

I'm trying to talk close to the mic because then we shouldn't get much background feed. A couple introductions first. Some of you were greeted by Katrina. Katrina here is our an intern that's working for Buffalo County. She'll be helping out with a number of different projects, but she's helping out today. The firemen today that are doing the demonstrations we have Tom Braake who is the Chief, we have David Bohm, we have Joey Wick, and we have Ben Shams, all from the Alma Fire Department. They're gonna try to cover a number of different things about fires about mostly related pretty much to ag. But there'll be some other things also that are just general with fire control. So if you have questions, we will we'll - I'll watch the chat while Katrina's filming. And if there's something specific you have if we don't hear your chatter and see your chat right away, holler out, just turn your, your mute button off for a bit and we'll, we'll work with it that way also. Any questions before we started folks? Okay, if not, I'm going to introduce Tom Braake. Mr. Braake is chief at the fire department has been here for quite a few years. And you should see him in your camera for a little bit. We'll get them adjusted a little. Okay, looks good. Here we go. Tom. Take it away.

All right. Welcome everybody to fire tractor safety. We're going to go over a few things for you today. And I also would like to introduce the guys again that that Carl introduced if you want to give them a shout over there my fire department helpers.

Dave Bohm, Joey wick, and Ben Shams who's on the phone.

We'll rib him a lot today. Anyway, welcome those guys are gonna help you we're going to go over a lot of things. First thing we're going to start out with those as about fires don't become a victim dying in a fire and we have said that to ourselves even as firemen dying in a fire you're not a hero. Nobody has become a hero. You are not replaceable, the machinery is all equipment is so don't become a victim in this in a fire. When to call for help. Well, the best thing to do is to call it immediately because once you get involved in the fire yourself, a lot of times that time takes over and you never realize how much time it takes for fire to spread. And if you don't have us on the way those minutes cost you a lot of things in everything. And sometimes that's when you get hurt. So So make sure that you call 911 immediately, and then go back. And if you need to try and fight the fire from that point, do that

Tom could you expand on that just a little bit and talk about what is what is reasonable timeframe from when it's a little bitty small fire, let's say if it's even in your house till when it's you can't control it anymore?

Well, let's even say for instance, you're in your - on a piece of machinery or you're in your house or anything like that. And you have actually grabbed your fire extinguisher and expelled it and you don't have any other means of putting it out. And you can see that it's already gone past that point of return. Where you're going to either have to go find another source to put it out or you don't have a water source or another fire extinguisher, you need to call 911. Then it comes right back to all what we've taught you guys in fire safety in school, get out, stay out. You know, don't go back in those kinds of things. Hopefully you've you've, you know, went through that go to your meeting place. All that kind of stuff, things that we've talked about earlier, but then it's time to get out and make sure that you you see a building that's fully involved. Obviously, you better call right away. The elements needed for a fire we're going to talk about, Carl's got a PowerPoint for you guys to look at and it's a triangle. It's called the the fire triangle. There are three points to this and we'll talk about them all. And so every fire needs these three elements in order to exist. Heat, fuel, and oxygen. The first thing is the fuel. There are many things that we cannot control, in a fire. Fuel sometimes is one of them. Fuel can consist of gasoline can

consist of wood. Any other materials houses are built out of some really terrible things right now. We've never had such a time trying to fight a fire right now. Houses, houses that are constructed back in the 40s 50s 60s are built very well because they're built out of a real stick lumber. Sheet rock is different all that now it's all processed lumber, and the houses burned very, very quickly. We call them new construction buildings, but this triangle it exists. So you can see that the oxygen, the heat and the fuel, all combined that chemical reaction, that's what that's what a fire is. So any one of these that we can take out, so let's just say you drop your fuel barrel line and while you're filling your tractor in it tips on a hot exhaust and you got fuel spilling all over. One of the easiest things is to shut fuel barrel off but your probably having to walk away if you don't have a fire extinguisher so you can cut some of the fuel off, but you still have that heat and oxygen rolling in there. And that's where a fire extinguisher comes in. Because hopefully it can actually do two of one thing it'll It'll cover the fuel. So that fuel is the fuel is covered up so that you cannot or that cannot burn again and it might take away the oxygen. There also is another one, it's called the fire tetrahedron. And that comes into effect when you're doing wildland fires. And you don't see it very often, but what it does is it actually creates a different effect with all three of these. And it all has to do with the weather, humidity, wind, rain, all those kinds of things and also topography. The tetrahedron actually just adds that another degree to everything that's going on. And that is something that you don't see very often unless you have a wildland fire because that means that like trees are blowing up and that kind of thing. That's the extra things things expand too much. They call them a bleve, but blow up or or it just adds another dimension to the fire. We're going to go into any questions I should say. Any questions on any of that so far?

Right, go ahead.

