

Leadership in Fire Protection

An Oral History Series

Jerry Grier on the early residential sprinkler movement in Cobb County, GA

Jerry W. Grier – JWG

Caption: Taped in Marietta, GA April 27, 2012 by Etched in Stone Productions for the United States Fire Administration.

Caption: Jerry is a retired Captain of the Cobb County, Georgia Fire Department.

Caption: Fire Service Beginnings.

JWG: Well, how I got started in the fire service was in 1964. And before Cobb County became a countywide fire department, we had districts. And the district in Kennesaw, Georgia, where I live, which is part of Cobb County, asked me to be a volunteer. I was working at Lockheed Aircraft and I was a volunteer. I had a lot of firefighting experience for five years there. And then Lockheed, when they started buckling down, I took a lay off and I asked Chief Hilton about the Cobb County Fire Department, which had just been organized probably about a year by then, I told him I wanted to change my career and become a firefighter for him. About three months later, I was hired. And I went from Private to Sergeant to Lieutenant and eventually up to Captain. How I got to be a Lieutenant was strange in that I came in from a fire truck wreck in 1977 and Andrew Dollar (?) was pretty good. And I decided I wanted to go into the education or fire bureau and I went in as educator and I went from educator to plan review, inspections.

Caption: Initial Involvement with Sprinklers.

JWG: Well, I was a plan reviewer in all of the commercial buildings we did and with my background at Lockheed; I was a trained plan reviewer. I could understand architecture drawings. And then by going to all of the training that Chief Hilton sent us to, we started enforcing the codes, which was the life safety code, the way it should be enforced with everyone. And because we were farther than you on the enforcement end of it, the builders in Cobb County were used to buildings that didn't exactly comply with NFPA one on one life safety codes. As we started enforcing the codes, then a lot of builders got upset that they couldn't build the type of A-frame buildings they wanted to build, architecturally, to comply with the code. And that's where it was brought, "Well, put fire sprinklers in them, NFPA-13 fire sprinklers in them, and we'll give you the code concessions on that." At the time, we...the apartment buildings were more...they were going hot and heavy and strong. But yet, the apartment buildings – the builders, the contractors themselves – didn't want to comply. Not that they didn't want to comply with the code, it was just not feasible in the types of buildings they were building to 100 percent comply with the code. And that's where they were complaining to the commissioners and the commissioners got back with us and we just, "Yeah, you all got to work it out."

Caption: Meeting the Challenge of Population Growth.

JWG: Well, we looked at NFPA-13 and those type of buildings and wood frame type construction and it just didn't really lend itself to it. So then we come up with – our Chief Hilton did – said, “Well, we'll put in a modified 13 system.” There wasn't any such thing as that. And we got to looking at it and all of a sudden the manufacturers themselves got with us because that was just right at the time that the life saving fire sprinkler heads were coming on the market. At that time, there was actually only one that was listed. Several others were in the process of being listed. But we would have had got in an empty building, a wood frame building, and the contractors and the builders of an apartment complexes, they chipped in with us, sprinkler contractors, plumbers. And through a lot of different types of testing, that's how we came up with a system that wasn't NFPA-13, but it wasn't 13D, either.

Caption: Adding Fire Prevention Staff.

JWG: I think there was a lot of controversy of we're taking people who produce something to people who are not producing something because the powers that be and the general public, the media all look at the fire service as its own fire. We send these people out and they put the fire out. They just find it hard to believe that you could actually put fires out through education and fire sprinklers before they occurred in the first place.

Caption: Program Success.

JWG: To me, it was a hundred percent successful then and it's still successful now. It's... it's... kind of evolved into the Cobb County Building Fire Complex where kids come to and they're taught all of the fire safety things. But it's hard for the media and the public and the elected officials to understand that about educating the public, especially the kids, and the fire sprinkler system. So together, we have made a heck of an impact. And then you've got to keep those facts and figures of “yes, this is working” and now you've got to go out and interview the people when they had the fire.

Caption: Jim Bechtel.

JWG: Jim Bechtel was a...he was high up in the Post Properties chain of apartment builders and he was the one who had complained, along with others, to the commissioners. They were having a hard time trying to comply with the code and build the building at the same time. But when we decided to try to work something out with them, you know, with a fire system that was neither a 13, it wasn't a 13D, but by proving that it worked by doing all the testing that we did, Post Properties got involved, along with others and other types of contractors, and donated materials and equipment, even donated one of their buildings under construction as a prototype to see how everything worked.

