and 100% of the apparatus, equipment and training that we provide is given free-of-charge to firefighters and emergency first responders.

Introduction

The following report is drawn from information obtained in three areas, namely:

1. First-hand observations while in Hopkins Village (HV), Dangriga, Placentia and neighboring communities.

2. Discussions prior to and during this visit with residents of HV, Placentia and Firefighter Thomas Morrera of the Belize National Fire Service (BNFS).

3. Independent research.

The report that follows is divided into twelve subject-specific sections. Within each section are observations, areas of concern, recommendations and/or topics for further discussion. Subsequent to these sections are three Appendices included for reference and elaboration of the topics discussed.

We view this report as a starting point upon which we hope to develop an expanding dialogue in support of your efforts to enhance fire safety and minimize property loss from fires and other types of emergencies in HV and the surrounding area.

section 1

Identification and Quantification of Risk

To advance your interest in establishing a fire department in HV, a number of issues need to be addressed, including but not limited to: The identification of volunteer firefighters, providing training for these individuals, developing response protocols, providing firefighter tools and equipment, acquiring appropriate apparatus, storing and maintaining fire apparatus, developing a relationship with the BNFS, and instituting a program of community fire prevention and fire safety education. A related issue is the need to acquire medical supplies and an ambulance with which to respond to local emergencies and/or to provide transportation to the medical clinic in Dangriga, the hospital in Belize City or elsewhere.

HV and the surrounding area suffer from numerous brush fires each year (several of which were observed while flying into and out of Dangriga), in addition to smaller structural fires caused by burning crop residues, negligence, arson, faulty electrical equipment, etc. The current reality however, is that response capabilities to these and other emergencies in and around HV are largely non-existent.

For the 911 FUND to maximize the assistance it can provide, consensus must be reached as to the near-term need within HV and future allocation of resources, both of which should be in alignment with current risks, available staffing, resources and other Regional realities.

Given the prevalence of brush fires and potential natural disasters like hurricanes, any discussion of multi-hazard emergency and response preparation must include pre-disaster mitigation (PDM) planning, which is an essential topic for future development. As it relates to any type of disaster, while it may be difficult to calculate "damages avoided," PDM planning results in significant net benefits to everyone involved by reducing future losses and hazard-related expenditures.

Given the fact that HV has neither an ambulance nor trained emergency medical service (EMS) staff should an ambulance be made available, transporting ill or injured people to the clinic in Dangriga or the even longer distance to the hospital in Belize City merits immediate attention as well.

While it's impossible to create an exhaustive list of everything that could be done to prepare for an emergency, preparing to the best of a communities ability makes virtually any emergency far less devastating. We believe, therefore, that it's imperative for HV to build its capacity to preserve, maintain and reconstitute its ability to function under the threat or occurrence of ***any*** disaster that has the potential to disrupt life as it is known.

Recognizing that leadership is never put more strongly to the test than in a crisis situation where the objectives are immediate and so are the results, we applaud the recognition that complacency is not an option, and that denial could be deadly. That said, HV needs to think about emergency management, and the cascading effects resulting there from, by focusing your efforts on developing HV's mitigation, preparedness, response and recovery abilities, while becoming sensitive to the subsequent chain reaction that occurs post-event.

We recommend, therefore, that HV undertake a simple risk-based review of the hazards you face. Once completed, such a review would form the basis for long-term all-hazards strategic planning. By identifying current and potential risks both in and near HV, you'll be better able to develop a continuity of operations plan to identify:

- Standards, policies and procedures that address both prevention and intervention.
- Resource requirements needed to meet current and prospective needs.
- Emergency and response planning in coordination with the BNFS, the Hopkins Emergency Lifeline Providers (HELP), and HV residents who would be trained in disaster prevention, response and recovery.

As HV grows and expands its services, so too must it advance public safety through fire prevention, investigation and education, with skills needed in:

- Firefighting (both brush and structural).
- Fire prevention (inspection, education, enforcement and evacuation).
- Fire investigation (primarily arson and cause/origin).