All right. So the next thing we're going to do is those are the types of fires or what's needed in a fire. From that triangle, we're going to look at different things that we can do to actually upset that triangle. And we can what we can use to upset that triangle. And they're going to be fire extinguishers are going to be your main, the main source, we'll talk about a few other things that you can use while you're in, in the field or anything like that. But we are going to talk about fire extinguishers. So most of you probably have a fire extinguisher house or you know, hopefully on most of the machinery that you have, and they are going to be an ABC fire extinguisher because you're going to you have nothing specific that you're going to be putting out so that a, the A and a B, C. is going to be the wood paper clothing most of your anything that's combustible in your house that starts up on fire your couch or stuff like that is going to be put out with with an A, in that fire extinguisher.

Is plastic considered a?

Plastic can be can be considered an A, part of that. It's the the other two are pretty specific to what you're talking about. So it's like anything besides like cooking grease which is the B the flammable liquids. It's ordered ordinary combustibles plastic garbage bag, a pail anything like that. I mean we've had people throw hot wood coals in a plastic pail and that lights up on fire. That's an ordinary combustible. Flammable liquids your grease paint solvent and stuff like that you throw or you dump out a solvent on the ground or anything like that and it starts up you get an A will not put it out but the B portion of that will put that fire out. That's where that comes. into and that is, and there are labeled. And I should say they all have a triangle or a square or a circle, and they're colored for that particular one. So they're easy to see from a long distance away. So if you memorize the colors in the triangle, the A, or the a part of it is a triangle with a green triangle around it, the B is a square with red or red

involved in it, and those are for the flammable liquids. The C part is for live electrical equipment. So you're good on stairs in and something shorted out in the house and it's still live. That's the key. If it's still live, you're going to have to use the ABC we'll put this out. Otherwise, it'll have to be specific to a B, and they do make all of them individually, but there are very specific spot that they need to be put in in your house or in a factory or something to that effect. That's where they're used. Very specific spots. So the C is a circle with a blue circle around it. And that'll be for any live electrical like even your blender starts up on fire and account or anything like that and it's still live. Sometimes they don't short it out right away, you need to use that ABC on there. There are a couple different kinds of of fire extinguishers on there. One is the D which is combustible metals and that is very specific if you see this you're going to be in a factory where they actually work with it magnesium and aluminum are actually flammable. Cars are have a spot of magnesium in them and we can always see them on a car fire. We can always see that burn most of the time they're in the steering wheel column of a car or they might be in the post of the car like they post where the windshield is. They might be embedded in the the steel in that and once that car gets burning hot enough. That's another thing that it's an exciting thing to see because you know exactly when you hit it because it actually was - water when we put a car fire out, the water actually makes that spark makes it light up really bright. It's a really bright light. If you see a lot of it, do not spray anything on it, you're better off to let it burn. Because if you spray water on it all you it's like antagonizing a bee nest, all you're doing is going to make that worse,

Anything around a farm that would be combustible metals that you can think of?

I was trying to do a little research and there are some of the combines that are out there have have some of it in I didn't see things like tractors, it's a very specific metal for a very specific thing. And, and but aluminum is in everything. And aluminum is another thing that can actually burn and it creates a hazard when you're fighting things. So air conditioner, compressors, all body parts and stuff like that are made out of aluminum. So there's a lot of aluminum in in all tractors all that it becomes more dangerous. Stepping into burns their shoes, that kind of stuff to. The K, um, can I get one of you guys to bring up I was gonna say I should show you guys the ABC on their extinguishers too. I know you've got it on there, but the K is a cooking oil one and you'll see this in kitchens, restaurants, kitchens, restaurants, all that you're going to see a lot of that. And then if you want to bring that K, though, no, not that one. Silver one. So you'll see in restaurants, you'll see that in like we have them here in our school all around and they are used specifically for kitchens or places - restaurants, - where they cook food grease fires, because they clean up very easily. Basically, you're gonna have to throw the food away that you might have used sprayed in, you know, obviously, it's probably burnt anyway. But, but you're going to use it in that you can actually go around with a degreaser or a cleaning solution, clean it up and you can go right back to cooking, that's what those are used for. Joey that that CO2, you do not see these very often anymore. They were used in kitchens, this one hung in our kitchen, they don't consider them a valuable source accepting again, very specific uses. This is a co2 fire extinguisher. It is very cold. So what it what would you think it takes out of the fire by being very cold it takes that heat aspect out. So when you spray that that's another one that you can go right back to you can clean it up or wipe the residue down and you go right back to using it again. But they are more expensive to fill. The other ones, the other extinguishers that are on the ground there. The smaller one, if you want to bring that up here Ben and this has Ben Shams. This is all A lot of times this is probably exactly what you see on your machinery or maybe even the household because they are inexpensive. And you see that they actually come with a bracket most of them come with a bracket they get mounted on a piece of machinery. They're easy to

use. You literally probably have less than 30 seconds to use. With this fire extinguisher though you it's it does not last very long. This is an ABC or actually this is only a BC. This is a BC you can see that has a BC on here. It only has a BC on there. So this is only a BC fire extinguisher so what's it going to put out? Flammable liquids and electrical. So this is a specific use one also. The other ones that are around here or reason I brought them out here for our four sizes. This is an ABC This is actually a five pound one in all Honesty this one here can be mounted. If you have a large piece of machinery, or you have a large size shop or in your garage or anything else, I would honestly recommend something on this order. Because this is going to give you a over a minute of spray time, continuous spray time, and you'll be able to take care of a lot of firewood, a lot of the fire with this with this fire extinguisher.