Caption: Adapting Fire Protection Practices Around the Code.

JWG: People said, “You can't do this.” I said, “You need to read the first part of the code where it says, ‘Anything equal to or better than is acceptable,’” and used another past reference on fire sprinklers, you can reduce a one hour wall to a non-rated wall or even a half hour rated, if you want to call it that. But there were exceptions already granted for fire sprinklers. See, we proved that the type of system we developed actually worked, so they didn't have to comply with all of the heavy requirements that they were having a problem with and it just started...started off from there. It actually surprised us how fast it went because everybody jumped on it.

Caption: Experimenting & Testing.

JWG: We did all kinds of testing. As I had said earlier, the contractors even built us – all various contractors out there – built us a test building and we had monitoring through Georgia Tech for all of the fires and smoke. And many different situations, from the kitchen to a bedroom, a living room, the type of head – the one head flow, the two head flow, the three head or even the four head flow – was all determined during that testing. And this went on for several years and that’s how we tested. Well, these are the types of meters, and this head works. I don’t even know how to explain it. It’s like I say, it surprised us. It worked like a charm, even the piping in there. The type of piping.... Wood frame building, you know, trying to put metal piping, nothing wrong with metal pipe, it just didn’t lend itself to the type of building they were doing. So a lot of contractors got involved, new types of piping were now coming out, working with some manufacturers on new types of piping and all the manufacturers with the new listed heads. There’s nothing that we’ve required in our Cobb County Code that was not tested over and over and over again to ensure that yes, it works. Right after our test showing that everything was the way we were starting out with was working, Scottsdale, Arizona, set up with some condominium type buildings and they were putting on some demonstrations and they wanted us involved in it because we already had the experience there, and so we went out and we did that there. And again, one of them we did was even a Christmas tree fire out there. And everything worked like a charm. It surprised us, the manufacturers, and the contractors as how well that it did work. The main thing that made everything work was the gelling of.... We had a problem. We’re going to put a system in it that’s neither 13 nor 13D, but what made everything work was the gelling of the fast response fire sprinkler head coming out at the same time we were all starting this and it was just like a marriage made in heaven. It just took off like a rocket. And it worked. And it still works.

Caption: The Consortium.

JWG: The Consortium was an easy way of saying “spread the blame around”. And that was.... We had representatives from manufacturers, we had representatives from fire sprinkler companies, plumbing companies, real estate companies. I think at one time we had some insurance people there because, in the beginning, it was kind of rough, and that’s putting it mildly. If you could imagine the first guy that comes up and says, “We’re going to put the bathroom in the house.” And that’s kind of like what we were facing with the...all of the...all of the problems going to happen. Oh, yeah. The house is going to flood. The electrical’s going to short out. It’s going to catch on fire. But we had all of these people involved and that’s what we were doing the task. And various people were looking at us saying, “This is a problem.” After the test, we did live burns and buildings. We even had the fire burn trailers. We set it up, one of those, and doing it. It’s kind of hard to say, “It doesn’t work,” when you’re setting there and you’re part of the Consortium and it does work. How do you say it didn’t work? It just did.

Caption: Trade-offs & Fire Protection.

JWG: Well, as far as I know, that Cobb County was the very first in the United States, so anywhere else as a matter of fact, to actually come up with a local ordinance for contractors and builders in apartment buildings that we would give certain trade-offs if they would put, what was known then as, the Cobb County System. But the trade-offs, and I don’t know if I like the word “trade-offs” because we really didn’t trade-off fire safety, we actually enhanced it, but things like

compartmentalization, we expanded it, all kinds of...of things that I can't even recall right now. But we actually put it in the code and I worked with the county attorney, myself and Chief Hilton, and we...we put together this countywide ordinance. So, rather than saying, "This is a good idea and I think we're going to do this," we went through the proper testing and confrontation that all this stuff worked, then we could give these, again using the word, "trade-offs" in lieu of complying with this, that, and the other, then you put in the fire sprinkler system. And we actually come out with...we come out with something, I don't know, an idea. And it surprised the heck out of me and Hilton. The whole world just descended into Cobb County.