- Transportation incidents (land, air and water).
- Catastrophic weather events (hurricanes, floods, severe climate changes, etc.).
- Special events planning and response (especially where large numbers of people are in attendance, with the added threat of mass casualties, which makes these events take on a whole new dimension and makes them no longer routine).
- Medical emergencies.

In addition, we recommend that HV look to:

- Improve Emergency Response Operations by:
  - Enhancing its overall preparedness to respond to fires, emergencies and disasters.
  - Developing a system to provide incident commanders with on-scene critical information, enhance emergency response and provide a safe operational environment.
  - Developing training initiatives to ensure the maintenance and sustainability of core competencies for volunteer firefighters.
  - Implementing initiatives to address system performance, operational coordination, resource deployment and EMS service delivery.
  - Develop a continuity of operations plan that in the event of an emergency or threat of an emergency, ensures the continuation and uninterrupted delivery of critical services to the public.

- Strengthen Management and Organizational Development by:
  - Implementing a performance management system for mission-critical functions.
  - Developing a Region-wide communication strategy utilizing available and relatively inexpensive technologies.

- Improve Fire Prevention and Fire Safety Education by:
  - Developing fire prevention and educational outreach programs to make HV safer.
  - Implementing safety requirements and evacuation plans in case of major emergencies.
  - Integrating fire prevention with community fire safety education.

section 2

Training

It's our understanding that the BNFS provides its eighty paid firefighters in the twelve stations throughout Belize with some training (the topics and length of this training are unknown), while volunteer firefighters throughout Belize receive little if any formal training. It's essential, therefore, that a formal albeit basic training program be introduced for volunteer firefighters to familiarize them with essential skills and "tools of the trade." Didactic and hands-on instruction in fire prevention, firefighting, in responding to major events, in special operations, etc., all need to be introduced.

As it relates to leadership training, familiarity is needed with incident command (IC) and the Incident Command System (ICS), a standardized on-scene emergency management

protocol designed to allow its users to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. While ICS training is incremental and there are several ICS courses (level 100 and above) that are routinely provided to fire departments on a worldwide basis, level 100 training in HV should suffice for the time being. The United States government, through organizations like the United States Agency for International Development (USAID), the National Fire Protection Association (NFPA), and others, have made ICS course material, as well as safety information on EMS, PPE, SCBA, wild land firefighting and a wide range of other topics available at no cost.

Given the prevalence of brush fires in and around HV, relevant to the above is an understanding of the National Fire Danger Rating System (NFDRS), which helps estimate current fire danger for a specific area based on fuels, topography and weather, commonly referred to as the "fire triangle." The NFDRS rates the potential growth and behavior of wild land fires, serving as a guide for initiating pre-suppression activities and the appropriate initial response to a reported fire, while linking an organization's readiness level to the fire problems of the day.

An understanding of ICS, the operation of the NFDRS, and how these and other topics are infused in courses adapted to both HV's and Regional needs are important issues to be covered. In this regard, we suggest introducing these and other topics through:

Pre-Service Training:

Firefighting skills must be developed and maintained through a combination of practical and classroom experience, as well as hands-on and refresher training. Firefighters must be proficient at assessing a situation, formulating an intervention plan and implementing that plan within minutes, if not seconds. If a plan is less effective than hoped for, and/or if other variables are introduced (e.g., embers ignite ancillary fires in other and sometimes less accessible locations), firefighters must quickly know it, change direction and return to work. These skills can only be learned by training and practical experience, or it will cost firefighters and the public their lives.

We understand that volunteer firefighters are often employed elsewhere, and would be called upon as needed to perform firefighting duties. That being the case, creative ways should be developed to bring instructional resources to HV, and to bring volunteer firefighters to this training whenever possible.

In addition, firefighters should be required to participate in mandatory in-service and refresher training on a periodic basis on topics to include size-up, fire attack, search and rescue, ICS, etc. This is especially true for firefighters who respond to fires on an infrequent basis, as well as for those who (for medical or other reasons) have been "off-line" for an extended period.

Training must be ongoing, repetitious and as realistic as possible, ***without compromising safety***. Since firefighting is often chaotic, especially when working in an unfamiliar

environment, skills must be second nature. Important also is the need for brutally honest reviews of each incident to assess the "lessons-learned" from interventions, then to adapt accordingly.