And you got some fairly good sized machinery at your farm is that the kind of carry on like your choppers and combine?

Two of them.

Two of them on each? Good.

The other one that's down on the ground over there as a 10 pounder. That one actually, that one actually and all retrospect is almost too big to put on. It's hard to carry around, but in a shop situation or anything like that. That's where I would mount something on this order. And they usually come with a clip that you can hang on the wall. They should be visible. Near an exit because you don't, you got to make sure you have a point of egress when you back out of a garage, we're going to talk about locations of fire extinguishers and everything else, if you want to go set it down, you can, um, the other one that's there is a, a two and a half pound. This one is, if you were going to go go smaller, this would be another one that I would actually use. It's a two and a half pound fire extinguisher again, you can see that this is actually a BC One also, it is not an ABC. But this gives you a good perspective of the size. This is and they also come with a hanger. And they're easy to use, and they're simple. I mean, if you're a smaller, even a smaller child can use one of these if they're trained, trained to do so. So that would be a really good size on anything. I mean a tractor or anything like that even if you were going to go smaller. Locations - you can set it on - locations of at any time you're in a building or anything like that. It's a really good idea, like I said before to put it by an exit, near an exit because you need a point of egress. So if you go if you're running away from the fire going to the exit, well, you don't want to give that exit up so that each fire extinguisher should be by an exit. And they need to. So if you need to go back in your back is always at that exit. And don't ever let the fire get by you. If you go back into put something out on on the ground or in the fire, that's we we do that in a house we cannot no make sure that we cannot lose our access or recess back out of that house, or even out of a burning shed or anything like that. So if you are going to attempt to put it out you make sure that you get that out because then otherwise you become a victim like we were talking about don't put yourself in those kinds of dangers. Also on any of the any of the pieces of machinery that you have, it'd be a really Good idea to either exit a cab or close to the door so that you can actually get into it or right outside the cab, you can grab it on your way down. It's a hard thing not to crawl up into a quarter of a million dollar piece of machinery, not to to attempt to put it out but you got to make sure again that you you do not try and put yourself in danger to do that because the machinery is replaceable, you're not you know hear me say a lot of that today. So locations on tractors, you can be right outside the cab, down by the engine block even those kinds of things. And get one of you guys to bring the the big 10 pounder up here I just want to actually in that little one Joey. We're gonna talk about a little things, especially on farms and stuff like that. It's pretty important to

actually check these even on a more regular basis than you possibly can. You can see this one is equipped with a hose. The hose, the hose actually screws on and off. It's easy to maintain. The biggest thing with these is making sure that you keep these your nozzles clear and it doesn't matter which fire extinguisher you use. It can be one with a hose or a small and like this. You guys have heard mud wasps. Mud wasps are great to build nests and things and you want to know what they can plug this up in it actually makes it very useless. Very, very useless because without this nozzle, the spray the spray that comes out of here is very wide open and you can't concentrate it on a fire. The same with this you can't take this nozzle off that these nozzles are on here for a reason. So you have to maintain them. There are things that you can do and I've heard of guy sticking like cotton balls in them to keep them out stuff like that because the cotton ball will get blown out of it. But you still have to maintain them you have to check them and make sure that the the nozzles are clear, get that mud wasp out of it, but I can't say enough that even you can mount you can actually mount it like this. And it's a good idea to take them out once in a while they're filled with a powder, so that powder will actually lay in there, and it will vibrate, and it'll actually become kind of hard. And so when you tip it down like this, all you're going to do is spray the arrow. So it actually is a really good idea to tip it upside down once in a while and you can actually feel that that powder in there loose and once you do that and take a rubber mallet and hit on it once in a while or just tip it upside down to loosen that powder up otherwise, otherwise what you do is you just blow a hole in the powder and it does not come out. All you're gonna do is blow the air out, and it doesn't take long after that for the fire extinguisher to be useless. Make sure you check them periodically before you even start the machinery. While you're wanting your walk around. Check. Thank you guys. Want to walk around checks on a tractor piece and any piece of machinery, um, the 10 pounders are actually they're... They're very user user friendly, they can be refilled. The five pounder can be also that two and a half pounder probably can be. So look at a good quality fire extinguisher you're gonna buy that because you can get them filled in. There are many people around that actually do that there are fire companies that come around and do it. Winona has a couple of them I have a company that comes here and checks them out. And and that's how we check them because they'll hydro test them for you and all that and they're good for a very long time. 25 years I think sometimes so if you are good to them, they're going to be good to you. And they need to be ready. We do have another one that's down here. And it's that water can there's a water can. This one here actually, and it's really pretty much good for an A it will put out couple other things, but more of it is take the heat out. This one here obviously isn't going to be advantageous to keep on a piece of equipment in the wintertime, what's going to happen to it is you're gonna have a great big hole on the side because it'll split it wide open because of the water. And you don't want to mix anything with it to keep it from freezing, because that defeats the purpose of the fire as you might be adding to the fire. But this is only strictly a water, a water cannon, it's two and a half gallons goes in it you fill the rest up with air. Right now we're in good shape. And you can use it to spray out a grass fire or keep it in it's better than absolutely nothing. But it was a very specific can to put out a fire with. Again, maintenance again, it's a hose, take it off if you need to clean it out. Make sure you keep make sure you can blow through it. That's why they're easy to take off too they just spin out. Get them mud wasps or anything else that's out of there. If you're out chopping hay or whatever, a lot of times it can get filled up with chaff and dirt, whatever you want, you know, so you need to make sure that they're in good operating condition for you out on the field.

