Near Earth Asteroid (NEA) Capture and Mining Preparation Assessment

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**The profitability of Near Earth Asteroids (NEAs) is tremendous with some asteroids estimated to be worth approximately the Gross Domestic Product (GDP) of the Earth itself. The system under evaluation studied many variances of methods as well as how they fit in to a Concept of Operations (CONOPS) to determine a practical method for capturing a NEA and preparing it for resource extraction. Considering a NEA has never been captured nor transported, the practice still allows for significant innovation and new concepts. The concept explored for the analyzed system is a**

1. **Nomenclature**

*CONOPS* = Concept of Operations

*NEA* = Near Earth Asteroid

1. **Introduction**

This

1. **Resources**

Your

1. **Economics**

Your

1. **Mission Design**

Your

1. **Spacecraft Design**

Your

1. **Mining Technology**

Your

1. **Feasibility of Asteroid’s Resources for Earth Transportation or Site Mining**

**A. Resource: Water**

Your

**B. Resource: PGMs**

Your

**C. Resource: PGMs**

Your

**D. Resource: PGMs**

Your

**E. Resource: PGMs**

Your

**F. Resource: PGMs**

Your

**G. Resource: PGMs**

Your

**H. Resource: PGMs**

You

1. **Capturing Technology**

The

**A. Capturing Functions**

Your

**B. Asteroid Capturing Approaches**

It

**C. Resource Preservation**

Your

**D. Resource Transportation**

Before

1. **Transportation Technology**

The

**A. Capturing Functions**

Your

**B. Asteroid Capturing Approaches**

It

**D. Resource Transportation**

Before

1. **Mining and Processing Technology**

The

**A. Mining Functions**

Yo

**B. Asteroid Mining Approaches**

It

**C. Resource Useful Extraction**

Your

**D. Resource Mining**

Before

1. **Conclusion**

**Acknowledgments**

The work founded herein was guided by the instructional direction of Dr. Dagli. I would also like to acknowledge my puppy, Daisy, for the lack of attention I’ve been able to give her as of lately.

**References**

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