

Leadership in Fire Protection: An Oral History Series

Sonny Scarff on Residential Sprinklers with Wayne Powell

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Wayne Powell – WP

Sonny Scarff – SS

WP – Sonny, tell us a little about yourself and how is it that you came to be involved in the fire and the fire protection.

Caption: Sonny is the Senior Director for Corporate Fire Protection for Marriott International.

SS - I joined the Carroll Manor Fire Department in 1953 or 1954 when it was organized and stayed involved with that until I went into the service – I graduated from high school and went into the service – and then came back and went to school at the University of Maryland, started school at the University of Maryland.

Caption: Early Fire Company Experience.

SS – And then was offered a job in the District Fire Department. That was the fulfillment of a dream and just thought that I had died and gone to heaven. And I stayed in the fire department there until the several, I think eight, years and then I went to work at Chillum-Adelphi Volunteer Fire Department as a paid lieutenant. And then I advanced up to Captain and I went with Marriott in 1974, I think it was. And took over the Fire Protection and Life Safety for the Marriott Corporation.

WP – You started in Carroll Manor, which was in Frederick County, Maryland, then Washington, D.C., and then out to Prince George’s County –

SS – Right.

WP – With the Chillym-Adelphi Volunteer Fire Department.

SS – Right.

WP – Very busy fire department in those days and even so today. And I happen to know that you had a dramatic impact on things in that region.

Caption: Wayne is the Executive Director of the National Heritage Museum in Emmitsburg, MD.

WP – And quite frankly you were a legend then and, of course, I was in neighboring Silver Spring and we always looked forward to going to fires with you. And that was a great time. Things have changed so dramatically. But to make the move from the fire service, which I know you have loved all your life, but to corporate fire protection, that was a pretty big jump. How did that happen to come about.

Caption: Moving to Corporate Fire Protection.

SS – Well, I had, was working at Chillum and had a contract with the fire department there, the individual fire department, and then the county took over and the union became a factor there. And at that time I was offered a job at Marriott and thought it was going to be an opportunity of advancement and jumped on it and interviewed with them. And they said, well, around 35 percent of the time it would be travel. And I wasn't there three months and I met with the Vice President of Construction and he said, "You need to get involved with us and the fire departments because we're going to do a lot of construction. And you'll be the front runner on us meeting fire marshals all over the country. And the next thing I knew I woke up one morning travelling 95 percent of the time and it was constantly on the road. And it's been that way since.

WP – Sure. Sonny, I've never known of anyone who has traveled as extensively as you have. I think you've traveled more than any individual in the entire Marriott organization, some 145 thousand associates around the world. And you are known in every corner of this great land and internationally, too. When you ended up going to work at Marriott, you worked for J.W. Marriott in the very beginning because he was at the helm and what was it that sparked his – he only had 11 or so hotels in the system at that time?

Caption: J.W. Marriott & Fire Protection.

SS – It started with – we had 11 hotels. And we were progressing and looking about a greater number of hotels in development. And then the MGM Grand occurred, and then the Hilton occurred in Las Vegas. And then that hotel that was up in Upstate New York –

WP – The Stouffers.

