

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2008

BUDGET ACTIVITY: 07
PROGRAM ELEMENT: 0203761N
PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

COST: (Dollars in Thousands)

Project Number & Title	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
Total PE	38,370	39,778	34,469	45,592	40,174	41,398	47,564
3126 RAPID TECHNOLOGY TRANSITION (RTT)	23,537	29,542	28,422	33,638	28,028	34,396	34,858
3174 RAPID DEVELOPMENT & DEPLOYMENT (RDD)	10,948	9,441	6,047	11,954	12,146	7,002	12,706
9999 CONGRESSIONAL PLUS-UPS	3,885	795	0	0	0	0	0

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The mission of the Rapid Technology Transition (RTT) program and the Technology Insertion Program for Savings (TIPS) is to increase the rate that new, innovative, and potentially disruptive technologies are inserted into DON acquisition programs and the hands of the warfighter. The RTT program transitions technology from any source, including those not traditionally associated with defense technology. TIPS increases the rate that new cutting edge technologies are inserted into DON acquisition programs in order to significantly reduce operations and maintenance support costs. An effective and robust integration of commercial and military technologies can reduce costs and improve naval capabilities by keeping pace with the fast moving changes in technologies and operational needs. These programs are structured to bring transition deals to closure quickly, and to provide execution year funding for a rapid start, bridging the gap until the program of record can fund the completion of the technology insertion.

Rapid transition opportunities occur when a sufficiently mature technology is identified that can meet a particular need on a timetable which matches that of an acquisition program, and is supported by a business case which justifies the associated cost and schedule risk. The combination of circumstances which create such opportunities can appear, and disappear, well inside the Program Objectives Memorandum (POM) cycle. These programs are designed to be pro-active in identifying opportunities and to work with resource sponsors,

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2008

BUDGET ACTIVITY: 07
PROGRAM ELEMENT: 0203761N
PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

fleet and force users, and Program Managers (PMs) in constructing viable technology transition deals one at a time.

To ensure the widest possible awareness of emergent commercial technology opportunities, these programs interact with the venture capital community and industry. These programs coordinate closely with Program Executive Offices (PEOs) and PMs to maintain awareness of insertion opportunities. Utilizing existing authorities, RTT applies execution year funds where necessary to "jump-start" transitions so they can be inserted and validated by Sea Trial experiments leading directly to deployment and/or demonstrations of high risk/high payoff technologies. This Program Element is the only Navy program that addresses current, urgent requirements that are required by the fleet within a 18-24 month period. As such, planning and execution are accomplished within the same fiscal year, which causes a non-traditional financial execution profile for the program. The program therefore does not meet traditional execution benchmarks.

UNCLASSIFIED

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2

DATE: February 2008

BUDGET ACTIVITY: 07
PROGRAM ELEMENT: 0203761N
PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

B. PROGRAM CHANGE SUMMARY:

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
FY 2008/FY 2009 President's Budget Submission	39,326	44,756	34,469
Congressional Action	0	-4,200	0
Congressional Undistributed Reductions/Rescissions	0	-258	0
Execution Adjustments	-97	0	0
SBIR Assessment	-859	-520	0
FY 2009 President's Budget Submission	38,370	39,778	34,469

PROGRAM CHANGE SUMMARY EXPLANATION:

Technical: Not applicable.

Schedule: As a result of the FY 2008 Congressional reduction, cancel one new technology transition deal in support of the RTT program, two new start projects in support of the TIPS program, and cancel two new projects in support of the RDD program in FY 2008.

C. OTHER PROGRAM FUNDING SUMMARY:

Not applicable.

D. ACQUISITION STRATEGY:

Not applicable.

E. PERFORMANCE METRICS:

The RTT program will, at a minimum, initiate 5-8 new deals a year that provide for new, innovative, and potentially disruptive technology being inserted into DON acquisition programs. The RTT deals will have a greater than 80% success rate of insertion and fielding of technology into DON warfighting systems.

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT NUMBER: 3126

PROJECT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

COST: (Dollars in Thousands)

Project Number & Title	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
3126 RAPID TECHNOLOGY TRANSITION (RTT)	23,537	29,542	28,422	33,638	28,028	34,396	34,858

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The mission of the RTT project is to increase the rate that new, innovative, and potentially disruptive technologies are inserted into DON acquisition programs and the hands of the warfighter. A key aspect of the RTT project is its charter to transition technology from any source, including those not traditionally associated with defense technology. An effective and robust integration of commercial and military technologies can reduce costs and improve naval capabilities by keeping pace with the fast moving changes in technologies and operational needs. The RTT project is structured to bring transition deals to closure quickly, and to provide execution year funding for a rapid start, bridging the gap until the program of record can fund the completion of the technology insertion.