We encourage the parties to this report to adopt the credo of the New York City Fire Academy, displayed in large letters and which says with irrevocable conviction above its entranceway: ***"Let No Man's Ghost Return To Say His Training Let Him Down!"***

Basic and Specialized Training:

With the understanding that the ultimate goal of fire departments worldwide is largely the same, standardized training needs to be given in the following areas:

- Structural / Operational Firefighting: PPE; SCBA; tool usage; forcible entry; ventilation; search and rescue; accountability on the fire ground; engine, pump operations; advancing hose lines; communication on the fire ground; ropes and knots; MCI's, etc., all of which require some equipment and must be mastered before any emphasis can be placed on advanced training.
- Special Operations: Confined space rescue; collapse operations; water rescue; breaking and breaching; heavy rigging; shoring and cribbing; torch operations; void search; etc.
- EMS and Pre-Hospital Care: 1st aid; trauma; triage; patient stabilization; tagging and packaging patients; auto extrication; dealing with hazardous materials; etc.

Officer Training:

Officer training is also needed, especially for newly promoted officers. Training in officers' roles and responsibilities, in administrative and operational matters, decision-making, problem solving, in-unit training, etc., are required of officers everywhere, and should be introduced as an ongoing part of the training provided in HV.

An important component of officer training and responsibility is the need for an in-depth understanding of ICS. The first step in accountability and the use of ICS is to ensure that everyone speaks a common language and understands the command structure. Second should be a simple rostering of personnel with this information provided to incident commanders at the fire scene.

Incident command and safety coordination, particularly during an emergency, coupled with the strategies and tactics required to monitor firefighters during operations while successfully managing a dynamic fire or other type of emergency must be developed. Understanding and comfortably working with IC and ICS is critical if HV is to have reasonably trained officers capable of meeting the operational demands placed upon them. Effective role-related training is essential when maintaining operational capability and ensuring the health and safety of firefighters and other emergency service personnel.

Officer training is critical to the maintenance of effective risk assessment, decision-making, planning, objective setting, prioritizing and reviewing the practical outcomes of

emergency interventions. Officers must have a clear understanding of their roles and responsibilities at incidents, together with an understanding of ICS principles and how to safely maximize personnel and other resources during any emergency.

section 3

Apparatus

The sole fire truck that we saw (pictured above) was in Placentia. The hose on the truck (3" and above) was too large for local needs, and although it had a reasonable assortment of nozzles, hand and hydraulic tools, both the truck itself and its complement of tools seemed to be little used and somewhat disorganized.

It's my belief that this fire truck, and fire trucks like it, are oversized and largely inappropriate for HV's needs. Given the prevalence of brush fires in the area surrounding HV and the extremely poor local roadway conditions, brush trucks, mini-pumpers, pick-up trucks, 4x4 or All Terrain Vehicles (ATVs) equipped with skid units are more practical and far less expensive to acquire and maintain.

Also discussed was the suggested location within HV to place a fire apparatus, as well as the viability of equipping the 16' foot twin-axle trailer (located next to Chef Rob's Restaurant) as a skid unit, then towing it behind a pick-up truck to the fire ground when needed.

Located at the center of HV, the vicinity of Chef Rob's Restaurant is an appropriate location for whatever fire apparatus is ultimately chosen. While the aforementioned 16' trailer could be equipped with a skid unit, I have several reservations about using it for this purpose. These reservations include whether it's sturdy enough to hold the required weight (water, a pump, fire hose, tools, etc.), the durability of the trailer given the welding and possibly other repairs it reportedly needs, the availability of a pick-up truck or other vehicle onto which it could be hitched then towed to a fire, the ability of drivers to safety pull such a trailer on HV's unpaved roads and/or off-road when necessary, etc.