SS – The Stouffers. And they had several fatalities in Stouffers as well. So Bill Marriott – I was up in the house one morning, on Saturday morning, and the phone rang, and it was Bill Marriott. And he said, "Have you seen what's on the radio?" And we – not we, not Marriott – they'd had a fire in a Hilton hotel in Houston and it killed 12 or 14 people there. And, of course, he said "Do you know anybody in Houston?" And I said "Yeah! I know the fire marshal." And he said "Get down there and see what went on, why did they lose that number of people?" And I went down to talk to Eddie Corral, who was the fire marshal at the time, and came back and he said, Bill Marriott told me to meet him in the office on Monday morning, about six-thirty. So I got in there and a fellow named Fred Malek was in there with him because he was President of Operations at the time. And he said "I don't ever want to stand in front of a T.V. and explain to them why people died in my hotel, employees or a guest." And I said, I'd looked at this on the way back from Houston and I thought, and I took the number of hotels that we could retrofit these at the cost of the time for about 20 million dollars. And I said to him, I said "We can solve our problem. We can put sprinklers in these hotels, these high rise buildings and eliminate these deaths." And he said, he looked at Fred Malek and he looked at me and said "Get on it," he said. And he said "And report to me every month as to what we're doing." I said "Well, we maybe could come in cheaper if we could use plastic pipe," because, at the time, they were using plastic pipe for residential sprinklers in Scottsdale, Arizona, which was the only county in the country, in our country, that was using residential sprinklers. And I said "I'm going to run some tests and see if we couldn't use plastic pipe," which would eliminate the downtime because, when you were doing a hotel with black iron pipe, it would have to shut down the floors all the time. So if

we could do it in plastic, it would eliminate a lot of time. And if we could get in the rooms at nine or nine-thirty in the morning and get out at three, then the guests could still use those rooms. So we started doing that and we saved a substantial amount of money and downtime by doing that. So, that's where it all started.

WP – Now, it's interesting now, 37 years later and going from some 11 properties to about 3700.

SS – Right.

WP – Which is incredible. In, I think it's some 61 or more countries. And Marriott's opening properties every single month, even in this economy. How did you get that concept, the valuing of the kinds of fire safety that you were championing at the time, which was unheard of in the hotel industry? There were many hotel fires in Houston. But what was it that kind of helped Marriott understand the value of what you were talking about, and the quick response sprinkler heads, and the plastic pipes. How did you help people inside understand? This was a big step for anybody in our country.

Caption: Establishing the Value of Fire Protection.

SS – Well, in that process, we're starting to build Courtyards. And the Courtyard concept was coming in, they said that it started, they said that this looks like a good thing to do, we're going to do 300 of those. So we had meetings about the construction. And we walking in a meeting one morning and there must've been 40 people in there, and they said "What are we going to do about fire protection?" I said "We're going to sprinkle all of these." He said "Well, the architect said this is only three stories." I said "It's corporate policy." So we went on with that and they didn't research that it wasn't corporate policy. And so they went on with that. We started the Courtyard and built those, maybe 100 Courtyards, and they were all sprinklered. So we were getting all of the government business because the government had said if you're staying for government business, you have to stay in sprinklered hotels because the results of the MGM Grand and those things. So we started and sprinklered those and sprinklered three or four hundred of them. And then now we've got over a thousand of them sprinklered. So that's how the thing started, and it went from there.

WP – Knowing you, in all these many years, you've never been one who's been shy. And you've always been willing to take a risk. And I'm interested because you've mentioned courtyards. The single most successful hotel brand in the world. But had you come from another discipline, say had you come from the codes process or had you been, say, a builder or whatever, do you think you would have taken the risks in terms of what today is considered just absolutely essential, but in its time it was just unheard of? But you're coming from the fire service, an operational background, did that have an impact on what you saw?

Caption: The Value of Firefighting Experience.

SS – Oh, no question about it. Because I had been in the fire department in Washington, D.C. and it was out in the county that I saw a lot of lives lost as a result of the fire. Because I was in the busiest companies out in Washington, D.C. and in Maryland.

WP – Oh, absolutely. Surely. The reception of those that were, in turn, owners and developers and builders, to this rather radical thinking, because nobody in the hotel business, the hoteliers, they just didn't bother putting in fire sprinklers unless somebody had to be forced into it.

SS – Unless the codes called for it.

WP – Very seldom was that the case. The thing you mentioned a bit ago, I mean the thing about the plastic pipe, you were out, not only on the cutting edge, you were out on the bleeding edge of that. Nobody even understood. Now, that was just regular PVC in the beginning and then you helped.

SS – No, polybutylene.

WP – And bring us through that process to where we are.

