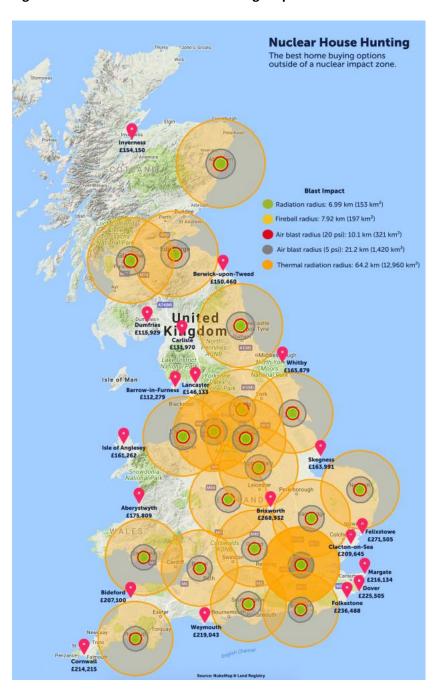
# **Nuclear House Hunting**

Version 2 – 06 April 2022

The online estate agent Emoov caused a recent stir by publishing a map titled "Nuclear House Hunting – The best home buying options outside a nuclear impact zone". Although there were some so called "safer areas", overall, it painted a pretty bleak picture of the effects on the UK of a nuclear attack.

Figure 1 – Emove Nuclear House Hunting map



I have some major criticisms. Firstly, it does not indicate whether the impact areas are from a ground burst or airburst attack (if ground burst there would also be significant radiation fallout to contend with). Secondly, only cities are targeted, not military assets. Thirdly, the yields of each burst mapped must be massive, at least 50 megatons. There are few weapons of this size in any nuclear arsenal and 5 megatons, even 1 megaton, would more likely be the maximum yield of choice. Britain's Trident missiles I believe have only a maximum yield of 100 kiloton.

Targeting, in case of a nuclear war, would also be likely to be more precise and limited, centred primarily on military assets, critical infrastructure and major industrial centres.

However, you can make your own map if you go to <a href="http://nuclearsecrecy.com/nukemap/">http://nuclearsecrecy.com/nukemap/</a> and assess the likely risks in the precise area you live. Using NukeMap, I have simulated a 1 megaton air burst over Leeds (a major financial centre). Although a dire event, at least one does get a chance to survive.

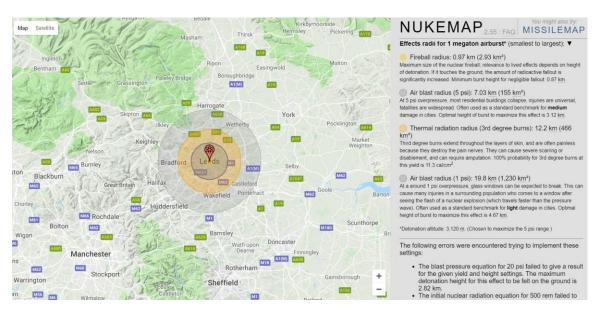


Figure 2 – 1 megaton nuclear airburst over Leeds, UK

Significant zones of destruction (moving outwards from the centre) are:

#### 1. Fireball – Radius 0.97 kilometres

This will be the zone of maximum destruction. Very little chance of any survivors.

### 2. Air Blast 5psi Overpressure – Radius 7.03 kilometres

Most residential building collapses. Fatalities are widespread.

### 3. Thermal Radiation – Radius 12.2 kilometres

Third degree burns widespread.

# 4. Air Blast 1psi Overpressure – Radius 19.8 kilometres

Glass windows shatter, light damage to buildings.

So, if you live more than 7 kilometres from a potential target you have a chance as long as you protect yourself.

### References:

- 1. Metro News, 2017. "Want to survive a nuclear attack". Available at: <a href="http://metro.co.uk/2017/08/11/want-to-survive-nuclear-attack-this-map-shows-where-you-need-to-move-6845692/">http://metro.co.uk/2017/08/11/want-to-survive-nuclear-attack-this-map-shows-where-you-need-to-move-6845692/</a>
- 2. Wellerstein, Alex, 2012. "The Nuclear Secrecy Blog, NUKEMAP". Available at: <a href="https://nuclearsecrecy.com/nukemap/">https://nuclearsecrecy.com/nukemap/</a>