

Russ Marion's Statement Concerning the Incident on January 11, 2018

This is Russ Marion on the incident that happened on Jan 11, 2018 in Puerto Rico at location 18.24153 -65.81926.

I'll begin when we left the yard at the LZ. I was the first one out there I rode the longline and the ladder out with the 3-way arbor attachment to location 1 which was the first location. The accident happened on the second location. When we got to location 1 I landed the ladder on the top arm of the 2-arm side of the pole. After I freed myself the pilot went back to LZ and got Cameron with the longline. He longlined him into the ladder location. While he was gone I transferred from the front side of the ladder to the backside of the ladder. After that was completed the pilot flew back to the LZ and swapped out from the longline and grabbed his grapple. He flew back, picked up the phase, changed the insulator pinned it to the arm. So, we were complete with that task. To transfer the ladder from the top arm to the bottom arm the system we were doing was that I would climb up the ladder, shimmy into the pole on the top arm, climb down the pole to the second location. I would wait at the second location and then the pilot would fly Cameron and the ladder to the second location we had to work. When he did that first ladder transfer, he did not go back and get the A frame he used the grapple hook we use to transfer the conductor itself, but he was going straight down in that instance. He wasn't going anywhere but straight down. There was 12' or so in between the arms. Once he had that secured I shimmied out on the arm and down the ladder to my working position. He used the grapple hook to pull the conductor up to us. We changed the insulator and then after we were complete with that task, he flew back to the LZ to get the A frame and while he was gone. While he was gone I mentioned to Cameron that I was surprised that we could use the grapple to move the ladder. We did talk about it at that instance. When he came back with the 3-way, I climbed up that ladder shimmied onto the arm and up the pole to the arm that's on the single arm side. The pilot then picked up Cameron with the 3-way system and moved him and the ladder around the conductors over the static and around to the single side and landed him on the arm. Once it was secured and Cameron freed himself then I climbed out the arm and climbed down the ladder and we completed the task on that side. While I was climbing out the arm and down the ladder that's when the pilot flew back and swapped out to the grapple hook to pull the conductor up to us. Once we were completed with that location, the pilot flew back, got the 3-way arbor again, flew back to us and he took me first to the second location and dropped me off at the top arm location at the pole where I tied in and freed myself. He flew back to location 1 and got Cameron with the ladder and flew him into location 2 at the top arm location with the 3-way arbor. At that time once he freed himself the pilot flew back to the LZ and swapped out for his grapple hook. While that was taking place, I shimmied out the arm onto the ladder. Then we move the conductor up. Pinned the insulator because those insulators were already attached to the phase. Apparently, someone was there before that time and pinned the insulators to the conductors in this location so that we would just have to pin it to the arm. So, we completed the work on the top arm location. The pilot then flew back to the LZ and swapped out for the 3-way arbor and flew out to us. In the mean time while he was doing that, I shimmied out the arm to the pole, climbed down the pole to the bottom arm location because we were doing things in the same order we did things in the previous pole location. When he came back he had the 3-way arbor that he transferred Cam and the ladder. He dropped him straight down and put it on the arm and then he flew back to swap out for the grapple once again. While he was gone, that's when we noticed that the insulators that were on the conductor were the wrong insulators. They were 115kv insulators instead of 230kv insulators. So, while he was gone, Cam was on the radio to Dominic, our

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foreman and was confirming the length on the insulators to make sure the ones that were on there were the correct ones. When we determined that they weren't they radioed the pilot and he got 3 230kv insulators from the LZ and he brought them to us on his grapple hook. At that time, we were already on the bottom arm on the 2-side location of the pole. When he brought the insulators to us, we tied those insulators on the ladder minus the one we needed to use on that arm. Once we had the insulators, the pilot lifted the conductor for us. We dropped out the existing 115kv insulator to the ground and used the new one that he brought. So, we completed the task on that bottom arm. At that time, he went out to switch to the 3-way arbor once again and while he was doing that, I climbed back to the center of the pole and made my way up to the top arm location and waited until he returned. He had the 3-way arbor at that time and then he picked up Cameron and the ladder and raised it directly straight up onto the top arm so we could replace the 115kv insulator with the new ones that he brought out. Once he landed him on the arm with the ladder, he flew back to the LZ swapped out for the grapple hook, came out and lifted the conductor for us. We pinned it and completed the task on that arm. At that point the 2 phases on the two-sided side of the pole were complete. At that time, I shimmied up the arm and climbed down to the location on the single side. He flew back to swap out the grapple hook with the 3-way arbor. He flew back in and picked up Cameron and the ladder and flew out over the conductors and around and landed him on the end of the arm on the single-phase side. Up until this point, everything worked like clockwork. It was smooth. There wasn't a hitch in it whatsoever, other than the very first ladder move he did with the grapple hook instead of the 3-way arbor. That's the only point up until that time that he had not used the 3-way arbor was the very first ladder move. So at this time Cameron is out at the end of the arm on the ladder. He flew back to the LZ to swap out to the grapple and the grapple that he had was at 100' rope length. So, in the mean time I shimmied out to the end of the arm, climbed down the ladder, into the position I had been working on in every location. Up until that point every location I was working the bottom side on the backside of the ladder and Cameron was always on the top on the front side of the ladder on every one of the locations that we worked. This final phase is what posed the beginning of our problems because the phase, the next location down was double dead-ended. It was double dead-ended at the pole, not on the arms so the natural direction of that phase was to be in to the pole and it was in to the pole tight. So at this point we're both on the ladder. He had dropped down in between the static and the pole initially to try and move that phase. He had found that there wasn't enough room there for him to bring it out, so he dropped down on the outside of the static with the grapple hook and he had to swing the rope to where it would come out on top of the conductor which took some doing. He finally got the grapple onto the phase and he tried flying, which would be to the south, to pull the phase out and around and underneath the ladder that we were on but he found that he couldn't do it. I, at that point climbed down to the very bottom of the ladder and was trying to assist in any way that I could to get the phase down below our ladder which wasn't working because there was a parallel circuit that was probably 40 feet or so from our circuit so he had no lateral movement to be able to pull that out and around our ladder. At that time, he had told Cameron on the radio that he was going to go swap his line out to the 50 foot line with the grapple. So when he flew back to the LZ I climbed up the ladder and shimmied back to the pole on top of the arm and tried to pull the ladder closer to the pole. We moved it in as close as we could to the pole so that it was less of a pull for him to get it out around the ladder. When he came back he attempted to grab the conductor and pull it out but it was the same reaction. At that point, him and Cameron had determined that, I think he told Cameron that he needed to move the ladder away from and off of that arm. At that time, he didn't fly back to get the 3-way arbor, at that point he lifted him with the grapple hook on the