Caption: Plastic Pipe and Fire Protection.

SS – Well, they were doing that in Scottsdale, the polybutylene pipe, and the polybutylene pipe was very easy to work with. So, we started that and, the fire marshal's all over the country, we started polybutylene in Miami and they shot down, the state fire marshals shot down, the job in Miami because you couldn't use a plastic pipe. So I said "You're going to do one of two things: You're either going to approve of the pipe that we're going to put in there, and you're not requiring it to start with [the fire marshals' office was not requiring that hotel to be sprinklered], and if somebody dies in a fire, I'm going to make notice of it that we tried to put a sprinkler system in." So we went to the Board of Appeals and the Board of Appeals in the state approved it. And said, and the funny thing about that was I didn't tell my boss, but the fire marshal said "Well, Sonny, if it doesn't work, or if this doesn't get approved, what're you going to do?" He said "Would you take it out?" I said "I'll take it out if it doesn't get approved." Well, I didn't tell my boss that until we'd installed it. And he said "My God, what did you do?" But we didn't have to take it out. It got approved and then we started with it and went all over the country with it.

WP – So tell us, from that experience and Operation Fort Lauderdale, which was a sort of precursor for Operation San Francisco, I mean that was not only bold it was just unheard of in fire prevention. How did that come about, how did that develop?

Caption: The San Francisco Event.

SS – We had a building that had belonged to the government or had been used as a government building in San Francisco, downtown, and they were going to tear it down. So I said, and I met a chief down there, Ed Phipps, who was a great friend and was looking to solve these problems. So I said "Ed, let's take this building, install sprinklers in it, and then set some fires in it. And we'll show these people that the plastic pipe is going to work. So he said "Why don't we try that?" So we got in touch with a building official out there and said we were going to do that. Well, he got the keys to the building but he was holding off on letting us do that. So we decided we were going to raise some money to bring a lot of people in. Well, we ultimately brought about 900 to a thousand people in from all over the world, fire marshals from all over the world. And we set this thing up. Well, we ran on a shortcut of money, so we were short on money, and my wife was booking these people in from all over the world. So we said we're going to make it. So we did that. So we brought almost a thousand people in and ran sprinkler tests on polybutylene and then

CPVC that we use now. We ran tests on smoke control and all of the things that were associated with that. And as we're starting to build this – on a lot close to this we were getting ready to build a ballroom – and we tested fast response sprinkler heads. So I said "I'm going to use fast response sprinkler heads in the ballroom that we're going to build." So people from the Fire Marshals' Association and the National Sprinkler Association came to me and said "Don't use the fast response heads, it's not going to work." So I said "I'm hard pressed to understand that because if you react to a fire quickly, it reduces the damage." "Aw, no," they said. "It's not going to do it. We suggested that you not use a fast response head." And I said "Well," I can't tell you what I said to them, but I told them that I was going to use them. So we built a ballroom and we tore that hotel down, I mean the building that we were testing in, and built like a 40 or 50 story hotel on it. And right after the week that we had opened, they had the earthquake in San Francisco and the only thing it did to that building, the only damage that it did to that building was that a mirror fell off the wall up on the fiftieth or fifty-first floor. But other than that...and the building has been going great ever since then.

WP – You were talking about that fire marshal in Houston who later went on to be fire chief, you all got together and did a lot of interesting things, again pushing this business. I want to say, because I recollect, having retired from the U.S. Fire Administration and having been a lifelong member of the NFPA, even those groups weren't necessarily understanding the dramatic impact of what you were trying to do would become the new reality. Your wife, Robin, is here with us today and she helped along the way trying to bring an awful lot of people that just could not conceive of these new ideas. But take us to San Francisco and the eighty-fifth story because the building department was slow in allowing you to go into that building to set it up. Now, there's a fun kind of story about what you and Eddie, Fire Chief Ed Phipps, Deputy Chief at that time, later the chief.