So Tom why would we have one of those like, say on a farm, where you could easily pick up the wrong one, if you had an oil fire and you grabbed the water cannon? You don't want to do that. So why would you have one of those instead of an ABC?

Well, if you wanted to, if you wanted to run like, um, I know guys that put on their choppers and stuff like that because most of the chaff it's an ordinary combustible or anything like that. So you're gonna put it out, bearing goes on or anything like that, it'll easily put on a lot of different things because you're actually taking that heat element it'd be no different than us coming with a truck and putting it out with our water or anything else. It's more or less getting that heat aspect out of that triangle, so that we can actually control that fire so we can put that fire out. So again, water is always a rate, it might not be the most advantageous, but it's always a great backup or something to have around there. So thanks, Dave. So those are the kinds of things that we can talk about fire extinguishers, again, ABCs are the most common you should put those, you know, wherever in your house, those can actually be all over the farm. If you're going to get more specific, which I don't know, I don't see that happening unless you run a kitchen or anything like that, you're going to go to the K. And of course the D, if you're going to have specific metals. The CO2 you can use pretty much anywhere like I said, again, that can be used in if you have valuables, CO2 - valuables - CO2s is actually are a really good thing to have around because if you have pictures that you have or jewelry or guns or anything like that, a lot of the other ones have corrosive aspects to them, the powder, the cleanup, all that kind of stuff. These are actually very good CO2, they're very good - good to have around. But they're they're a little more expensive to maintain, per se. Yeah. So that's what I have on fire extinguishers. Any questions on that?

Hearing none, let's keep going Tom.

All right, I talked about where you should put fire extinguishers, again, I'll just cover that again just exits, wherever you're accessing a piece of machinery would be a good thing to do. The types of fires as long as we've covered all that now the types of fires that we come across on these, on your farm or even out in construction, business or anything else on the equipment. The machinery part of it is usually a fairly expensive one because usually out in the middle of nowhere in a hay field or a cornfield, and it usually ends up being something different as far as or ends up being something different as far as you're in there. If you want to throw one of the tractor ones up there as far as the on your PowerPoint, you can throw a tractor on up there, or the combine one. So machinery is a little bit different when you get on a piece of machinery and you see that it's gone past this the baler. Yeah, I haven't seen that picture yet. But those are pretty unique cuz there's a lot of fuel in them, especially if something goes wrong, because you have a full bale of hay in there and if they're not able to eject that bale, that bale is going to be part of the fuel. What else is in a baler? There's a lot of belts in that and oil from greasing it or anything like that the grease is there and all it does is add to it. So that's going to be an ABC fire to an extreme. Hopefully you have something on your tractor that you can at least try to put it out with and as you can see, this one is in a hay field. And if the hay field is dry like we had this spring that can also extend into all of a sudden we have a wildland fire.

He was chopping or bailing corn stocks into the hay field so it didn't burn up.

Yes. And so that's what happened with this with this particular baler. And if it would have got into the corn stocks, it just adds to the whole situation. Actually, the baler becomes the non essential part of putting this out, because it's contained in itself and it's already a loss. So we would have to make sure that we go through the cornfield and put that out, and especially if it's on a windy day or anything like that, it really raises concerns. I did have another, that tractor, the tractor in the field, in the field. Well, that's one way...

With, with the field fire?

Yeah.

Okay.

That one.

Okay.

So you can see this one also what that can turn into grasslands, like if it's really dry out, and let's just say People have set aside acres or they have a good stand of hay and it gets dry springtime when people are out doing field work or anything like that there's the grasses dry and all that. I mean, this is an extreme picture. But But things can work to this. This tractor is probably in the field, I don't, I didn't see if it was pulling anything. But a lot of times, what you can do is get in front of the green and while we're going to call the green, you can get in the green and you're going to see another picture of one or you can go on line actually look at some demonstrations where they actually get in the green. I don't ever recommend it. Especially if you're not not taught how to get if you're in the green, you're in the danger zone. I've seen fires go across the fields at 20 miles an hour, 30 miles an hour. So you do not want to be in the green but a lot of times if the fire is that far out, you can actually make a black area which we call uh... black area, you can actually go out and dig up the ground and make sure that the fire doesn't spread past that. But they do jump, especially a fire this size.

