

Technical Instruction 001
Reference Statement of Work: Paragraph 2.3q

Tasks:

Task 1: DYSMAS Coupling Support

Assist IHD/NSWC in the evaluation and improvement of coupling techniques with DYSMAS.

Non-physical oscillatory behavior is occasionally seen late in time in DYSMAS coupled simulations. New time-stepping algorithms to rectify this behavior were developed by ATR in a previous effort. In the current task the recommended time-stepping algorithm will be further tested and refined in preparation of deployment in production DYSMAS code. Other issues that affect coupling stability will be explored, in particular coupling boundary conditions.

Task 2: DYSMAS Support for Submarine Simulations

Provide support to IHD/NSWC in resolving issues associated with submarine simulations under the DYSMAS PA program.

Task 3: DYSMAS Support

Provide technical support to IHD/NSWC for the verification, validation, debugging, exercise, and improvement of DYSMAS.

Deliverables:

No.	Task & Deliverables
1	DYSMAS Coupling Support
	1) Updated Gemini code
2	DYSMAS Support for Submarine Simulations
	1) Updated Gemini code
3	DYSMAS Support

Conditions:

This TI is not intended to (1) assign work not covered by the scope of the task order; (2) direct a change as defined in the clause entitled "Changes"; (3) increase or decrease the estimated contract cost, the fixed or award fee, the fixed price, the level of effort, or the time required for contract performance; or (4) change any of the terms, conditions, or specifications of the Master Contract and/or Task Order. In the event you consider these requirements to represent a change for which you are entitled to an equitable adjustment, you are to comply with the requirements of the "Changes" clause of the contract and resolution from the Government Contracting Officer must be obtained prior to proceeding with this effort.

Technical Point of Contact:

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