Whatever style or size fire truck is eventually chosen for use in HV, regular maintenance of both the apparatus and the equipment it carries used will be required. As it relates to the use of skid units for this purpose, pictured below is an ATV equipped with a skid unit, hose and some tools that we saw in Placentia. This skid unit is a definite asset to Placentia's firefighting capability, and although the equipment it carried was something of a concern, I see this type of vehicle as the way to go, and my sense was that HV could create a skid unit that would be very effective for its needs. That said, ***Appendix B*** contains photos and descriptions of various types of skid units for your review.

section 4

Water Supply

Once efforts begin to recruit volunteer firefighters, it's essential that they have adequate access to drinking water, and that water be made available on the fire line. This is extremely important if firefighters are to be able to control, minimize or prevent fire spread, and eventually to extinguish fires. That said, the need to develop procedures regarding how best to utilize water in whatever quantity is available must be developed.

Training in the ability to draft large volumes of water from the ocean, and/or a strategically located water supply can be provided by rain water collection systems, portable or prepositioned Rotoplas-type water storage tanks (under $100 apiece), water tankers (privately owned and often used to spray the ground to keep dust levels to a minimum) brought to an area near the fire ground, etc., could address this need. Other inexpensive options include access to portable water tanks, above ground pools, fixed storage tanks or fuel tanks buried in high fire danger areas, folding water tanks or flexible framing arrangements that could quickly create temporary water containment systems. Folding water tanks and flexible framing systems are easy to assemble, don't require much grading or surface preparation, and provide water storage for hundreds or thousands of gallons for firefighting operations.

Water is an essential tool for firefighters. Limited access to a dedicated water supply for firefighters on the fire ground is an extremely serious problem. From a Regional growth perspective, this problem will not get better on its own, and if left untreated, has great potential for civilian and firefighter loss of life.

section 5

Tools and Equipment

It's clear that minimal first aid equipment and even less firefighting equipment is on hand. Needed are hand tools (axes, shovels, brush rakes, Pulaski's, McCloud's, drip torches, etc.), Personal Protective Equipment (PPE), eye protection, radios for communication on the fire ground, Indian or other wild land fire packs to carry water and safety gear, portable brush pumps or water tanks, jerry cans for fuel transport, come along tools, etc.

Another major concern was the limited ability to hydrate firefighters on the fire ground, given the absence of backpack hydration or other water systems. To stay healthy, the human body must be adequately hydrated. While the optimum quantity of fluid to be consumed by firefighters varies based on an individual's physical condition, the local weather, terrain, equipment being used, etc., a good rule of thumb is that firefighters should drink 1 to 2 cups (240 to 480 ml) of water, juice or sport drink before beginning work, take regular fluid breaks while on duty, and consume at least 1 quart (0.95 liters) of fluid per hour.

We see the acquisition of a wide range of firefighting tools and equipment, access to medical supplies, the lack of water on the fire line and the need to constantly hydrate firefighters as major concerns that must be addressed if HV is to fulfill its aspiration of creating its own fire and emergency response capability.

section 6

Dispatch and Communications

A number of challenges exist in this area, not the least of which is the need for a control facility that could be activated during an emergency. That said, we recommend:

Dispatch and Communications:

We encourage the adoption of a 911, 999 or other three-digit number dedicated exclusively for emergency calls, with the same number accessible from either a landline or a cell phone. The operator receiving these calls should:

- Be able to quickly ascertain the nature of the emergency.
- Route the call appropriately, to the fire service, medical personnel, or the police.
- Stay on the line with the caller (e.g., if a child is calling) until help arrives.
- Be trained in emergency management protocols and be able to coach callers in basic first aid, CPR or related procedures.
- Have access to local mapping information.

While we acknowledge that creating a system such as this brings new responsibilities and creates training, management and administrative issues, we believe that its benefits far outweigh these concerns.

section 7

Mutual Aid and Interagency Operations

A relationship between the parties to this report, the BNFS, local medical clinics, hospitals, utility companies, etc., must be developed, the goal of which, in any emergency during some or all of the above play a role, is to enhance firefighter and public safety. The mutual aid system should be one of seamless interoperability. No such system exists at present. A mutual aid agreement must be developed, periodically reviewed and updated to ensure its accuracy. Developing reliable mutual aid programs is a complex and ongoing challenge, and should (at a minimum) reflect each participant's capabilities in the following areas:

