# PENTYRCH INCIDENT RADIATION STUDY



### OVERVIEW

- February 26th, 2016. Pentyrch area of Whales is overwhelmed by Military presence, including AWACS surveillance planes that had been in area for days. Supposed Military Special Ops Exercise is being performed.
- Witnesses in the area seem distraught at the commotion; but none as much as Caz Clarke (joined by friend Dave), who claims to have had view of an incident involving an enormous pyramidal UFO, and several daughter craft.
- Caz describes a highly detailed scene of the pyramidal entity nearly striking the ground, and discharging "hands of lightning" in order to keep from bottoming. A different glowing green craft is chased by military, and downed, according to Caz.
- The next day, Caz and friends explore the area to find evidence that the incident has left a mark; seemingly greying Caz's hair, making her ill, among other strange findings.
- 22 months later, Caz and friends first attempt to take Radiation and EMF readings for the area.
- This is an attempt at quantifying an approximate picture of the radiation levels
  present at the place of inspection, being the "Bald Spot" formed by the "hand of
  lightning". Sources of error, and result reliability will be briefly discussed.

#### WHAT IS IONIZING RADIATION?

lonizing Radiation is the release of energy in the form of waves and particles, from an unstable isotope (element)



There are 3 types of Ionizing Radiation

- Alpha Helium molecule (2 Proton + 2 Neutron) this is the only way a nucleus can lose a proton.
- Beta fast electron, formed when neutron turns to proton (down quark → up quark + fast electron)
- Gamma photon, often accompanies beta decay

#### HOW DO WE FIND RADIATION?

# Radiation can be measured with Geiger Counters,



The Geiger Counter is a device that counts how many instances of radiation occur, at a certain intensity, Per Area, Per Time.



### GEIGER COUNTER CLOSER LOOK

#### Video Example of DP-66 Being Used DP-66 Operation Manual



• The Geiger Counter shown is measuring 70% of whatever scale is selected.

#### 1.2. General Characteristics

- 1.2.1. Radiation Measuring Range
- -- Beta Contamination from 103 to 107 decays/min.\*cm2 in four sub-ranges,
- -- Beta and Gamma Radiation from 0.05 mR/hr to 200 R/hr in six ranges.
- 1.2.2. Radiation Energy Detection Range

This instrument allows radiation detection and measurement from the following energy levels:

- -- Beta Radiation from 0.5 MeV to 3 MeV.
- -- Gamma Radiation from 0.1 MeV to 3 MeV.

#### Table 1

			Measuring range is dependent on location of beta shield.			
			Beta x1(	three lengthwise open	e openings)	
	Rotary	Scale of Sub-	Beta x1	0 (small circular open	ing)	
Sub-	Switch	range				
range	Position					
			Beta x l	Beta x10	Beta/Gamma	
			(Contamination)	(Contamination)	(Roentgens)	
				(Roentgens)		
			decays/min.*cm <sup>2</sup>	decays/min.*cm <sup>2</sup>	R/hr	
					(mR/h)	
1	2	3	4	5	6	
Ι	200 R/hr	0-200	-	-	5-200 R/hr	
Ш	5 R/hr	0-5	-	-	0.5-5 R/hr	
III	0.5 R/hr	0.5	-	-	0.05-0.5 R/hr	
IV	1M	0-10	100000 - 1000000	1000000-10000000	-	
	50 mR/hr	0.5	-	-	5-50 mR/hr	
V	100K	0-10	10000 - 100000	-	-	
	5 mR/hr	0-5	-	-	0.5-5 mR/hr	
VI	10K	0-10	0 - 10000	-	-	
	0.5 mR/hr	0.5	-	-	0.05-0.5 mR/h	

Note: The white line on the probe is signifying position of beta shield (x1, x10, G).

### HOW DID THEY MEASURE?

- The DP66 was set on the most sensitive setting, which can measure radition in the range of 0.05mR/h - 0.50mR/h
- The probe had beta shield REMOVED (later we examine if this is the cause of high radiation readings)
- The investigators read the values from the wrong scale (bottom scale). This scale is used for a different calculation protocol than the one we require.
- An actual picture of a value of 3 is shown, with a line drawn at value 10, the maximum level that was reportedly measured.
- Gari reports intermittent moments of up to 17, but settling around 10. This is normal and suggests value around 10-12



## HOW DID THEY MEASURE?



We can see that the investigators had the "Beta Shield" removed, which exposes the sensor to more radiation than the device was calibrated for. This is a likely source of error. In this picture, we can see the construction of the DP66 Probe. The Beta Shield is the piece with three slits in it. These three slits allow beta radiation to pass into the sensor (past the aluminum foil, and into the Muller Tube).





Shown is the correct orientation and setup for measuring radiation. The green arrow represents the amount of radiation that would be allowed for measurement. If the shield were off, the sensor would measure all three arrows, but believe that all of the radiation was coming through the 3 slits. This would result in inaccurately high readings.

