

# RECORD AND DISCLOSURE OF INVENTION

FOR USE BY NAVY  
INTELLECTUAL PROPERTY OFFICE

DATE DISCLOSURE RECEIVED      NAVY CASE NO.

**INSTRUCTIONS:** A Navy employee should use this form when submitting an invention disclosure to the Department of the Navy. Fill each blank with the requested information or enter "NONE" as appropriate. Original and two copies should be printed or typed and forwarded to the Intellectual property office responsible for providing services to your activity. Where space on the form is inadequate, enter "see attached page," use plain pages as needed, and identify item by number. When completely executed, this form becomes an important legal document useful in proving priority of invention. This form may also be used by a contractor or grantee for disclosing an invention to the Navy.

## PART 1. RECORD OF INVENTION

1. INVENTOR(S)	ADDRESS	POSITION TITLE	EMPLOYER (Activity & Code No., or Company & address)
(b) (6)	(b) (6)	(b) (6)	NAVAIR / NAWCAD AIR 4.4.5.1

2. DESCRIPTIVE TITLE OF INVENTION  
**THE INERTIAL MASS REDUCTION DEVICE**

3. CONCEPTION, INITIAL RECORDS AND RESULTS OF FIRST MODEL

a. EARLIEST DATE AND PLACE INVENTION WAS CONCEIVED (Identify persons and records to support date and place)  
10-01-2016 - CONCEPT DISCLOSURE TO THE OFFICE OF PATENT COUNSEL NAS PATUXENT RIVER AND TO (b) (6) NAVAIR CTO.

b. DATE AND PRESENT LOCATION OF FIRST SKETCH, DRAWING OR PHOTO AND FIRST WRITTEN DESCRIPTION (Such as notebook entries, etc.)  
10-01-2015 - SAME AS ABOVE.

c. DATE AND PLACE OF COMPLETION OF FIRST MODEL, PROTOTYPE, PRELIMINARY SYNTHESIS, FORMULATION, ETC., AND ITS PRESENT LOCATION  
NOT APPLICABLE - THIS IS ONLY A THEORETICAL CONCEPT, FOR NOW.

d. DATE AND PLACE OF FIRST TEST OR OPERATION AND THE RESULTS (Give name and address of witnesses, and present location of records)  
NOT APPLICABLE - THIS IS ONLY A THEORETICAL CONCEPT, FOR NOW.

4. OTHER RECORDS (Notebook entries, descriptions, reports, drawings, etc.)

IDENTIFICATION	DATE OF DOCUMENT	PRESENT LOCATION
THE INERTIAL MASS REDUCTION DEVICE - Concept Description Paper	10-01-2015	TO BE ATTACHED TO THIS OFFICIAL DISCLOSURE.

5. OTHER INDIVIDUALS TO WHOM INVENTION WAS DISCLOSED

NAME	ACTIVITY OR COMPANY INDIVIDUAL REPRESENTS	DATE DISCLOSED	TYPE (oral or written disclosures)
(b) (6)	NAVAIR 11.0 / OFFICE OF PATENT COUNSEL	10-01-2015	WRITTEN
(b) (6)	NAVAIR / Air 4.0T (CTO)	10-01-2015	WRITTEN AND ORAL
(b) (6)	NAWCAD TTO	10-01-2015	WRITTEN
(b) (6)	NAVAIR / Air 4.4	10-01-2015	WRITTEN
(b) (6)	NAVAIR / Air 4.4.5	10-01-2015	WRITTEN
(b) (6)	NAVAIR / Air 4.4.5.1	10-01-2015	ORAL

6. DATE AND PLACE OF OTHER TESTS OR OPERATIONS, AND THE RESULTS (List name and address of witnesses and identify present location of records)  
 For now this is only a theoretical concept, however a simple laboratory experiment is proposed in the concept description paper submitted with this intake.

7. IDENTIFY ANY PAST, PRESENT OR CONTEMPLATED USE, SALE, OR PUBLICATION OF THE INVENTION  
 Theoretical Concept only (no concept enablement) was submitted for publication to the SAE International Journal of Aerospace (Abstract has been accepted – awaiting finalized peer review).

8. LIST ANY CLOSELY RELATED PATENTS, PATENT APPLICATIONS AND PUBLICATIONS OF YOURS OR OTHER PERSONS  
 Navy Case PAX 182 – Patent Application # 14807943 - patent application titled: 'Electromagnetic Field Generator and Method to Generate an Electromagnetic Field'.  
 Recent paper discusses the possibility of achieving extreme speeds – (b) (6) 2015 'Conditional Possibility of Spacecraft Propulsion at Superluminal Speeds' – Int. J. Space Science and Engineering, Vol. 3, No.1, pp 89-92.

PART II. DISCLOSURE OF INVENTION

Attach on separate sheets of paper a full and complete description of the invention, using the outline given below.

- a. PURPOSE. State the purpose of the invention.  
 The original inventive concept described herein, is named the Inertial Mass Reduction Device (IMRD) and works in conjunction with the physics of the High Energy Electromagnetic Field Generator (HEEMFG) described in Navy case PAX 182. When put in practice, this system can provide the design of energy generation machinery with power output levels much higher than those currently achievable. The utilization of such high power sources for Aerospace Power and Propulsion generation, as it pertains to reduction in an hybrid aerospace/undersea vehicle's inertial (gravitational) mass as a direct result of local Vacuum polarization (coupled with EM field - matter repulsion), is an important application of the described theoretical concept. As a result, extreme hybrid aerospace/undersea craft speeds can be achieved.
- b. BACKGROUND. Describe the old methods, materials or apparatus used to perform the purpose of the invention and give their limitations and disadvantages.  
 This is a revolutionary / breakthrough concept – there are no limitations or disadvantages to this technology.
- c. DESCRIPTION AND OPERATION. Describe clearly and completely the best mode of the invention and give a detailed description of its operation and use. Sketches, prints, photos, or other illustrations should be attached. In the description, use reference characters to refer to components in attached illustrations.  
 Please see detailed concept description paper titled – 'The Inertial Mass Reduction Device' submitted with this intake (Invention disclosure forms).
- d. ADVANTAGES AND NEW FEATURES. State the advantages of the invention over the old methods, materials or apparatus described in paragraph b. above, and the features believed to be new.  
 Please see detailed concept description paper titled – 'The Inertial Mass Reduction Device' submitted with this intake.
- e. ALTERNATIVES. Indicate any alternative methods, materials, or apparatus of the invention. – THERE ARE NO ALTERNATIVES.
- f. CONTRIBUTIONS BY INVENTORS. If this is a joint invention, indicate what contribution was made by each inventor. – N/A – I am the sole inventor.

PART III. CERTIFICATION OF INVENTORS

I certify that the invention disclosed herein and in the attached documents is the  sole  joint invention of the undersigned and that the statements and answers are true to my best knowledge and belief.

Date 10/26/2015	Signature (b) (6)
Date	Signature
Date	Signature

PART IV. CERTIFICATION OF WITNESSES

I certify that the invention described herein and in the attached documents has been disclosed to and understood by me.

Date 26 OCT 2015	(b) (6)	Business Address NAVAIR 4.4.5.1
Date	(b) (6)	Business Address