- Citizen preparedness, participation, protection and evacuation
- Critical infrastructure protection (e.g., schools)
- Economic and community recovery
- Emergency public information
- Environmental health
- Firefighter health and safety
- Firefighting operations and support
- Information gathering and recognition of indicators and warnings
- Interoperable communications
- Isolation and quarantine
- Mass care/prophylaxis
- Medical supplies management and distribution
- Onsite incident management
- Risk management
- Structural damage and mitigation assessment
- Triage and pre-hospital care
- Volunteer management

Formal mutual aid arrangements enable participants at all levels to coordinate preparedness activities more effectively, spread costs, pool resources, distribute risk, and thereby increase the overall return on investment. We also recommend that an ongoing program of joint training, drills, large-scale exercises and strategic personnel exchange be introduced to enhance communication and collective preparedness. ***Practice makes perfect!***

In furtherance of these efforts, an all-hazards preparedness policy should be developed, the purpose of which is to define the responsibilities and resources to be brought to bear in any type of emergency. A standardized set of concepts would allow for effective, efficient and collaborative incident management at all levels and at any emergency.

A unified command system should also be developed when multiple communities and/or agencies are involved and incident jurisdiction has the potential of coming into play (e.g.,

during an event involving police, fire and medical personnel), or when incidents cross political or geographic jurisdictions.

section 8

Community Fire Safety

Among the most important programs to be introduced is fire safety education. Building on current efforts to teach basic fire safety education in schools and through other activities, introducing risk reduction and basic preparedness into the everyday lives of HV's residents is an invaluable tool in fire prevention. Community fire safety activity should be a core responsibility for each and every citizen. ***Every opportunity must be taken to promote fire safety education.***

One way of doing this is through the establishment of a local Fire Council, which is an important tool to enhance public safety, help manage resources, sustain environmental integrity, create a forum to address issues of concern and serve as a focal point for sharing ideas. The relationships and cooperation that exists within HV and surrounding communities is an excellent foundation for the creation of Fire Councils. We suggest that these parties, in concert with the BNFS, relevant government agencies, local organizations and industry representatives, farmer and environmental organizations, the church, concerned citizens, etc., create a local Fire Council, which could then be formalized with regularly scheduled meetings.

A continuing investment of time and resources in fire safety is among the best investments that could be made to reduce losses from fire and other emergencies.

section 9

Fire Cadets

Conceptually parallel to the Hopkins Police Youth Cadet Corp, we suggest the development of a program for Fire Cadets.

Aimed at boys and girls between 12 and 18 years of age, Cadet activities should be supervised by firefighters and other concerned citizens, with Cadets expected to adhere to published standards of good conduct, while developing character and leadership qualities in a friendly and professional setting, a goal of which is to provide youth with positive adult and peer role models in a safe and supervised environment.

Uniforms should be provided, and Cadets can come together on weekends to work and train in an organized format where discipline and the essential work of firefighters is emphasized. Instructors must be supportive, enforce the rules, and insist that all participants work and learn. The focus should be on firefighting, and when old enough, Cadets should have the opportunity become volunteer firefighters in their communities, or paid firefighters with the BNFS if the opportunity was to present itself.

Providing classroom training in fire prevention and fire safety education, as well as hands-on familiarity training with the equipment and apparatus used, Fire Cadets are provided with a unique first-hand look at the essential role that firefighters play in the community, which then serves as an important avenue for future recruitment.

Pictured below are Fire Cadet Programs in different countries that the 911 FUND has helped organize and equip.

section 10

The Need for Expanded Dialogue with Government and Industry

Fire protection has historically been a local responsibility. While each community has both static and dynamic conditions that are unique to itself, a system of fire protection that works well in one community cannot be assumed to work equally well in another. ***Fire prevention is the key***, and without intensive and ongoing local-level planning, any system of fire protection is apt to be ill suited to local needs.

Each community must balance acceptable risks with the need for adequate fire protection and reasonable financial costs. While major emergencies could easily overwhelm the capabilities of HV and surrounding communities alike, as a result, cooperative plans for coping with major emergencies should be developed. Effectiveness can only be improved through pre-planning, joint training, familiarity with each other's day-to-day operations and (to the extent possible) some standardization of tools, equipment and response protocols.