A couple questions. First of all, do they kill sometimes in front of front of a fire to help prevent spread?

That's what we were just talking about is is going and taking a digger or a disk or something else and knocking down the fuel that's out there or cutting off the fuel it's out there, you need to actually really get rid of it a lot of times, like if we have something that that's large, we'll get a caterpillar or a cat out there and those guys will actually go out and dig a trench, make it make it black. Make that that stop. It's a fire stop. Make it black so that that fire can't jump across that.

Correct me if I'm wrong, but some of these really large fires we used to burn wheat fields when I lived down south, they'll actually generate their own wind, won't they?

Correct. They could generate a lot of wind. If you have ever ever been around any kind of trees or a woodland fire or anything like that. They're very very noisy, very noisy and they do create their own. They're actually big - somewhere big enough like out in California, they created their own weather. They actually create their own storms, you can get a smoke laden valley and actually what it'll produce is lightning. So it doesn't help anyway so those fires and actually produce produce electricity and they actually produce lightning which doesn't help because they'll start another fire, especially if they're that dry.

There's one more question from Cole and Cole I'm assuming you mean like, like from a battery will acid burn?

Oh yes, battery actually battery and a fire will explode. If you read the top of a battery, it says..... whenever you jump a battery or anything like that, you're supposed to put it on the dead battery first and then on the other battery, because you're going to a dead battery gives off a lot of sulfuric acid which is explosive. And we've had batteries blow up in guy's face. I'm sure Carl has had experience with that with some of the farmers and stuff around here and That's not a good thing. People go blind from that or it burns them permanently. That is not that's that's a huge issue.

That's a good reminder because in your manual it talks about the proper way to jump a battery. Correct and where does the last? Where does the last clamp go?

On the ground.

On the ground on,

The live battery.

No, on the chassis is grounded not to the vehicle to your ground on the vehicle,

the vehicle you're jumping from. That's from the vehicle A

Lot of people don't follow that that will be most likely will be a test question too guys just to give you a heads up but there's lots and lots of people injured every year jumping batteries incorrectly.

And and then again to just in that know when you go back to the Baylor fire that is the farmer did a good job of getting it out of the danger zone. He could actually foresee what was going to happen if you left it where it was at. He looked back and started saw that the fire was on, was this Craig's?

No.

Okay. Um, the you can see that the baler was on fire he looked at where he was at in the danger zone that he was in and he went to a green area where he knew that it wasn't going to do much damage. That was actually a very, very good thing to see. And you always got to look at that.

Exactly the same situation you guys had.

Yeah. We just had one recently this spring, just same thing. So that kind of runs the machinery one down machinery like going to machinery one, we're going to spray water on it, we don't have enough fire extinguisher. So we're going to try and we are always as a fire department going to try and take the heat aspect out of the machinery fire if you want to put that ba- or that combine one up there. This combine also, obviously you can see how fast it went out. The other thing that happens is that thing probably has what 200 gallons of fuel. Okay. Yeah, two or 300 gallons of fuel plastic tank. So here's what we're dealing with tires, how many tires are on that there are many, many, many things on that that will burn very fast, very hot very erratically. That's another reason why if you cannot get that fire out it initially as you get as this picture was taken, you get upwind from that do not stand in that smoke that rubber, rubber, all the plastics, the fiberglass, the oils, all that residue. Smoke is deadly. Smoke is deadly. Get out of that path of that smoke, get out of the path of the heat.

One other caution too, if you want to talk about just a little bit, a lot of older tractors may have ether that they use and a friend of mine had a can of ether- to the cab. The tractor. Yeah, he actually had it inside the cab. And as the fire was he was going running away to call 911 and he heard a pretty good sized explosion. Do you want to just say explain what happens to ether under heat?

Oh it's a it's a compressed gas. So when the ether can explodes what it is is actually is building up so much heat and it's starting to boil in there that it causes the can to explode there is a plastic top on that if the top is if the covers on it or it's protected at any amount of time but the back of that can it gets a

heat makes that that's what happens is that explodes and it is very loud, very dangerous and there is a lot of percussion that goes behind an ether can exploding some-

Oh yeah, another question. Fires spread fairly fast. And to do with the baler, Christine asked how to be on hits the baler so fast when when it was already burning?