Caption: Documenting the Sprinkler Experience.

JWG: You've got an ordinance and this seems to be working because we did one thing that you have to do; no matter where you're at, you have to have facts to back it up, not just your opinion. I had a inspector that was on duty 24 hours a day, on call, that any fire in any sprinklered building, a big report had to be filled out of how it worked, what it did, how much money it saved, so forth and so on, so we compiled that for several years. Of how many lives were saved for.... We could go to the meeting, we could go to the contractors and all the naysayers and we could show this in our hand to them rather than, "Yeah, it works, and that's my opinion that it works." We had the facts to back it up.

Caption: Factory Mutual Tests 1080-1981.

JWG: We were just doing something for ourselves, locally. We didn't set out to shoot the moon; we shot out to solve a Cobb County problem. But as we started out and word got out, the next thing I know manufacturers and fire sprinkler contractors and everybody was jumping on board and Factory Mutual was getting involved. And, at the time, there was only one head listed, but there were several others that were in the process of being listed, even though they weren't listed. We put them in the building and we had some scenarios there where they monitored the smoke level and how long and the heat at different levels and how long it took for it to go off in this situation and that situation, types of piping and all that. And it just went from there. It amazed me. Again, I'm still astounded by how fast this thing went. Commercial type heads we did in as a comparison to when they would go off as to how fast first response would go off. The fast response was the way to go. We didn't know just to do a series of tests on a commercial heads because ULS had already been done. We already did the commercial heads in a comparison against fast response.

Caption: Continuing the Tests.

JWG: I'd met with several of the contractors and manufacturers in a building, say 16 by 16 test building. And a lot of stuff was donated by contractors and everyone wanted to help us get an answer, even though, from the fire service point of view, we knew it worked. But knowing that it worked and then having the facts, the figures, the testing, was important that other people could see it worked. So, again, you have to have the facts. You have to have the proof of the pudding, rather than just your opinion that this is just a good idea. We actually went through all of the testing that it did work and everything was documented. I was the fire protection engineer, if you want to call it that, and I'm not an engineer. But I had a background.... At Lockheed, I was an Assistant Supervisor in master tooling so I knew how to read drawings. And all – with all – the training we had, we studied, we took tests, we went to schools, and we knew how to enforce the

codes and knew what they meant and that's where, when the sprinkler division come on, we again had to write our own code and everything. But in order again for – to get the proof of the pudding out to the people and prove. We had to have a division where we concentrated on nothing but fire sprinklers. And again, keeping documentation on the type of fires, type of heads, piping in the fire, how many lives it saved, so that we would have the documentation as we went on. For people who were against it, we could prove it works.

Caption: Educating Elected Officials – Dramatically.

JWG: And the Board of Commissioners sat in and this was before the fire burn trailers, which we did before in which we did the first one, in Cobb County and it spread from there. But we had the Board of Commissioners and putting rain slickers on them. And we had bedroom fires and kitchen fires and of course we had the media running everywhere. And we set the fire and that's when you say, "I hope somebody don't cut the water off," because your job and your life...this is it. Oh, they come out and...nothing but praise...nothing but praise. And again, they were looking at what they had give us an order, if you want to say an order, they had given us a challenge that we had to work with these people but at the same time you're working with them to save lives and to comply with the code rather than, "I'm going to work with them by letting them get away with anything." And we didn't do that. We come up with a system that they could live with and, to use a pun, the people could live with, too.

Caption: Building a New Code.

JWG: Working with the county attorney, we come up with a Cobb County fire sprinkler code for most family houses with the trade-offs and everything and that's where the Commissioners were backing us 100 percent. We had all of our hearings, all of the Commissioners were in favor of it, and nobody voted against it. And that, again, goes back to putting them in the building, setting it on fire, and saying what we're doing actually works. We didn't have any opposition to it. Again, because of the way we handled it through testing, with tons of media coverage and confirmation on all the smoke and fire levels and everything, everything that we do we have confirmation and paperwork to back it up. It was a...it was hard for anyone to disagree with it. We did it that way so when time come where we wanted to pass the ordinance, there was no one that spoke against it because everything had already been tried and proven. As soon as that ordinance was passed, there was never a part of a building built since then that didn't have the system in it.