#### WHAT DID THEY RECORD?

-The investigators read the scale with the largest numbers, being the bottom scale, recording values of 0 – 10, corresponding to 1/10th of total range for selected scale.

-Values are calculated by multiplying the scale fraction by the scale range.

- 1/10th of 0.50mR/h = 0.05mR/h
- (with Beta Shield REMOVED)



### SECOND RADIATION READING



No image available

- The investigators returned to collect radiation levels again, this time using a more modern (digital) Geiger Counter.
- These measurements have higher confidence because of ease of use, and transparency of results readout.
- The investigators measured readings of between 0.15uSv/h – 0.25uSv/h. This figure was only given to me by word of mouth.
- Conversion to mR/h  $\rightarrow$
- 0.20uSv/h = 0.020mR/h
- This data reportedly taken 8/2020, or 54 months after incident.

#### THIRD RADIATION READING



- The investigators returned to collect radiation levels again, this time using a more modern (digital) Geiger Counter.
- These measurements have higher confidence because of ease of use, and transparency of results readout.
- The investigators measured readings of between 0.10uSv/h – 0.20uSv/h, as shown in the picture.
- Conversion to mR/h  $\rightarrow$
- 0.15 uSv/h = 0.015 mR/h.
- This data reportedly taken 2/2021, or 60 months after incident (another incorrect date displayed in pic)

#### THEIR INTERPRETATION

Counts Per Minute CPM	Micro Sieverts per hour uSv/hr	Milli Sieverts Per year 2 mSv/yr Avg	Background Radiation Level Guide for detections one meter above the ground.
10	0.09	0.82	Average background, pre Fukushima Japan 0.081 uSv/hr, Australia 0.17 uSv/hr,
25	0.24	2.06	0.23 uSv.hr world average, USA average 0.34 uSv.hr,
40	0.38	3.3	It is normal to occasionally get short duration peaks above normal background, for any location.
60	0.56	4.94	Larger peaks of longer duration indicate detection of a hot spot, or a cloud of radiation is passing through!
100	0.94	8.23	Detections 1.0 uSv/hr and above you are getting into the dangerous area of detection, shelter or leave immediately!
200	1.88	16.47	Even more hazardous, shelter or leave immediately!

Radioactive contamination ingestion and inhalation is a significant risk factor, if you are getting significant free air detection increases above your normal background for any length of time. For detections in the yellow to red zones, leave the area, or shelter until it passes. Knowledge of your pre Fukushima / Chernobyl local average background radiation levels is helpful. Any increase in your local background radiation level increases risk.

http://sccc.org.au/international-radiation-monitoring-stations

0.5 mR/h Milliroentgen per hour

Readings from fields October 2018 – 1- 10 mR/h = 10 to 100uSv/h – Average Background is 0.1uSV/h Can This Be Right ? 18 months after.

#### Convert milliroentgen/hour [mR/h] to microsievert/hour [µSv/hour]

<pre>1 milliroentgen/hour [mR/h] = 10 microsievert/hour [µSv/hour] 5 milliroentgen/hour = 50 microsievert/hour</pre>	
2.5 milliroentgen/hour = 25 microsievert/hour	
50 milliroentgen/hour = 500 microsievert/hour	
50 microroentgen/hour = 0.5 microsievert/hour	
50 milliroentgen/hour = 500 microsievert/hour	



-The investigators believed their results to be 1 – 10 mR/h, as they misunderstood how to read the counter.

- This was their question for me. Was this correct? What did it mean?
- Incorrect dates are common in the communications, the data on the paper was recorded on 12/19/2017, or 22 months after incident.

### SUMMARY SO FAR

- The investigators made a few mistakes during the initial measurements,
  - with the DP66 Geiger Counter
- What the investigators believed to be 10mR/h was actually reading as 0.05mR/h.

- 0.05mR/h level is
   5x above
   background
   level
- The 0.05mR/h measurement is likely
   exaggerated
   due to the Beta
   Shield being
   removed from
   the Probe

- The second and third readings are around
   0.02mR/h, which is still a bit high
- These measurements are quoted with higher confidence, because a modern Geiger Counter was used

#### WHAT NOWS

- An idea of the actual levels in 2017 could be calculated by recreating the scene again with the same Geiger counter, and comparing results.

Obtain baseline with DP66 Geiger Counter, as is, with absolutely no modifications. - If desired, I will create an Experiment in order to baseline the DP66, and attempt to back out the true reading at 12/19/2017

#### MY THOUGHTS

The Author of this presentation is of the opinion that this evidence is not so strong when it comes to radiation, but it is evidence that the investigators in this case are FULLY TRANSPARENT, with the Author sensing NO DECEPTION

If the level was normal by the time they measured the first time (day 981 after incident), that doesn't mean that no radiation was present initially

- If no radiation can be found present day with the DP66, it suggests that there was radiation present in 2017. If the same level is measured today, then it either means the Beta Shield being off makes the device too sensitive, or that there is long term beta radiation present at the bald spot.

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