Even with joint planning, however, expanded coordination should involve the national government through the BNFS, as well as local industry. While fire prevention, fire suppression and fire safety education should remain HV's responsibility, the BNFS, local municipalities and others should work collaboratively to expand regulatory responsibilities in these areas, as well as financial support for the invaluable service that HV is preparing to assume.

We recognize that government alone cannot satisfy all requirements and that industry must fulfill its responsibility when it is the beneficiary of services provided by firefighters who are called upon in time of need. Firefighters are a basic form of insurance. No one likes paying the cost for this insurance, but they deeply appreciate having it in times of emergency. ***In prevention we have cure***, and a goal should be to strengthen industries awareness of the risks they face from fire and/or other natural disasters.

Among the concrete steps the Belize government could take to support HV's aspirations in this area would be to waive the fifty percent (50%) import duty for a fire truck, skid unit, firefighting equipment, an ambulance, medical supplies or potentially other donations that we and others could make to HV. Such a step would demonstrate their support of HV's aspirations, and enable donations to be made with greater facility and at far reduced overall cost.

In addition, outreach must be made to the BNFS Chief of Department in Belize City, Chief Ted Smith, at 501-227-2579, to better understand how HV might become involved in their program of training and/or equipment distribution. This is an important relationship to develop as HV embarks on long-range planning to create and support an operational fire and emergency response capability.

By sharing information, identifying risks, performing vulnerability assessments, developing emergency response and business continuity plans, enhancing overall readiness, implementing appropriate prevention and protection programs, and by providing increased financial

support for HV, industry can dramatically assist their community both by being an employer, and in helping respond to and recover from an emergency.

section 11

Topics for Further Discussion / Short-Term Timetable of Proposed Activities

As we move to expand the relationship between HV, the BNFS, local communities and the 911 FUND, a component of our future discussions must include the need to develop collateral relationships with:

- Airlines, who could be called upon to support joint training efforts by providing transportation for 911 FUND personnel (SME's who are prepared to donate their time and expertise to provide training on the topics discussed), or for HV firefighters and/or others to be trained in other parts of Belize or in other countries.
- Domestic and international shipping companies who could be called upon to provide transportation of donated apparatus and/or equipment.
- Hotels to provide accommodations for 911 FUND personnel who come to Belize to provide training.

We welcome your thoughts in all of the above areas. As it relates to a specific timetable for future 911 FUND support of the parties to this report, the following is proposed:

+/- ***15 July 2011***: Recipients of this report respond to our observations and recommendations, identify your future priorities on behalf of HV, and offer suggestions as to how 911 FUND can be of assistance in your efforts to achieve these goals.

+/- ***1 September 2011***: Pursuant to our meeting with Dr. Amos Ojo at the Hopkins Health Clinic and in connection with our understanding of the urgent need for medical supplies and equipment in HV, at the medical clinic in Dangriga (some 20 miles away), and at the hospital in Belize City (some 100 miles away), the 911 FUND is prepared to make an initial donation of a 40' (12-meter long) container of medical supplies for distribution to these medical facilities (see ***Appendix C*** for a listing of the medical supplies and personal care items available for immediate donation, and the conditions under which such as donation would be made). We are also prepared to include in this container various essential firefighting equipment (including PPE, fire hose, hand tools, etc.), in keeping with the issues discussed.

+/- ***1 October 2011***: Two senior firefighters from the US to visit HV to provide approximately one week of firefighter training on some or all of the following topics:

- Practical/operational skills and tool usage for firefighters, including mobile attack, use of and access to water (drafting,

tankers, etc.), pump operations, tools and specialized equipment, etc.

- Emergency first aid, victim stabilization, tagging and packaging patients, trauma, dealing with crush injuries, etc.
- Creating a local Fire Council and Fire Cadet program, the purpose of which is to educate community residents who are **not** firefighters about the importance of fire prevention and fire safety education, awareness information on fire hazards, use of fire extinguishers, exit planning, light search and rescue, team organization, medical triage and general disaster preparedness within HV. Using the training learned in classroom settings and during exercises, participants can support firefighters by taking a more active role in HV's emergency preparedness following an event until such time as fire, police and/or medical personnel are available to help.

