

Ladies, gentleman and distinguished guests my name is SSG Charles E. Weaver Jr. Let me thank you for this honor of being allowed to speak before you. I would also like to personally thank LTC Andre' Kearns and Mr. Mark Whitby for allowing me to do this. I hope that they do not live to regret it, as this is my first major public speaking event. Thank you gentlemen. I am very honored. Please at anytime during my presentation if I have confused you in any way do not hesitate to stop me and asked me to clarify or explain myself. Now without further ado let me tell you a little about myself. I have been an indirect fire infantryman for 15 yrs now. I have served as an ammo man, assistant gunner, gunner, check computer, FDC Chief, forward observer, and as of late I served as the 4<sup>th</sup> Battalion, 64<sup>th</sup> Armor Regiment Mortar Platoon Sergeant in the Third Infantry Division during Operation Desert Spring and Operation Iraqi Freedom. As a mortar platoon sergeant your job is to ensure that your soldiers are trained to be quick, responsive, and accurate with their mortar system in order to support the needs of your battalion commander and his company commanders in the field. I have assisted in developing training and conducting live fire missions while serving in several of these positions. Operation Iraqi Freedom was my first combat operation with mortars and I have learned a lot from my experiences there. While serving as an indirect fire infantryman I have used the 60mm, 81mm, 107mm also known as the 4.2-inch mortar and the 120mm mortar. The 60, 81, and 120 mm are as simple as they come except for the 120mm not being easily dismounted when in the track configuration. I think all of these mortars are very accurate and durable. I would like to discuss with you today five topics that I consider crucial to mortars. They are (Slide 2):

### **Desert Spring Lessons Operation Learned**

Some of the things I learned was that the use of the M303 Sub-Caliber insert with the 120mm mortar system in training leave a lot to be desired when practicing for war. The insert cuts the range of your mortar from 7200 meter to approximately 4900 meters depending on what type of 81mm round you are using. This prevents commanders from having a true idea of how to employ their mortars. The US Army's policy has always been "train as you fight". During our battalion and brigade live fires we were consistently asked why we were not able to fire. We continually had to explain that our range was almost cut in half due to the use of the sub- caliber inserts. I would also recommend that in the future mortar rounds be allowed to fire over friendly troops heads in the same manner that artillery is. My reason for this is that our soldiers and commanders out front need to have confidence in these mortars. If there were restrictions placed on the use of mortars in training then when and where are they going to be provided with the proper knowledge and confidence in what the mortars are capable of? This knowledge and confidence should be available to the soldiers and the commanders before they have to roll into battle.

### **Operation Iraqi Freedom Lessons Learned**

One thing that I would recommend be changed on the 120mm is the barrel. The barrel on the track is great but in the event that it is required to be used in the dismounted role there should be an alternate lighter barrel that is just as durable as the track mounted one. The reason I think this is because during OIF if I would have had a lighter barrel and base plate I could have taken my mortars and placed them on certain buildings and would have been able to provide better security to my task force. In my opinion it takes to long to

ground mount the 120 from the mortar carrier configuration. It is awkward, heavy and time consuming. There are a couple of items that are used with these mortars that I think really need to be improved. The aiming poles tend to be easily damaged as well as the aiming pole lights that are easily damaged and unfortunately lost. The sites on these mortars also tend to be rather touchy and easily gummed up. When operating in a high dust or sand area it is pertinent to keep your mortar system cleaned, we all know this, but when conducting combat operations this is not always possible. When you receive an immediate suppression mission the soldiers that are calling it do not have time to wait for you to clean your bipod or another piece of equipment. During OIF there were several times where the sights were so full of sand that we had to take precious seconds to clean them. All of these sites had boxes that they were stored in yet the sand was still getting into the sights. (power point 5) I am sure that everyone who watched the news reports from the imbedded reporters saw the Mars like conditions that we were in. That was probably one of the worse possible environments that these sights and bipods could have been exposed to. I think that there should be a way to ensure that the traversing bar and the elevation bar on the bipod are protected and not exposed to these elements. An idea I had for this was to encase the traversing and elevation bars in a hollow airtight tube. The sight on the other hand is a mystery to me. I cannot think of a way to protect it from this kind of environment. Another thing that affected some of our missions was the loss of aiming poles and aiming pole lights. On numerous occasions we lost aiming poles and aiming lights to our M1's and Bradley's. They would not see them and run them over. My former battalion commander's tank was one of these that accidentally did this. We searched for an hour after this one incident and never found them. Luckily we brought

our home station poles and lights and were able to replace it. A suggestion that I had for this was to somehow make a pole that could be identified through our night vision goggles or the sights on our tanks and Bradley's. I would also recommend that a light be placed permanently in a rail system on the pole. This would prevent continuous breaking of the clamps that lock them on to the poles and also possibly aid in the recovery of the poles because the light would be there and not bouncing around somewhere else.