Well, the thing is, it might have been a bearing in the back where he you know, where it was just starting out and he knew that he wasn't going to get that thing out because if he couldn't expel the bail or get rid of the bail or get rid of the fuel, the belts were already on fire. And I'm just going by experience with this one, he expelled the bail. So he got that bail out, but that bail burnt as soon as he took it out, all it did was open that that thing up and the belts just just inflamed. So he actually was up back there on hooking it and from the tractor because most of the fire was in the back and he was guarded by the shielding or by the shields that were on the front of it. And so he was able to unhook it quickly and drive away. He pulled the pin I don't even know if he unhooked the hydraulic hoses. He just drove away from it. And but he got the tractor Oh, at least he saved the tractor.

And I know the picture where this one was taken. And it's kind of a weird thing because last fall, he was also bailing and he ended up burning up a baler then, and that one he didn't catch quite as fast and he got some pretty severe burns on his hands and arms when he was unhooking the baler so he didn't lose tractor, so they do happen pretty fast.

Yes. And, and here's another thing too, though is that all of a sudden - and I know it sounds strange, but you got to look at which way the wind is blowing in that situation because that fire is going if you're if you park with the wind at the back of you that when that fire is actually going to come right to the front by the tractor and then you probably are not going to get to it. So that's it's a whole, you got to look at those aspects of this. Of what you're doing out there. You have to be conscious of all those things.

Another question what happens if a controlled fire gets out of control and burns more than it's supposed to?

Well, they call us and then. A control burn sometimes you have to be that's that's one of those things that's inevitable. Preparation for a controlled burn is everything. I don't care what you're doing. If you're just burning garbage or anything else, you got to make sure that you you are going to reduce the factors of spread. You're going to make sure the area around that is clear. You're going to make sure that the wind is in the right direction. You're making sure that you're not going to, you know, put these materials that are burning like in a rush pile, you know how you get sparks flying and all that. You don't want them landing on somebody else's house, shed or in a woods area or anything like that. So weather and humidity have a lot to do with it just for the simple fact that that it's a really nice day doesn't mean it's going to be a really nice day to burn. Humidity levels can be very low, actually, humidity has a lot to play on, on even green greeneries if there's low humidity for a lot of days, I would suggest not burning because it goes a way. Heavier, heavy duty is a good thing. Those are the kinds of things that you got to think about. But yeah, we they call us and they call us in to help them put them up.

Just one more quick question Ryan asked about there was a tractor on fire a buddy of Mondovi not very long ago. Wondered if you guys helped put that one out. Probably not that one but you want to just

take 30 seconds or a minute talk about mutual aid how you guys help out, you know, put that barn fire up?

Oh sure. So when we have a fire that we know of that's going to be called out we have a called a MABAS system. It's mutual aid box alarm system. We're using that very readily right now. So between Mondovi and actually all the all that actually all the departments within Buffalo County, and actually outside of Buffalo County, we are all on a list. The Sheriff's Department has a list of us and when we call him calling a fire, there's a barn fire for sure. We're going to take it out to what's called the working still or we're going to take it out to a first to second box. That means the sheriff's department - we have given the sheriff's department permission to page out all the according fire departments in this we work mutual aid all the time with different departments. Our brush buggy goes out quite often a rescue vehicle or tankers and engines go out to different fires we were in it's becoming more and more commonplace. Because we have too many people. I mean, there are a lot of people I should say that are that are, it's hard for them to actually volunteer. And we're looking for volunteers. I'll promote that a little bit too, because we will be looking for volunteers to join the fire departments, because they're getting far and few between all of us are aging. And we're looking for people to take over.

Let's just use an example of the MABAS system. Just one more minute. There was a pretty large fire at a farm last, I think it was March or April, up by Mondovi last year. I know you guys responded with at least a tender truck. How many? You know how many departments were on that fire?

Are you talking about the hog barn?

Yeah.

If I remember right, I thought there were 20 department different departments that got called into that with with it was I wouldn't I would not be hesitating that that it was 20 departments. I don't remember how far away the water trucks came but it was a long ways away. Some of those guys traveled 45 minutes an hour to get to that fire. But that that was a large barn fire. Large barn fire was at 600 feet long. Something like that, I think is 600-700 hundred feet long, something like that. And 150-200 feet wide, and it was filled with pigs. And that was a large fire and that mutual aid call went out. And that's different. So that would have been a regional call. So then they call up other directors, and they go to different districts. We're in a district. So Buffalo County is in a district they call out to all these different district leaders, and they bring in and they say we need mutual aid from all of these, but all these departments come together so it's very easy to use for us right now with the MABAS system in here. All we need to do is just tell the sheriff's department how far we want to take our boxes which goes to box five. So.

So how bout some demonstrations Tom? Should we move on?

We can do that, um, will actually just tell you the truth. Just run that. Oh, that barn fire I was talking about I actually, or something on this bonfire that I really wanted to pay attention to. And if you guys can look at that, or when you're looking at that, I'm going to ask you to look at that picture and I want you to tell me what hazards are in that picture. I put that one up there for a reason.

Yep, somebody's got propane tank,

correct.

Anybody see another one? Oh a skid steer.