Caption: The Ed Phipps Story.

SS – We were coming down to the wire to run these demos, these tests and these people had already booked planes and we had rooms reserved and all of that. So, the guy that was in the building department said "I'm going to get the approval and then let you have the keys to the building." So we ask him and ask him and he was stalling us. So I called Phipps and said "We're down to the wire, we got to get in this building." So he said "Are you on your way out?" I said "I'm out – I'll be out there this evening." He said "We'll get in the building." So we went to the truck company, which was about a half a block away, and we pulled the aerial ladder out, we had the group pull the aerial ladder out, put us in the seventh or eighth floor because we couldn't get in the lower doors, broke the window, got in the building, and started work. Well, about two days later, the guy came up and said "Aw, you can get in the building now."

WP – Yeah, the demo was ready to start at that point and again you were pushing the...pushing the...

SS – Yeah, but we didn't let anything hold us back.

WP – The experiences in Operation Lauderdale and then the big one in Operation San Francisco, I mean, there were literally a list of "Who's Who" in the fire industries and people today, even all these years later, still talk about that 1984 experience. But I'm interested in Ron Coleman's book, *From Alpha to Omega: The History of the Residential Sprinkler System in America*, and

how there's a whole chapter devoted to you and the Marriott experience, and Ron's also a part of this experience looking back on how we came to where we are today. But as you look back on that time, when you were really out there, did you think that you would see the kind of changes that have come about in fire protection all these years later, in terms of routine acceptance of sprinklers and alarm systems and hood protections in kitchens? It's still a struggle, I know, but how did this come about?

Caption: The Impact of Early Sprinkler Work

SS – Well, I thought, my original thought was if we show them what we can do, why in the world would they get in the way of what we can do? And they jumped into the program with that. I've never had a problem with the fire marshals because when we were doing the construction, I would always go to the fire marshals and say "I'm not asking you for any favors. I'm going to give you what you want and beyond that because we're going to provide better fire protection than what we would do if just your code was looking at that way.

WP – Let's use that to change to your international work, which has been extensive. Many of the countries that you operated in had no requirements for any of the fire protection systems that are so crucial today. And you really had to be your own advocate and champion in these countries that had either minimal codes, no codes, some places where there was no organized fire protection, no fire authorities, and you've had a number of those come about. But you've had to deal with people that didn't accept – didn't readily accept – American codes, American approaches, NFPA standards and the like. Any particular story that comes to mind to wrestle with people that didn't come to accept some of these?

Caption: International Advocacy.

SS – Well, sometimes, if they would accept them, they would go overboard. Like Moscow. I had, like, seven or eight fire pumps in Moscow. They went overboard doing that. Then we would argue about smoke control, and they would go overboard with that, or wouldn't want it at all, saying it was going to increase the fire damage and things. But we fought a lot of battles, but I can't think specifically that they were all that difficult. You explain to people what you're going to do and they readily accept it.

WP – Even in this country, there are still a number of fire authorities and fire fighters that don't understand smoke exhaust, smoke control, smoke extraction, pressurizing stairwells and that sort of thing. You have actually had to teach thousands of people who are in this business about some of these concepts, pressurizing stairwells is a classic example, but take those concepts overseas, where they're just as unknown. Even today, you're still helping people learn around the world some of the things that Marriott's been doing for more than 20...Even in New York City, just recently, 20 years after you've been putting them in hotels, some of the people there are just learning about exhaust as we're talking.

Caption: Smoke Control as Part of Fire Protection.

SS – Well, you know, they are just adopting smoke control issues that we have been doing for over twenty years now. And it's been funny to bring that to light and to see how well that works because we use smoke control. We've used smoke control for more than twenty years. And it keeps the area clean, it gets the smoke out of the building, and I did it when I was in the fire

department, using exhaust fans all the time. And it was just an extension of that because you got the smoke...once you activated the sprinklers, we were getting the smoke out of there to start with.