### **Mortars in the MOUT Environment**

We used our mortars in both the open desert and in the MOUT environment. While in the open desert it was used to suppress enemy movement and to screen our tanks from enemy mortars and dismounts. While in the MOUT fight mortars proved to be invaluable. We were called upon several times to suppress and kill enemy dismounts in tree lines, trenches and in the open. We were also called upon to destroy some vehicles. This was done extremely well. In Baghdad several busloads of Fedayin soldiers were being bussed in to defend Baghdad against us. By the time we had finished firing our mortars the buses had been destroyed and so were the Fedayin soldiers. On all of these occasions the battles damage assessment for our missions were usually catastrophic. There were times where the amount of damage and carnage could not be discerned due to the destruction that the 120mm created. After several of our missions fired in the MOUT environment both tank company commanders, the infantry company commander, and the scout platoon sergeant thanked the mortar platoon for their actions. There are several issues that need to be addressed about using mortars in the MOUT environment. Number one is that the ability to maneuver a gun track into tight areas this can be very time consuming. The ability to get in and get rounds down range is a must. Number two

would be that in the mechanized infantry mortars are not evaluated or train to fight in the MOUT environment. This is something that needs to be addressed to ensure that our warriors have the best training possible for whatever situation they may find themselves in. Number three on one certain instance I had to provide immediate suppression for one of our tank companies that was surrounded by enemy dismounts. I had one gun to fire due to my other two guns having to support a raid mission that Alpha Company from 3<sup>rd</sup> Bn., 7<sup>th</sup> Infantry Regiment was on. On this occasion we had to pour water on this tube due to the amount of fire that we were providing. We were shooting 1 round every 5-6 seconds or so for over 5 minutes. The ability to provide a higher rate of fire is a must. Once commanders and soldiers see what a mortar does and what it provides for them it is then forever being called upon.

### **Recommendations for the Future Use of Mortars**

To me there are three things that need to be improved upon for mortars, the range of mortars, the types of rounds, and the vehicles to move them. The 60mm mortar is the perfect mortar to use in the light-fighting mode. In my opinion the greatest shortcoming that I find with mortars is that the max range is not enough. I believe that two thousand meters should at least improve the range of the 60mm in order to provide more stands off distance between our friendly troops and the enemies. The 81mm mortar to me is one of the best mortars I have ever used. It can be man-packed, towed, or put into a track. What more could you ask for. Well how about the infantrymen's dream. The 120mm mortar, it is bigger, has a greater killing radius, and a longer range. It has a decent range but I still believe that that the range needs to be improved on the 81mm and the 120mm by no less than two to three thousand meters. I also believe that if you make a lighter barrel

than you will definitely have provided the best support you can to the soldier on the ground. On several occasions my mortar platoon was call upon to shoot missions two to three thousand meters beyond our max range. Most of these missions were in support of dismounts involved in a MOUT fight. The reason we were being called was because of the amount of time that it took for the artillery side of the house to fire their rounds. Not to take anything from my artillery brethren but it easier to get permission to fire mortars, my mortars proved time and time again that they were quicker than the artillery when responding to a “call for fire”. The reason that mortars are at the battalion level is to ensure that the battalion commander has his own hip-pocket artillery. The problem is that they tend to want to use the artillery first. I believe this is because of the greater range that the 155’s have. I also know that it is because of the variety of rounds that the 155’s can shoot. This brings me to my next point. The variety of rounds that mortars can fire should be improved upon. High Explosive, White Phosphorous, and Illumination are definitely a must. Something else that I consider a must for mortars are laser guided rounds, and Duel Purpose Cargo Improved Munitions Rounds from now on to be called the DPCIM’s. During OIF we carried a combat load of HE and WP mix. These rounds were used to destroy and suppress enemy personnel. There were so many times that I wished I would have had the IR illumination or just plain old illume rounds in our mount fights. Psychologically, the IR illume rounds would have demoralized the enemy soldiers. We would have been able to see them and they would have been blind to us. When we made our Thunder Run into Baghdad we set up at a palace. That same evening we had enemy dismounts try to come over the palace walls. Inside these walls were the 2<sup>nd</sup> Brigade TOC and the 4/64 AR TOC. Our infantry engaged these dismounts but could

not see to well enough due to the zero illume at this time. If I had IR illume we would have eliminated more than just three enemy soldiers. To coin an old phrase it would have been like shooting fish in a barrel. The reason I believe it is important to have a laser guided round is due to how important the collateral damage issue is. In a MOUT environment you could pinpoint any sort of structure, vehicle, or obstacle without causing greater damage to the surrounding environment. The DPCIM round is a perfect round for attacking enemy dismounts in an open area; one DPCIM round properly placed could take out numerous dismounts and saves the amount of HE rounds you shoot; also preventing enemy counter battery from locking on to you because there would be a lesser need to adjust with additional rounds. If you remember one of the vignette from above which talked about one of my guns having to pour water on their tube due to the amount of rounds that they were firing at enemy dismounts. The DPCIM could have possibly prevented this.