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50' line straight up to the static above him on the same side as the single arm side. He hooked the ladder up with the safety's and everything and then the pilot flew away a little bit and apparently didn't feel comfortable with it on the same side as where he had to move the conductor, so he then instructed Cameron that he needed to move the ladder from that side of the pole to the opposite side of the pole to be able to grab the conductor and move it out and around the arm and land it on the top of the arm with no obstructions. When he had flown a little bit away, that's what Cameron told me because I was at the pole location on the single side arm and I couldn't hear any of their conversations because the noise from the helicopter and also my distance away from him at that point when he was up on the static arm. To do that, when he moved him straight up to the static arm he only had to go straight up because we had moved the ladder from the end of the single arm closer to the pole so he could drop his line in between the static and just pull him straight up. When he moved him to the other arm he took him up and all the way around and landed him. It looked to me like he was originally going to land him on the top arm (the conductor arm) at that point but he didn't. He raised him up and he put him on the static arm on that side which is where the problem was created. On the first ladder move on location 1 when he dropped him straight down when he used the hook to move the ladder at that point, he dropped him straight down but the ladder is longer than the distance between the two arms so the ladder was actually below the bottom arm. On location 2 where this took place the length of the ladder actually falls in between the top conductor arm and the bottom conductor arm. So I was tied in at the center of the pole at the location of the single arm side right next to the conductor because that's where its natural position wanted to be so when he laid it on top of the arm it came into the pole. At this point the ladder was at the top static arm on the two conductor side. What I'm gathering happened, I can't speculate on his decision to use the grapple hook instead of going back to get the A frame when he moved him because other than that first ladder move, he had used that 3 way arbor every single time we made a ladder move except for those 2 moves right there. When he moved him from the single arm to the static arm and from the static arm out and around onto that side. Once he put the conductor up on top of the arm and he got his hook off of the conductor, he flew up top, dropped the hook down. Cameron hooked up the ladder on top of the grapple hook and he started to pick him up. I don't know if Cameron didn't realize that the second safety (on the ladder) wasn't freed up, or if there was misunderstanding with head directions and he started to lift him up before he freed up the second safety. He had started to lift him up but then he realized the safety wasn't unlatched so he then went to unlatch that safety and he had a real hard time getting that safety off of there. It took what seemed like probably a full minute for him to free up that safety. When he freed up that safety, at that point the one hook was still on top of the static arm when he lifted him up to free him off of that static arm, the intention was to fly him up and around the statics and land him on the single side arm and I would climb out and do the same thing that we had done on every one of the other conductors. When he picked him up off of the static arm, he picked him up and pulled him backwards and downward at an angle. Once he picked him off the static arm the hook was up freed off of there he was coming down and back. When that happened, when you're standing on that ladder it won't stay straight up and down it'll go back at a 45 degree angle. When he pulled him up off the static arm, he started backward and at a downward angle it caused that gap between the bottom of the ladder and the distance between the bottom arm closed. As soon as I saw that the ladder was coming down, that he was coming down, I looked directly down and I saw the bottom of the ladder rest on top of the bottom conductor arm. I immediately looked up and when I did, the strap on the ladder had already come off. When I saw him it was off by maybe about 2 feet. When that happened he fell to the ground with the ladder. He was facing away from the

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structure at that time falling directly straight towards his back. During the fall his natural tendency was to turn around and face the ground as he's falling. So as he was falling, him and the ladder were twisting so when he hit the ground he was facing, I wouldn't say a completely sideways angle but it was pretty close to being sideways. He fell on top of the cut up brush and cut up tree logs and everything like. That apparently is what dissipated the energy of his fall which enable him not to get the injuries that were really likely. At that time, as soon as I saw that the strap had come off of the grapple hook, I started screaming. I looked directly up at the helicopter and was screaming at the helicopter. At that time the helicopter immediately headed in to the LZ. When he was gone, I was screaming so much that the workers that were cutting the lawn at the house in that vicinity heard me screaming and started running toward the pole. I was screaming for them to call 911. At that time is when I unbuckled from my location and came down the pole as fast as I could. As soon as I got to the ground, those workers and those people were just in front of me. At that time is when we climbed over all of brush and everything and I think there was one or two that had already made it out to him. That's when I saw Cameron's condition and him laying in the brush pile. That's when the first aid attempts were made at that point. So that last phase and when that ladder was still hooked on that top static arm, was the trouble areas that we had. Up until that last phase, everything went as smooth as could be ever expected to do that type of job. That last phase is where our trouble began. That's what happened from the beginning of the day to the end.