fatalityCMR Q and A

Q1

```
------------------------------------------------------------------------
Probability of not finding a carcass given it is in surveyed area (P0):
------------------------------------------------------------------------
      Uniform entry rate Pulsed entry rate SE(unif) SE(pulse)
Type1             0.3178            0.3174   0.0991    0.0991
Type2             0.3178            0.3174   0.0991    0.0991
------------------------------------------------------------------------
```

OK, this one I think I understand, with P0 having same meaning as in our paper, right?

==Yes.

Q2

```
Maximum number of fatalities (with risk threshold 0.05 )
------------------------------------------------------------------------
      Uniform entry rate Pulsed entry rate SE(unif) SE(pulse)
Type1             2.6135            2.6103   0.8234    0.8219
Type2             2.6135            2.6103   0.8234    0.8219
------------------------------------------------------------------------
```

labeling causes me to interpret this as follows:
Pr(number of fatalities > 2.6135) <0.05.

Is my interpretation correct?
Also, is this conditional on the observed number of carcasses?
So if you really observed 1 carcass, would I rewrite above as:
Pr(number of fatalities > 2.6135 | 1 carcass observed) <0.05

== Here, knowing that x carcasses have been observed, I compute Nmax that verifies

`Pr(number of fatalities = Nmax | x ) = 0.05`

So in the example,

`Pr(number of fatalities = 2.6135 | 1 carcass observed) = 0.05`

Q3

```
Ad-hoc estimate of the number of fatalities
------------------------------------------------------------------------
      Uniform entry rate Pulsed entry rate SE(unif) SE(pulse)
Type1             0.6504            0.6487   0.5938    0.5918
Type2             0.6504            0.6487   0.5938    0.5918

------------------------------------------------------------------------
```

I don't know what the above labeling means: "ad-hoc estimate of the number of fatalities".
I guess if 1 carcass had been observed and you then divided this 1 by (1-P0),

I would understand, but this does not seem to be what was done. In addition, how would you compute this if no carcasses were observed? Bottom line is that I would appreciate an explanation of what this is, thanks.

==Sorry about the text. Throughout, if any of you can think of better labels and text, feel free to change.

*This "ad hoc" estimate is the sum over n of [n * Pr(number of fatalities = n | x carcasses observed)]*
I stopped the sum at a finite maximum n, so divided the whole thing by sum over n of [Pr(number of fatalities = n | x carcasses observed)]
I realize I should have run this by you, let me know if clarifications are needed

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Q4

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Extrapolations to whole wind farm ------------------------------------
------------------------------------------------------------------------
Maximum number of fatalities (with risk threshold 0.05 )
------------------------------------------------------------------------
      Uniform entry rate Pulsed entry rate SE(unif) SE(pulse)
Type1             2.6135            2.6103   0.8234    0.8219
Type2             2.6135            2.6103   0.8234    0.8219
```

I assume this is based on simple area expansion. Is variance computed by treating area searched as a known constant, I assume? So if you searched 50% of turbines, then var for entire area estimate would be 4*var(number fatalities in searched area)?

==Yes,
this is a simple multiplication by a correction factor that is derived from the proportion of turbine searched and the proportion of the death zone around each turbine that is searched.