+/- ***1 December 2011***: Donation of fire apparatus, additional firefighting equipment, an ambulance, medical supplies and/or training, including an initial large-scale simulation exercise for firefighters and medical personnel from surrounding communities and/or various agencies.

While these activities are underway, the 911 FUND can discuss future training and timelines for additional donations as we outline the terms of an ongoing relationship. As we discussed, the conditions under which the 911 FUND makes donations of equipment, apparatus and/or training are as follows:

1. Nothing that the 911 FUND donates can be sold.
2. The 911 FUND neither requests nor accepts any payment whatsoever for its services.
3. The recipient, or a sponsor, is responsible for all shipping and related costs for donated equipment and/or apparatus.
4. When training is provided, the recipient, or a sponsor, is responsible for airline tickets, hotel and meals for 911 FUND instructors, as well as access to appropriate facilities in which to provide training.

section 12

Conclusion

Much like emergency first responders the world over, we encourage HV to embrace the following credo:

- **Service:** An unwavering call to protect and serve.

- **Bravery:** The ability to overcome fear through fortitude, instinct, compassion for others and training.

- **Safety:** To keep citizens free from danger by providing the best equipment and training to reduce risk to the public and its members at fires and other emergencies.

- **Honor:** The enormous commitment necessary to perform tasks that require excellence of character, inspire each other through pride, and acknowledge that every action reflects on each resident of HV and each of the related organizations, both past and present.

- **Dedication:** A commitment to common objectives and the faithful observance of duty, which calls on everyone to fulfill their obligations professionally and honestly.

- **Preparedness:** By combining all of the components of their core values, HV and the surrounding communities can maintain a constant state of readiness to meet all threats and challenges, traditional and new.

The single greatest asset of Belize continues to be its uncommonly dedicated men and women, both uniformed and civilian. We applaud your efforts to reduce firefighter risk, enhance civilian health and safety, and minimize property loss from fires and other emergencies. The 911 FUND is privileged to be of assistance.

Appendix A

Acronyms

ALS	Advanced Life Support
ATV	All-Terrain Vehicle
BLS	Basic Life Support
BNFS	Belize National Fire Service
CERT	Community Emergency Response Team
CPR	Cardio-Pulmonary Resuscitation
EMS	Emergency Medical Services
Haz-Mat	Hazardous Materials
HELP	Hopkins Emergency Lifeline Providers
HV	Hopkins Village
IC	Incident Command
ICS	Incident Command System
IDLH	Immediately Dangerous to Life or Health Concentrations
MCI	Multiple Casualty Incident
NFDRS	National Fire Danger Rating System
PASS	Personal Alarm Safety System
PDM	Pre-Disaster Mitigation
PPE	Personal Protective Equipment
ROPS	Restraint Operative Protective System
SABA	Supplied Air Breathing Apparatus
SCBA	Self-Contained Breathing Apparatus
SME	Subject Matter Expert
USAID	United States Agency for International Development
UTV	Utility Terrain Vehicle

Appendix B

Skid Units

A Skid Unit is the common name used to refer to a light weight self-contained slip-on firefighting platform, designed for installation on vehicles such as pick-up trucks, flatbed trucks, off-road vehicles, trailers, All-Terrain Vehicles (ATV's) or Utility Terrain Vehicles (UTV's), any of which can easily be fitted with a proper size skid unit for a variety of firefighting and/or medical operations. Skids units are approximately 90" long, 48" wide, on welded steel beams and connected to the vehicle's electrical system.

Among the ATV/UTV off-road vehicles designed to carry a skid unit are the Polaris Ranger 4x4 or 6x6, Kawasaki Mule 4010, Kubota RTV 900, John Deere Gator 4x4 or 6x6, Buffalo 6x6 and many others.

There is virtually no limit to the size or performance capability of a skid unit. What is important, however, is to match the overall weight carrying capacity of the vehicle on which the skid unit is mounted for its rated cargo capacity. Fire operations can include rural field operations, forest fires and other situations in which a small, highly mobile vehicle is needed to reach the fire ground in rough or otherwise inaccessible terrain.