The mission of the Technology Insertion Program for Savings (TIPS) is to increase the rate that new cutting edge technologies are inserted into DON acquisition programs in order to significantly reduce operations and maintenance support costs. The program is structured to rapidly transition applicable commercial off-the-shelf solutions and late-stage development technologies from any source to meet an immediate need. TIPS provides execution year funding for a rapid start, bridging the gap until the program of record can fund the completion of the technology insertion.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
RTT	23,537	29,542	28,422

FY 2007 Accomplishments:

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT NUMBER: 3126

PROJECT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

- Continued efforts on the following TIPS projects: Heat Induction Based Coating Removals project currently scheduled for completion in FY 2008; and Continued Sprayable Dielectric Shield Coatings effort.
- Completed the following RTT projects: Portable Fluid Analyzer (PFA); HELLFIRE Trajectory Shaping; Cryptologic Management and Analysis Support Segments (CMASS); Battle Force e-mail (BF-EM) for P-3C AIP; HF SIPRNET for E-2C; Enhanced Battlefield Situational Awareness (EBSA); Technical Control and Analysis Center SIGINT Query Tool; Low Cost Expendable Small Robotic Platform - BOMBOT; and MLS Coalition Architecture.
- Initiated the following RTT projects for the September 2006 and March 2007 Deal Cycles: Digital RF Memory (DRFM) Jammer; Subnet Relay (SNR) and High Frequency Internet Protocol (HF IP); Communications T/FDOA (Time / Frequency Difference of Arrival) Geo-location; Submarine Tactical Paging at Speed and Depth; Deployable Alternative Energy Module (DAEM); Airborne Communications Package ADNS Airborne Network Node; Expedient Airfield Damage Repair (ADR); Sparsely Populated Volumetric Array Acoustic Intercept Sensor Enhancing Submarine Passive Broadband Detection and Localization (SPVA PBB); Joint Mission Planning System Expeditionary SPF (JMPS-E); CLUSTER BIGHT Optical Subsystem (CBOS); Cryogenic Filters; MPU with Commercial Stirling Cooler; and Littoral Combat Ship Mission Package Networked Tactical Training System (LCS NTTS).
- Initiated the following TIPS projects: Non-Skid Coatings; Modified Atmosphere Packaging System for Fresh Fruits and Vegetables currently scheduled for completion in FY 2008; and Normal Fuel Oil Tanks and Littoral Combat Ship Virtual Maintenance Performance Aid in collaboration with RTT LCS - Network Transition Training System. Primary objectives of these projects are cost savings and reducing Operations and Support costs.

FY 2008 Plans:

- Continue efforts initiated in FY 2007.
- Complete Non-Skid Coatings, Modified Atmosphere Packaging System and Heat Induction Based Coating Removals TIPS projects.
- Initiate 11 new technology transition deals in support of the RTT program. (Note: As a result of the Congressional reduction, cancel one new technology transition deal)
- Initiate 4 new start projects in support of the TIPS program. (Note: As a result of the Congressional reduction, cancel two new start projects)

FY 2009 Plans:

- Continue new efforts initiated in FY 2008.
- Complete all efforts initiated in FY 2007.
- Initiate 6-10 new technology transition deals in support of the RTT program.

R1 Line Item 163

Page 5 of 10

UNCLASSIFIED

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT NUMBER: 3126

PROJECT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

- Initiate 5-8 new start projects in support of the TIPS program.

C. OTHER PROGRAM FUNDING SUMMARY - NAVY RELATED RDT&E::

Not applicable.

OTHER PROGRAM FUNDING SUMMARY - NON-NAVY RELATED RDT&E::

Not applicable.

D. ACQUISITION STRATEGY:

Utilize existing authorities on a case-specific basis to exploit rapid technology transition opportunities.

