Radio Durability testing notes

9-24-14

**Tests Conducted:**

1. Use radio while under constant water spray
2. Drop radio from 4 feet on each side, top and bottom.
3. Drop radio on bottom corner from 4 feet.
4. Drop radio on too (antenna) from 4 feet.
5. Test view finder for scratch resistance
6. Allow user to roll several times on the ground with radio attached to the waist
7. From a slowly moving vehicle radio will be dropped from 4 feet to a concrete or asphalt surface, once on bottom of radio and once on back of radio.
8. Place in back of RTV bed and drive over rough terrain for 10 minutes.
9. Immerse in bucket of water for 10 minutes after above testing.

**Result Notes:**

**APX 6000**

* Radio was able to transmit while standing under spraying water. Audio was ok.
* All drop tests passed with no problems, no power resets. Case had minor scratches and dings.
* No scratches were able to be made on the screen either with a knife or by grinding the radio into rock and sand
* Passed the drop test multiple times from a moving vehicle
* Passed a water submersion test in a bucket of water for 10 minutes, both at the beginning and at the end of the testing.

**APX 6000XE**

* Radio was able to transmit while standing under spraying water. Audio was ok.
* All drop tests passed with no problems, no power resets. Case had minor scratches and dings.
* No scratches were able to be made on the screen either with a knife or by grinding the radio into rock and sand
* Passed the drop test multiple times from a moving vehicle
* Passed a water submersion test in a bucket of water for 10 minutes, both at the beginning and at the end of the testing

**Harris XG-75**

* The radio was able to transmit while standing under spraying water however the audio was poor.
* When dropped on its back from 4ft the radio dislodged. All subsequent drop test the battery dislodged.
* The screen received minor scratches when ground into the sand and rocks.
* Passed a water submersion test in a bucket of water for 10 minutes, both at the beginning and at the end of the testing. Note it passed the end test with a damaged battery.

**EF Johnson Viking 600**

* The radio was able to transmit while standing under spraying water however the audio was poor.
* The radio did reset on three of the drop test.
* The screen suffered many scratches when ground into the rock and sand.
* Passed a water submersion test in a bucket of water for 10 minutes, both at the beginning and at the end of the testing

**Relm P800**

* The radio did not pass the first water submersion test. No radio transmissions were able to be tested.
* The case did suffer only minor scratches during the drop testing.
* The radio suffered catastrophic screen damage when the radio was placed on the user’s hip in a leather carry pouch and then the user rolled two times on the ground