The Impact of Deep Impact

Poster Introduction

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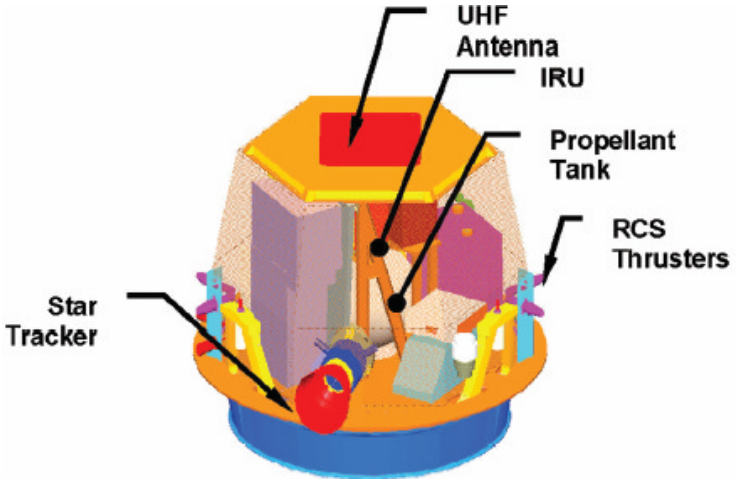
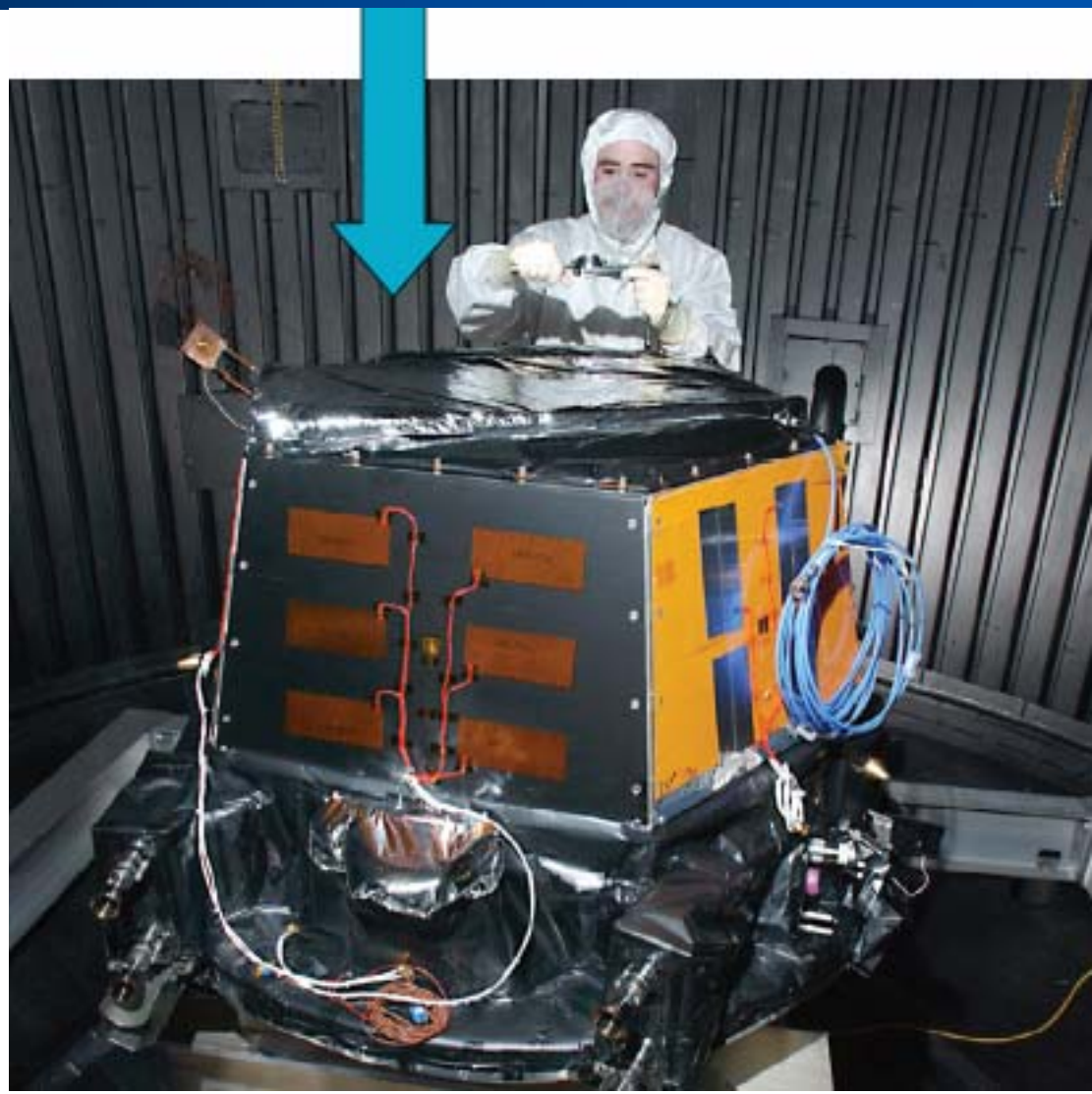
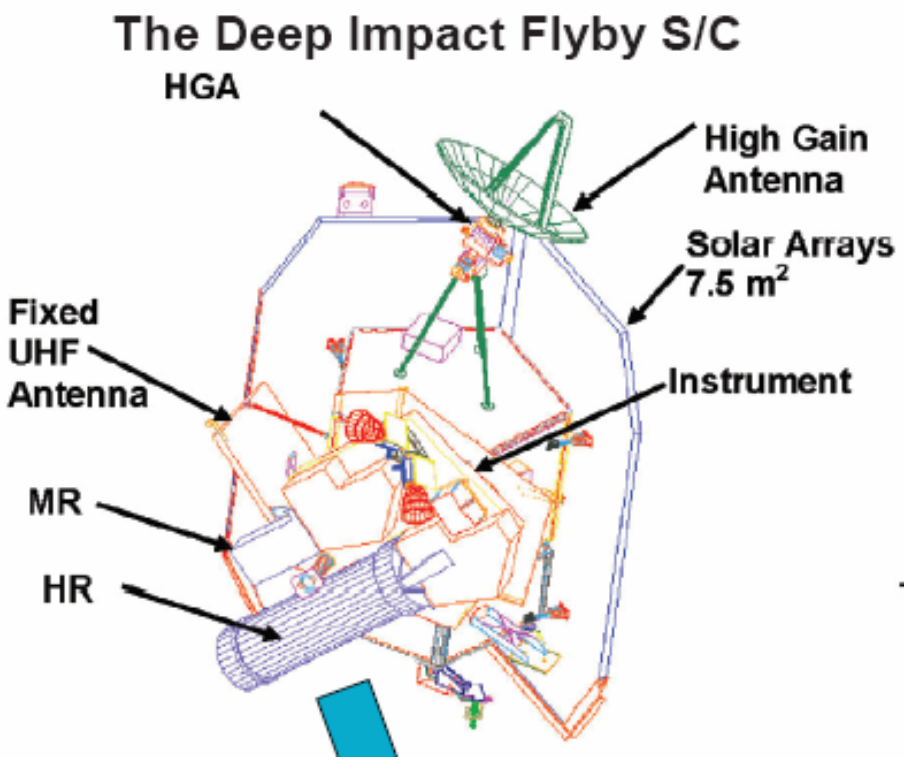
Our Poster Discusses Doing Something Like This to an Earth-Threatening NEO…

….Using Something that Looks Like This…





...Delivered by Something That Looks Like This...



Deep Impact Poster Conclusions

- Since there are conjectured to be a factor of ~200 more 100-200-m diameter NEOs than 1-2 km NEOs, the most likely known threats to Earth after the completion of the >140 m survey will be smaller bodies that can be deflected by Deep Impact-like missions.
- Kinetic energy deflection is an attractive approach for these bodies if there is >30 yr warning time
- However, the impactor will have to be designed in light of incomplete knowledge of a potential target's porosity, interior structure, and cratering properties unless there is a precursor rendezvous mission
- Method requires, at a minimum, knowledge of radiometric diameter, albedo, and spin state of the target from visible and thermal-IR measurements.