Caption: Sharing the Message.

JWG: What we did here seemed to be a solution that a lot of our districts throughout the United States and Canada and we had even visitors from Japan and Canada , England, and everywhere else because it's seemed to be the answer to a lot of other fire jurisdictions' problems. So, as it worked in Cobb County and the word kept getting out, I was spending about at least one week out of every month traveling to somewhere in the United States to work with other people to show them how it worked and the political things you had to go through to get local ordinances changed, etc., so forth, and so on. And it got so large that finally NFPA was using me as a speaker even though there was no NFPA code and they said, "There's not an NFPA standard, but as an authority-having jurisdiction, you can accept anything equal to or better than and we'll have Lieutenant Grier speak on that one."

JWG: And it eventually comes down to testing and referring back to things that we'd done that we wound up.... When I say "we wound up", all of us wound up with NFPA-13R, first year addition... Sonny Scarff with the Marriott Corporation. I worked with B.F. Goodrich, several others of the sprinkler manufacturers, authorities having jurisdiction, like Wayne Waggoner in Knox County, Tennessee, helping them get their very first code of any type adopted. They didn't even have any code. I mean, if you want to build it, you build it. But Wayne Waggoner and [name unrecognizable] is still involved in sprinklers, and Jim Dalton with the NFC is another. John Vinello, who was working for a private contractor, is now president of the International Association of Fire Sprinklers. People... I can't recall the names. There were hundreds of them all over the United States, Canada, England, had people come in from Japan, I had to go get interpreters. They forgot to tell me he didn't speak English. But we got interpreters and we had all these people. We answered their questions and then the manufacturers and the sprinkler contractors, knowing that that was a different ball game, a different type of head, a different type of piping, I wound up teaching classes on all of that, too. To have the sprinkler contractors try to transition into a different type of fire sprinklers, which turned out for most sprinkler contractors of using an entire different trained people. It was kind of hard to transition a sprinkler contractor doing a warehouse today and working in an apartment building tomorrow, so you had two different mind sets, two different types of construction. So we wound up working with them, teaching classes, as well as them teaching us on fire sprinkler systems, whether they'd be 13 or 13R.

Caption: Fighting Fires After Retiring.

JWG: I did a three...two or three day class at Montour Falls, New York at the New York Fire Academy. And get some of the reviews back from that said, and I was a lieutenant at the time, said that, "Lieutenant Grier seemed to be the only," – there was a consortium, all kinds of people up there – said that I was the only one that actually seemed like he believed in what he was talking about. And I wasn't always right about everything, but I was right about one thing; I believed in what I was doing. And I have spent money out of my pocket all through those years and I've never asked for any compensation. The height fire department connection that is required actually come from Cobb County; that's where we started first. And the type of piping working with the manufacturers in development of the pipe. I didn't ask for recognition or an award or a piece of paper on the wall. It just.... By working with them, and them working with us for the common cause, made things work and that was the goal in the first place. I needed their help. Actually, they needed mine. They needed mine for a product they wanted to sell, the builders need us so they could comply with the code without having to build the building in a different way. And so it was just kind of a marriage; they helped us, we helped them, we all worked together. But none of us were out to how much money we could make off of it. But as far as satisfaction for me, just the first year alone where we were keeping the records of the building going up, we saved infants' lives – fires in bedrooms where the baby was. One gentleman had a gold record hanging on the wall and it had a kitchen fire and that was a bit of controversy in the first place. Well, he had a kitchen fire. He was barefooted. He got on the phone and he said he had a pan of french fries going. They caught on fire. He went over and picked the pan up and, of course, it was hot. He dropped it in the floor, slipped in the oil on the floor, hit the corner of the cabinet, knocked himself out. Guess what woke him up? The water from the fire sprinkler said. He said, "I'm a dead man, ain't I?" I said, "Yes, sir, you are."

Caption: Resistance to Residential Sprinklers.

JWG: But keeping those type of records and things probably proved to the naysayers. It's kind of hard to say it doesn't work when I've got all this documentation and I know that it does. Me, personally, I have put out and will continue to be putting out fires for years and years and years just on our contribution alone and I've – mine and Hilton – and all the rest of it is involved.