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROJECT NUMBER: 3174

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT TITLE: RAPID DEVELOPMENT & DEPLOYMENT (RDD)

Project Number & Title	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
3174 RAPID DEVELOPMENT & DEPLOYMENT (RDD)	10,948	9,441	6,047	11,954	12,146	7,002	12,706

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Rapid Development and Deployment (RDD) provides an environment and process for rapid development and fielding of prototype solutions to meet urgent needs in the Global War on Terrorism (GWOT). The RDD process applies when existing DON processes cannot meet urgent operational needs. GWOT has generated rapidly evolving military needs that require responsive materiel solutions. RDD is a fast track process for application, by exception, to Navy and USMC capability needs and materiel solutions that meet the following criteria: (1) Need identified during active or incipient combat or contingency operation, or (2) Need derived from combat survivability of the warfighter or impacts the success of the mission. RDD initiates projects to deliver prototype solutions that are not readily available off-the-shelf and that can be developed, integrated with other components and systems (as necessary), tested, and fielded within 270 days of need approval. RDD provides startup funds to initiate projects that meet the above criteria while other funding is made available within the year of execution.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
RDD	10,948	9,441	6,047

RDD was a new start in FY 2007.

Change from FY 2008 to FY 2009 is due to reduced level of investment/effort required for completing projects and subsequent initiations in FY 2009.

FY 2007 Accomplishments:

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT NUMBER: 3174

PROJECT TITLE: RAPID DEVELOPMENT & DEPLOYMENT (RDD)

- The Counter Suicide Bomber Detection program was initiated and the prototype is currently in development. Additionally, the Tactical Biometric Collection and Matching System prototype, which supports the Expanded Maritime Intercept Operations mission area, is scheduled for delivery in 2008. The transition to program of record is progressing. RDD continued to support a number of urgent operational requirements throughout FY 2007.

FY 2008 Plans:

- Continue new efforts initiated in FY 2007.
- Initiate RDD effort titled: Chemical, Biological, Radioactive/Nuclear and Explosive and Weapons of Mass Destruction (WMD).
- Initiate 2 new RDD projects. (Note: As a result of Congressional reduction, cancel two new projects)

FY 2009 Plans:

- Continue new efforts initiated in FY 2008.
- Complete all efforts of FY 2007 less those noted as completed in FY 2008.
- Initiate and complete multiple projects within RDD for urgent warfighter requirements that meet the RDD selection and execution criteria. RDD will initiate 3 projects.

C. OTHER PROGRAM FUNDING SUMMARY - NAVY RELATED RDT&E:

Not applicable.

OTHER PROGRAM FUNDING SUMMARY - NON-NAVY RELATED RDT&E:

Not applicable.

D. ACQUISITION STRATEGY:

For RDD requirements that meet the selection criteria, the virtual Naval Innovation Laboratory (NaIL) is used to initiate projects. The NaIL is a virtual organization operating across Naval Laboratories and Warfare Centers, with interfaces and/or contractual agreements with other Military Services, Industry, Academia and the National Laboratory community. The NaIL will bring together, on demand, multi-disciplinary teams to develop and deliver rapid, innovative solutions. The NaIL will maintain an inventory of specialized RDT&E capabilities within the community, and will maintain visibility of available and emerging technologies from

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROJECT NUMBER: 3174

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT TITLE: RAPID DEVELOPMENT & DEPLOYMENT (RDD)

all sources that may serve as enablers to the success of RDD initiatives. The NaIL will review Urgent Combat Needs, identify and evaluate alternative solutions and provide recommendations. The NaIL will include a rapid acquisition channel, consistent with all applicable procurement regulations, for access to industry products and services as needed. For approved projects, the NaIL will select appropriate technologies, and develop, integrate, test, and deliver fieldable prototypes with the essential logistics for use by the warfighter. End users will be involved throughout the process as part of the virtual team.

UNCLASSIFIED

FY 2009 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET
Exhibit R-2a

DATE: February 2008

BUDGET ACTIVITY: 07

PROGRAM ELEMENT: 0203761N

PROJECT NUMBER: 9999

PROGRAM ELEMENT TITLE: RAPID TECHNOLOGY TRANSITION (RTT)

PROJECT TITLE: CONGRESSIONAL PLUS-UPS

CONGRESSIONAL PLUS-UPS:

	FY 2007	FY 2008
120MM HIGH EXPLOSIVE PLASTIC AMMUNITION PROGRAM	3,885	0

This effort supported development of the 120MM high explosive plastic ammunition to be used specifically for breaching structures in the urban warfare environment. This effort supported the USMC solution planning directive for the M1A1 Breaching Round Universal Need Statement.

	FY 2007	FY 2008
US NAVY MOBILE CONDITION ASSESSMENT SYSTEM PILOT	0	795

This effort supports US Navy Mobile Condition Assessment System Pilot project.