WP – In no time at all. Now, if you don't mind, I'd like you to tell the story of one of those situations. I think you were in a ballroom, and it was overseas, and you were testing the smoke and you realized that maybe it all wasn't exactly right, that maybe there were people hidden in a way that tried to make the system act like it was operating naturally, when in fact it wasn't. Do you remember that?

Caption: Smoke Control Test Experiences.

SS – Well, you want to put me on the spot on this one.

WP – Yeah, I did, yeah. Because it's a great story. It's how you bring a change.

SS – We were doing a hotel in Dubai and the ballroom was probably for 2000 people. And I said "Let's do the smoke test." I noticed that we didn't have as many people in the ballroom as we'd had, were working with. So we did the smoke test. The smoke went in and I said "You know, we're activating the smoke control. And I heard these voices and footsteps on the ceiling. And I thought there was something wrong here. And they operate. And I told them, I said "You all are doing something and I'm going to get you, if that's the way it's going to be." So the next day, I said "We're going to do the smoke test again." So I went over and I killed all the power to the fans. And we put the smoke in, and I said "Now, the smoke's going in. Let's see how it works this time." And there was no noise in the ceiling. And the fans didn't come on. And we put the smoke in. Well, all of a sudden I hear this coughing and gagging and all that. Well they had about 50 Indian guys up in the ceiling and they were suffocating because there was no smoke being pulled out because they couldn't operate the fans manually.

WP – Before, they were manually trying to trick you and you realized it. But that's a great story. There are many of those sort of things that go on. I want to go back to, if you don't mind, to the fire sprinkler aspect with this and the challenges with the plastic pipe. I mean, it was such an adamant position on the part of many, even in the fire sprinkler industry, that it had to be black iron pipe and this plastic and this quick response heads and all that. I know that you helped people in our own industry, in all aspects, come to grasp with this, today's acceptance of this across the country as well. But I know there had to be some kinds of conflicts through there.

Caption: Moving Toward Plastic Pipe.

SS – I met a lot of people that would tell you that there'd never be any plastic pipe in sprinklers in my jurisdiction. And that was acceptable. You knew that we're not going to put sprinklers in because you can save time and save money by doing this, and you don't require it to start with. So I would tell them up front. I'd say "If you don't put sprinklers in with plastic pipe and you don't have a code that requires it or prohibits it, I'm going to go to the press and tell them that we tried to put this in and you wouldn't accept it, some people are dead as a result of it." Well, nobody wanted to stand in that pressure to begin with.

WP – Right.

SS – But we’ve used that and by the same token it’s been a very effective installation and we’re saving lots of lives with the sprinklers.

WP – And it’s a cost effective way to do business, too, and in this economy people sometimes don’t see that. Now, again, always pushing the envelope the whole way through your entire career brings us to the more modern era, the last 11, 12 years when you’ve been promoting the concept of water mist fire protection. How did you first come to find that a number of years ago?

Caption: Early Involvement in Water Mist Systems.

SS – I really shouldn’t admit this.

WP – Well, nobody else knows, it’s just us.

SS – If I tell you, you’re going to tell everybody. I was out in Palm Springs and Palm Springs is awfully hot in the summer time. I saw this line that was around the bar – I had just happen to walk by this bar.

WP – I understand, yeah, sure.

SS – And I saw this line. And I said to the guy “Well, what is going on in here?” And he said “Well, that’s cooling outside this bar. Walk outside and it’s a temperature of 120 degrees.” He said “Walk inside this water curtain and you’ll see a difference.” And there was a substantial difference. And I said “Hell, I can make this work in fire protection.” So we talked to the people out there on the site and they told us who they were using and I got with those people in California. And I had a hotel that was going to be torn down in the next couple of days, so I took this line into the hotel. And we had a trashcan fire someplace and activated this ring of sprinkler heads or mist heads and it put the fire out. No damage at all and it put the fire out. So I said “I think we need to do something about this.” And we were using probably two gallons of water a minute, in comparison to 30 gallons of water a minute. So I said “I think I need to look at that.” So, I came back and the people said “God, what are you going to do now?” So we tested that and we got to a contractor manufacturing the mist system and we did some tests at the University of Maryland and finally it ended up that we put some of the mist systems in buildings and then we’re doing it in a lot of buildings now.