In their simplest form, skid units consist of a water tank and hose mounted on a self-contained platform. Skid units can be configured to hold as little as 50 gallons (200 liters) to over 200 gallons (800 liters) of water in an aluminum, steel, polypropylene or fiberglass tank. For forest fighting applications, skid units can be configured to hold axes, backpacks, bolt cutters, electric booster reels with up to 250' of 1" hose, fire extinguishers, firefighter clothing, fuel cans, gas-driven waterous pumps, gear bags, knives, lights, nozzles, radios, shovels, tool boxes, etc. For specialized applications, foam cells of various capacities can be included, as well as integrated foam injection systems to deliver Class "A" and/or "B" foam concentrates.

Skid units can perform the double duty of fighting fires and allowing rescuers to transport a medical victim out of the woods, or be configured exclusively for medical transport, like a mini-ambulance, carrying a full complement of medical gear and other fixtures like 02 holders, IV poles and designed to carry a medical attendant to accompany a patient being transported in a stokes basket or on a long board.

Given their compact and self-contained design, skid units are a versatile and cost effective tool that would be very well suited for HV's needs and the local terrain. Pictured below are several examples of commercially available relatively inexpensive slip-on skid units. Given the skills of many of the people with whom we met, we see no reason why a locally-produced customized skid unit couldn't be built for use within HV or the surrounding communities.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Appendix C

Proposed Contents of 40' (12-meter long) Containers of Medical Supplies and Firefighting Equipment

The 911 FUND is prepared to donate 40' (12-meter long) containers of ambulatory and surgical medical supplies to Belize under the conditions listed below.

The medical supplies that form the contents of each container are valued at roughly $400,000 apiece, and a detailed inventory of each container would be provided to you for customs purposes.

All of the medical supplies being donated are new, in their original cartons and packed on pallets. No medications, chemical, flammable, combustible or hazardous materials are included, and each 40' (12-meter long) container holds approximately 22 pallets.

The following medical supplies and personal care items are available for immediate donation:

- Pulse oximeters, stethoscopes, heart rate monitors, defibrillators and thermometers
- Blood pressure cuffs and glucose meters
- Nebulizers and nebulizer kits
- Gauze, bandages, sutures, insulin syringes, tongue depressors and cotton tipped applicators
- Fluid resistant gloves and Isopropyl alcohol
- Suction catheter kits, pen needles and cannulas
- Sharps collectors and biohazard bags
- Cervical collars, and all types of supports (lumbar, elbow, wrist, ankle, athletic, etc.)
- Urostomy bags and drainable pouches
- Midwife kits and feeding pump sets
- Tracheostomy care kits
- Irrigation trays
- Wheelchairs, walkers, crutches, canes, transport chairs, transfer benches and backboards
- Surgical blades, gowns, cap, masks, wipes, etc.
- IV tubing and stopcocks
- Incontinence underpads, disposable adult briefs and folding commodes
- Safety rails for beds, pillow wedges, bedpans, basins and sitz baths
- Surgi-foam, ice packs, heating pads, pedal exercisers and bubble humidifiers
- Toothbrushes, toothpaste and Poligrip/denture cleaner
- Shaving cream, men's and women's razors, soap, shampoo and Q-tips
- Baby wash, Desitin baby cream, baby lotion, diapers, wipes, bottles and pacifiers
- Toilet and facial tissue

As it relates to firefighting equipment (tools, hose, PPE, etc.) to be donated and included in these containers, this equipment may or may not be new, but wherever equipment is used, it is in excellent working condition.

The 911 FUND makes these donations under the following conditions:

1. We neither request nor accept any payment whatsoever for the donations that we make.
2. None of the medical supplies donated can be sold, with the complete contents of the medical supplies in each container to be donated to one or more medical facilities or not-for-profit organizations.
3. None of the firefighting equipment donated can be sold, with all of the firefighting equipment in each container to be donated to HV and/or surrounding communities.
4. The recipient(s), or a sponsor, is responsible for all shipping costs for the container(s) from our warehouse to them.
5. The recipient(s), or a sponsor, is responsible to pay $2,500 per container for "warehouse costs," which are the labor and equipment costs to sort the medical supplies for each donation, load and inventory each pallet, then load each container for shipment.