Yep. So we're gonna get we're gonna get a couple things involved in it. I can tell you there's a power line in that picture there to somewhere but but that goes to that barn. Yep, it is. But that propane tank is one of the things that I wanted to talk to you about is because there are a lot of buildings around farms. And that that are and do have propane tanks next to them. That propane tank is a danger. I'm going to say a danger in one way because we don't they are unpredictable. We would have to try and cool that tank down. LP tank is built in the way it is in a cylindrical form for a reason one of them is so that the ends blow out not the sides. So they're built with that cylindrical, cylindrical cone on the end for well for basically two reasons it's for the LP storage, but it is for that heat if they blow up, they blows the ends out on those so we make sure that we are not looking at the end of a propane tank when they are heated or extremely heated. There is a pop off valve, there is a pop off valve on those tanks. So if they get heated too much, and or in the sun if they overfill them if they're they're only supposed to be filled to 85% and if they fill them to 90%, even the sun heating them up with the sun Tri community just had one the other day that was that was leaking off. And they had to cool it down with a garden hose. That's basically all they did is cool it down and, and it quit leaking because they're under pressure. So if it does go off, there's a pop off valve, you're better off with us not trying to cool that tank too much trying to keep that tank cool to the point that it doesn't blevy up and explode is one thing. But it's better off also to let that thing burn off. Because LP is dangerous when it's not burnt, because it goes to low lying areas and all that kind of stuff. And it can raise a lot of havoc around that fire. Obviously it could spread into a valley or a ditch or something that we could be standing in and not even know it. Because if we're going to do that we're going to we're going to be used packs and all that kind of stuff. We won't be able to smell that. So that's one of the things that I just wanted to point out the skid loader obviously again, tires, gasoline, lots of oil. That would be another another one. I'm sure what he was trying to do is take some stuff out of it or stop there and that's where this he was in the skid loader when it all started. So, but the LP tank is a hazard. Alright, so what we're going to do is we're going to put together a demonstration of fire extinguishers, the do's and don'ts of fire extinguishers. I we have a couple of our fire department members Joey Wick and Ben Shams, and we are going to show you what we're going to be doing a couple of them are going to be - what we're gonna do is we're going to light up you want to light it up, go ahead. We're going to light up the the and show you what the do's and don'ts of a fire extinguisher are. And then also we're going to do is show you what clothes especially with today's world, what clothes are good and not good to wear. So this fire, we're going to show you the do's and don'ts to walk up to this fire. And try a little one and see if that one's gonna go. We had use this and did this already once. So I'm not sure how much is left in the little one, but it'll be a good thing. So, Mr. Shawn's is gonna walk up to this and he's going to show you how not to do this. We have a synonym that we use, and it's called PASS. P A S S. Pass is pull, aim, squeeze, sweep. That is what you need to do with this. So if you don't follow this, this is what's going to happen. If he's going to walk up to it, and he's going to hit it with one, one shot, it's done. So we'll use a different one. He's going to walk up with one shot and shoot it and it also is another very, very important thing. So if he shoots it into the top of the fire, you get all nervous, and you shoot it into the top of the fire. Uh, that one's good and you shoot it into the top of the fire bin, it will not put it out, especially with one shot. It doesn't do much - well he put it out. But a normal fire if there's a lot of fuel or there's a lot - this is a pretty simple one to put out - that's why we're doing. So you're gonna re-light it again Joey. You can put it out but you understand what we're talking about. So the easiest way to do this is to sweep. So... and, and of course like I said, if it's squeeze and sweep, we also want to make sure that we're walking we stay a certain distance away from the fire you