WP – Right, yeah. I think more than 40 properties have the water mist and you’ve had a number of activations and only successes, I understand.

SS – Right, with very little water lost.

WP – And in fact that’s the big issue for everybody today is water damage. And we see in the newspaper every day that there was a fire and the sprinkler system worked but then this terrible water damage was the result. Now, it would seem to me that in some cases, your success, in Marriott and beyond, probably has a way of coming back to haunt you, too. Now that you don’t have these devastating fires and lots of people hurt and killed, people not close to our business feel that the fire problem has gone away. So maintaining the vigilance to keep this kind of requirement in its place is not an easy journey. It’s a constant struggle, would you say it is?

Caption: The On-Going Battle for Sprinklers.

SS – Well, you have the systems inspected and the systems tested, you're familiar with that. And so many people put them in and never test them or never do any maintenance on them. But I got to tell you there's a lot of hotels in the U.S. that aren't sprinklered today, there's a lot of them. And it's been since the MGM Grand and those hotels where we've had a major loss of life as far as not Marriott hotels both other brands.

WP – You even have hotels that have had devastating fires before they became Marriotts. Then Marriott took them and fire-protected them, and that problem went away from Marriott. It's a really incredible story.

SS – Right.

WP – The background you have in the fire service, you think then has made it possible for people to understand the obvious, that they would go to the code. If it worked, then it was worth trying, and so people have been willing to go with you on these journeys, sometimes not knowing, but the end result has always been positive. As you look back on all these years, there have to be a million stories. But you've been very successful with the Marriott and the Marriott ideas have permeated the building codes in our country and beyond. If you look at it for a second in terms as an international impact, now that Marriott operates in so many countries, those experiences have followed you through to those in anything that surprised you in the international arena and the lack of acceptance and now the readily understanding that's taken place in the part of many around the world?

Caption: Marriott International's Influence in Fire Protection.

SS – Well, I've had a lot of people tell us that we don't need to sprinkler hotels. It was one in France – I mean, not France but Spain – this last week. And they had told us that they were going to put sprinklers in the room but not in the corridors and not enough in the room and all that. And they had the authority that signed off on it. And I said "Uh-uh, we're not going to do that. We're going to install the sprinklers the way we should install them." So, it's an on-going battle but you've got to look at the drawings. And our specs and our standards say that you'll meet Module 14 with additional requirements, as far as Marriott's concerned.

WP – The impact of your work, now that it's found so many codes today, of course you use the International Fire Code, the International Building Code, the list of NFPA codes, where they apply to hotels – linen chutes, and the like, and kitchen protection. You've really been successful using water mists for kitchen protection with some of these Courtyards that I'm familiar with. The entire property, including electrical rooms and data rooms and kitchens, were all mist protected. Of course, you're still doing testing, but mention, if you would, the test prop and the people that would come to see these demonstrations from all over the world at the University.

Caption: University of Maryland Mist Tests.

SS – Well, we have a test building at the University and we do tests on all configurations and testing the mist system, as far as defectiveness. And the mist systems have used about one-and-a-half to two gallons a minute, whereas a sprinkler head uses 30 gallons per minute. So there's substantial savings as far as water damage is concerned. And the people that then ultimately buy into and then say that's acceptable to them.

WP – Now, you did, beyond that test prop at the University of Maryland at College Park, you’ve also done similar testing in a variety of other scenarios – mobile homes, a house in Bethesda, Maryland that was going to be torn down (nothing wrong with it – built in 1962, but it was going to be torn down for a McMansion to go into its place). So you’ve done these tests with the real fire scenarios, including firefighters on board. Tell us a little about those sorts of sprinklers.

