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Subject: Re: Beacon Damage Radius

Posted by [StealthEye](#) on Sun, 09 Sep 2012 13:09:15 GMT

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We fixed it (actually, SH did ).

There were several issues: stock was overapproximating the distance, leading to the "beacon on airstrip does not kill the building" bug, and TT's version was underapproximating the distance by using bounding boxes unintentionally. A correct distance calculation gives results somewhere in between the TT and stock versions. To keep stock behavior as much as possible, we chose to revert to the stock algorithm (and not fix the issue properly), but if the beacon is placed on the building (i.e. touches it), the building is always killed.

I made some nice screenshots that show the issue. The red markers show places where a beacon would kill a building, the green markers show where it'd damage it. The different files show different algorithms:

correct - exact "triangle to point" distance calculation

stock - broken "centroid of triangle to point" distance calculation

tt-rc1 - broken "mesh bounding box to point" distance calculation as in RC1 and some previous versions

tt-final - stock "centroid of triangle to point" distance calculation unless placed on building, as will be used in the next release

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