can stay five to six feet away. Actually that fire extinguisher there is probably good from about 15 feet away. But when we do this, you're going to want to pull aim sweep and walk towards it as we're going walk into the fire to put it out. So if you want to do that, Ben. And he put it out. And he covered, look at the area that he covered with just a little bit of that because the anything around it this is a pretty contained fire, um, but he put it around you can put it around it and it puts it out that is as easy as it gets. I'm glad we're gonna do one more thing as long as we got a water cannon here too. I think what we're going to do is we're going to try the water cannon but you're going to stand back by where Joey is that this is a gas This is a gas and oil fire. And we're going to show you you know, this is a specific fire and that is go ahead. See, were - see what we're seeing? So this is a very specific fire. We can't even take the heat out of it if he goes closer to it, and he drowns it and takes the heat away from it but we don't want to do that right now because we won't be able to get it lit again. It will actually spread it you can walk in there and actually the hot oil is in there boiling oils if you go in there and spread it All it does is spray it up and you spread the fire. So you can see that water has a very specific use to cool and take the heat out of it. What we're going to show you next is some of the things that we have on the ground. Here are some simple things work gloves are a big thing. everybody wears work gloves and, and all that kind of stuff. And there are different gloves that that are out there that we can use. Carl gave us a pair of his gloves. You can see they're not wore out. You can we'll just put one on there on the fork. Put it on the fork. And you can see that now let's just say Carl's been working around a bunch of greasy things too. We could have actually got one in in grease. And there you go. Yeah, and once it gets warm, that diesel fuel lits off and it has has gases emitted from it. But this one, this one here will start on fire and it will burn. It will protect you for a little bit, but not from any sort of heat, any sort of heat. So when you're working around gas, fuel or oils or anything like that, and you're wearing those, all you're doing is putting yourself and your hands in danger. A lot of these gloves are not rated that way, on those yellow gloves and grab one of those, these are the ones that everybody wears their work gloves and all that. Most of the time they're made out of plastic or nylon or something to that effect to. I honestly, when I go by them, I actually look at them because these shrink. These shrink pretty fast. A lot of them aren't. You can actually see how they drip. See the plastic is melting. If you get them towards that and they're burning right now. But even if you get them hot enough, they actually melt and they melt your hands so you really have to watch. They're great gloves, but if you're working around a fire, they're not built for fire. The gloves that Ben has on on his on his hands right there those are actually those are fire resistant gloves, fire retardant gloves. So those actually are made for us to to handle different things. They do not hold up the heat there's not a lot that holds out the heat. And they I mean they do a good job of it but eventually it comes through. What happens is those guys are sweating profusely under those jackets right now what happens to us if we go into a fire right now is what happens is they actually get called lobster. So what it can do is it doesn't burn them. But what it does is it turns the steam their sweat into steam, or it can turn their sweat into steam and they they get basically get burnt or lobsterized. So whatever clothes you guys are wearing shorts, nylon shorts, that kind of stuff. Those same thing, these are all these are all things that are going to burn and they will burn in a hotter fire, this fire is actually getting down to the point now or we should watch it but you're gonna see that again, you see that they melt, you see that they, they will actually adhere to your skin. And if you've ever been around anything that adheres to your skin to get that pulled off, you do not want to go through that. And that doesn't take much. There are other things there. Cotton t shirts, stuff like that. If I was going to tell you to to wear anything, I would tell you to wear the cotton t shirts because it's something that that will not melt, they'll burn but they don't burn to the fact that they're going to melt that that hot lava or that molten

plastic all over you and burn you that way. They'll burn but you can shut them off and they all in all of it comes off. They're hard. It's hard to get lit. I know that but you can see that's a cotton t shirt. I mean it will burn but it doesn't melt. So think about the things that you're wearing. If you're around a fire. I know. That's it. That's a hard thing to say. But, but everything burns a lot differently.

Tom since these guys are gonna be around tractors and mainly what we're talking about Dave made a good point as far as fuel diesel fuel, trying to get just straight diesel fuel lit with a match really difficult, isn't it?

Correct.

And then you noticed with Joey when he looked at the second time once it's hot it's lights almost like gasoline then.

Correct.

Compare that to gasoline then where does gasoline actually burn or what burns in gasoline?

It's all the vapors that burn on gasoline itself. It's anything that is coming off that gasoline, diesel fuel, it's like it's almost like anything that is heated up and it boils. Your mom's your mom's oil on the stove, you're getting the gasoline in the car. As those as those get heated up, they vaporize and vaporize and and that the gases off of things are what's burning, and that's with anything. That's off of wood. It isn't actually the wood that's burning. It's the gases that are coming off that as it's heated up. So the the diesel fuel, the diesel fuel is another thing that we actually say once it gets heated up, it actually can be explosive, but it has to be almost boiling.

So, guys out there any questions from anybody? We're gonna be wrapping up here in just a second. Okay, Tom, Joey, Ben, Dave, any last comments?

Again, don't make yourself a victim. Make sure that you stay out once you stay out, once you've lost all aspects of fighting that fire or you can see that it's out of control. Don't try and go in and save anything. Get out. Stay out. You're not replaceable.

Call for help immediately.

Call for help immediately.

Because you can always cancel these guys.

Yeah.

If things get under control, but I don't know how far you guys go. How far do you go out on a call? How long does it take you to get there?

Our longest our longest is up highway 37. And it'll literally take us about 15 minutes to get there.

15 minutes, that's once you leave the fire station.

Correct.

Plus, you guys have lives. And so it takes you a little while to get to the fire station.

And it's already too long by the time, by most of the time we get there.

Hey, everybody, let's virtually give these guys a big thank you. If you see where the where the wow, let's not even go into that. But thanks, guys for being on. I am going to record this. Everybody's saying thanks. You guys did great. And we'll make that recording available in a couple days. We're going to meet again Thursday, same time 11 o'clock. I'll send the invitation out either tonight or tomorrow. But just plan on Thursday. It'll be kind of a - thursday we're gonna - do maybe a little bit of review of what we'll be talking about what might be added test some some hints on what you ought to study. We're not meeting tomorrow, not till Thursday and we will not be meeting Friday. So you get tomorrow off as far as virtual meeting, but we'll see you on Thursday.

Thanks, everybody. Thanks, guys. Thank you guys. Have a good day.