Caption: On-Going Mist Testing in the Field.

SS – Well, we did a building in Bethesda that, as you say, was going to be torn down, and set fires in the living room, the bed room, the kitchen. And all of them were extinguished immediately once the mist system activated. And there was very little water damage, as a result to those activations. So this system works exceptionally well. It’s amazing that a lot of people have not jumped on that as well, but I don’t think they understand it and I don’t think I can run over the country telling these people.

WP – But people have come to see your demos.

SS – Right.

WP – The one in Bethesda as an example. People came from Europe and all across the United States, as far away as California and Texas and all up and down the East Coast and central portion of the country, all of them going away with a renewed interest and enthusiasm for this information and technology. Even though it hasn’t caught on completely here, it is very common in European countries and elsewhere in the world.

SS – Right.

WP – And it’s worked for you?

SS – It’s worked exceptionally well for us.

WP – All right. As you think back on the dramatic changes that you’ve helped bring about, with a lot of other people that you – you always give a lot of other people credit for your success, too. But this series has included other great names, such as Kathy Slack and Ron Coleman and others. And Coleman’s book, *Alpha to Omega*, talks about what you had to deal with in terms of Operation San Francisco and the changes that you’ve brought about. Anything that you would like to mention to us in regard to the still-big struggle for the single residential, one- and two-family kind of structure that is still not yet quite as accepted in some parts of our country? But you’ve shown that it’s very cost effective.

Caption: The Need for Additional Sprinkler Applications.

SS – It’s very cost effective and, of course, you see these fires where a family of four or five die in a house fire and you think why in the hell do you not look at that in many areas and why is it the apartment buildings that have no protection at all? You really think that the politicians ought to jump on board with this.

WP – Yeah. Now, your advocacy for plastic sprinkler parts is known today and quick response sprinkler heads and mist, ideally suited for retro-fit in all these kinds of occupancies is...

SS – Exactly. The mist pipe is so small that you can get it and not do any trouble with the architectural...

WP – Historic Heritage kinds of properties. I know a number of properties that you've taken on, probably a traditional NFPA-13 type of sprinkler system would have been a deal breaker because of the cost –

SS – Sure.

WP - with the installation of the water mist and the tubing and the like. And it's just – it made it cost effective and had no push-back from the preservation, architectural, historic kinds of things. As you look forward, any other kinds of things you want to talk about that have had an impact on fire and life safety? We talked about sprinklers, also had to do with issues of alarm and anything else that you can think of that you might want to make mention of?

SS – The people that I work with and work for kind of wish that I would shut up and not do anymore testing for a while.

WP – But they all enjoy being successful and being able to say what only this particular hotelier can say in the world – never had a fire death in a sprinklered hotel. Nobody else can say that in the world.

SS – I've been there almost 38 years and we haven't had a fire death in a hotel in those 38 years. But I attribute that to the people that work with me on that. They've made the systems work and they've made the systems work and they've made the participation and what we're going to do successful. It's the staff we have. It's everybody involved in this thing.

WP – Well, I know for a fact that everybody that works with you thinks that you've made the difference in our lives. But your organization, Marriott Fire Protection, would be the envy of any fire department, any fire marshal's office in the country. Seasoned fire protection engineers, plan reviewers, operational chief fire officers, people who've had background military fire protection, other fields in engineering, that didn't just happen by itself. You brought together, in some cases for years now you've had more than 50 people on staff and you chase them all over the world, of course, to keep them out there. I leave, in fact, right after our interview I go to Baku, Azerbaijan to the Marriott. I can't tell you what an absolute delight and what a thrill it's been. It's been a heck of a ride, an absolute heck of a ride. But your impact on all of us and, beyond that, the public and the firefighter in every single fire department in the United States owes you a great debt of gratitude. Thank you.