I would like to discuss the platforms that mortars are carried on. The 1064 A3 mortar carrier is, in my opinion, is out of date. It will not keep up with the Abrams Tank or the Bradley Fighting Vehicle. It offers little protection to the soldiers that man it. There is not enough room for four men and the amount of ammunition that is needed when fighting a war. The 1064 also have a critical flaw with the amount of pressure that the suspension can take. It is recommended not to fire a charge out of the track because it will damage torsion bars. Once again this cripples the range of the 120mm mortar. It is fine for training but I believe in the concept of “train as you fight”. The vehicle needs to undergo serious modifications if it is going to continue to stay in service in the modern army. The M577 A3 also needs to be looked at. It has some of the same flaws as the

1064. The lack of armor and speed are the most notable flaws. The US Army and her allies should always be on the offensive. In order to do this it is a must to have the best equipment possible.

Some other concerns that I have are that number one there is a great desire in the FA community and I believe in the Army today for mortars to become digital, to do this, in my opinion slows down the mortars response time. You would have to allow the GPS systems catch up, the person sending the mission would have to decide how many rounds, what type of round and what type of sheaf he is going to fire. As mortar men working in the Fire Direction Center this information is second nature to us. This should not be a priority with mortars. The three main priorities should be the vehicle platform, the range, and the adding of different types of munitions to the mortars arsenal.

Number two, the ability to direct fire with the 120 mm mortar. I think that this is a great idea, but it is pertinent that it is used only defensively. There were so many times, especially in and around Objective Magnus that the lead tanks had by-passed enemy tanks, tracks, technicals, and or caches. I had to call back and notify the vehicles behind me that these things were ahead and they would have to destroy them. If I would have had direct fire capabilities I could have made those problems go away. The 120mm mortars are one of the best indirect fire weapons it has ever been my pleasure to use. If we send it out in the direct fire role instead of the indirect fire role than we are taking the risk of leaving our troops out front without responsive indirect fire support. The mortar is a very accurate and deadly asset to a battalion commander and should be used the way it was designed to. Number three the M2 Aiming circle, I believe that the ability to set up a declination station for the M2 aiming circles needs to be able to be accomplished by the



mortar platoon. We waste a lot of time waiting for a PADS team that may or may not show up to establish a declination station. I also think that there has to be a better way for mortars to receive a METT message. The ability of fire support to get this to us is not very good. There is too much confusion between the artillery METT message and the mortar METT message. If these things were accomplished this would ensure that the most accurate and timely fires would be provided to the units we support. I would like to state that if mortars are going to be used in future engagements around the world then it is paramount that the old concept of six guns and two FDC's be re-instituted. If you lose a vehicle with a four-gun platoon and you are doing split section operations than you have to place two guns on one set of data and one gun on another set of data as previously mentioned. This is not providing the best type of fire support to the soldiers down range. With six guns you are able to bound, if you lose one gun you still have two to continue on. With a four gun section if you lose one you just lost your ability to bound forward and to keep up with the battle. Last thing the mortar ballistic computer, it needs to be downsized, it also needs to be updated with the latest and greatest technology and should be able to be hooked up to a secure internet site in order to receive any changes or updates concerning mortar rounds.

### **SASO (Support and Stability Operations) Recommendations**

Well, once again, talking about the things that went on in Iraqi Freedom, when the war ended it was decided that indirect fires were not going to be used because of the need not to cause any non-hostile deaths. On several occasions, enemy mortars attacked my unit and others. We, the mortar platoons within the division, were not allowed to fire back because of the damage that we could cause. If we would have had non-lethal munitions

then we would have most likely been able to fire them at the individuals attacking and caused the collateral damage to be very low or non-existent. The counter-battery radar was up the entire time, it would catch the rounds coming up and a Quick Reaction Force would respond. Of course the enemy had already left that area. If we had the ability to stun them, knock them out or immobilize them some other way then we have not only shown mercy but may have just acquired ourselves some human intelligence. We would also have maintained our indirect fire superiority over the force still remaining.

Ladies and gentleman you will be glad to hear this about concludes my presentation. If you would like to contact me about anything please do not hesitate. My work number is 912-767-7375, DSN 870-7375; my address is 7416 C Taejon St., Fort Stewart, GA 31315, and my email in all lower case [charles.weaver@us.army.mil](mailto:charles.weaver@us.army.mil). Thank you for your time, attention, and patience. Rock of the Marne”, “Send Me”, and “Tuskers”. Pending any questions this will conclude my remarks.