Progress, Status and Management Report

Period Covered by the Report

Date of Report:

Project Title: Robust Automatic Transcription of Speech (RATS)
Contract Number: D10PC20008
Total Dollar Value: $ 13,047,478.00,596,885.00
Program Manager: Joseph Olive

Submitted by:

[Name]
[Address]

Telephone:
Fax:
Email:

Security Classification – Unclassified

Distribution List and Addresses

One report to:

Joseph Olive
Defense Advanced Research Projects Agency
3701 N. Fairfax Drive
Arlington, VA 22203-1714
E-mail: Nibir.Dhar@darpa.mil

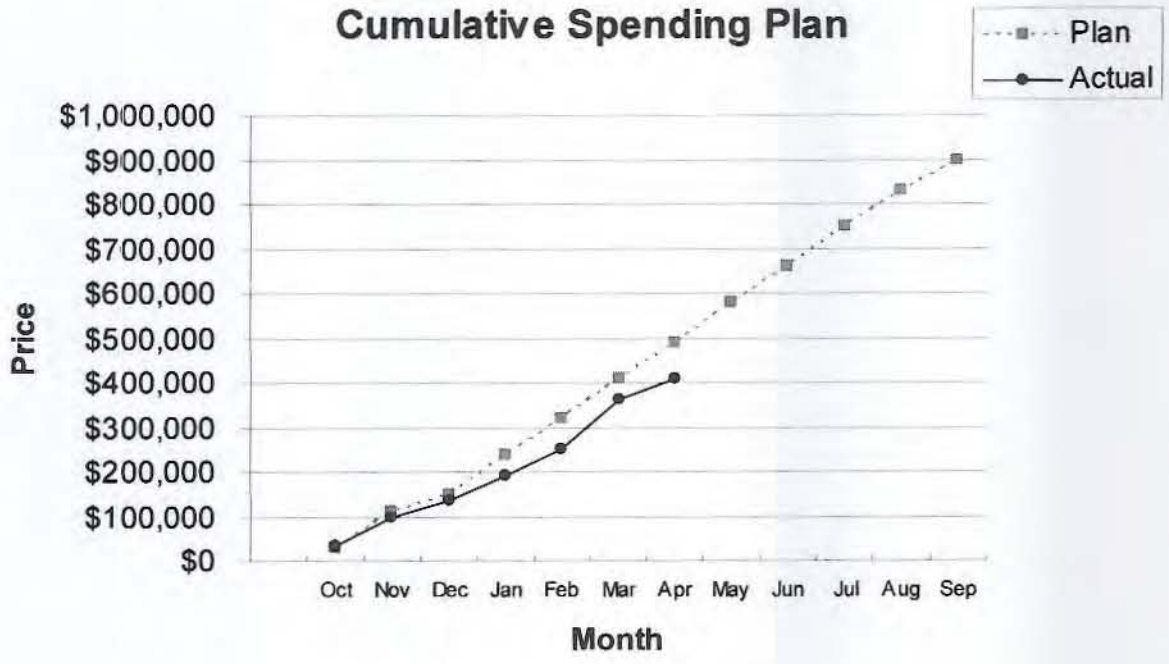
One report to:

Roy Peters/COR
Science & Technology Specialist
DOI/NBC
Acquisition Services Directorate
P.O. Box 192924
Fort Huachuca, AZ 85670-2924
E-mail: Roy_L_Peters@nbc.gov

Technical Information – Financial Management

1. **Technical Progress / Monthly Expenditure Report (Please provide cumulative spending graph).**

Figure 1. Example Graph



Please provide Phase 1 schedule of tasks and events for this quarter, with financial expenditures broken down by task.

Task 1 – (Task Description): $
Task 2 – (Task Description): $
Task 3 – (Task Description): $

Total expenditures for the quarter - $

Actual Cost versus Planned Costs

	Current Month's Cost* ($)	Inception to Date ($)	Phase 1 Cost ($)
Plan			
Actual			
Difference			

* Current month is (DATE) through (DATE).

2. **Technical Progress / Highlights - Observations**

3. **Results or Problems and Solutions**

4. **Significant Accomplishments Anticipated During Next Reporting Period**

5. **Publications relevant to this effort**

6. **Meetings and Events (Please include meetings with subcontractors)**

7. **Publications Changes to the Contract Organization**

SAIC
From Science to Solutions

Small/Small Disadvantaged/Women-Owned/HUBZone/HBCU/MI/ Veteran-Owned/Service Disabled Veteran-Owned Businesses Individual Subcontracting Plan

Including
Approved Master Subcontracting Plan Effective
01 January 2009 through 31 December 2011

SAIC DUNS Number 054781240 CAGE 52302 for ISR/SSR Reporting
SAIC SOLICITATION DUNS Number: 833063105 CAGE 5UTE1

Subcontracting Goals For
Prime Contract/Solicitation No.: DARPA BAA 10-34
SAIC Bid and Proposal No.: F00455.A.2311.010.000

Prepared By:

John Meanley — September 2, 2010
Senior Subcontracts Administrator

By:

Michael Tuffley — September 2, 2010
Deputy BU Procurement Director

Approved By:

September 2, 2010
James Cantor — Date
Deputy Business Unit Manager

Approval Concurrence:

9/2/2010
Rochelle Love — Date
Small Business Compliance Manager

SPECIFIC SUBCONTRACTING PLAN
BASED ON FAR 52.219-9 REQUIREMENTS

CONTENTS

NOTE: Requirements of FAR 52.219-9(d)((8), (d)(9), (d)(10), and (d)(11) are contained in the approved SAIC Master Subcontracting Plan; which is incorporated herein.

[ ] References Specifically Identifies FAR 52.219-9 Requirements
** Specifically Identifies DFAR 219.705-4

I. SUBCONTRACTING GOALS

A. Prime Contract/Solicitation Number: F00455.A.2311.010.000 / DARPA BAA 10-34

SAIC Group: Intelligence. Security and Technology Services Group (Shea)
DUNS: 833063105 CAGE 5UTE1

Proposal Title: Robust Automatic Transcription of Speech (RATS), Technical Area 3. Evaluation ("RATS")

Program Summary: The goal of the RATS program is to create technology capable of accurately determining speech activity regions, detecting key words, identifying language and speaker in highly degraded, weak and/or noisy communication channels. RATS test and training data will be collected under both controlled and uncontrolled field conditions.

B. Individual Subcontract Plan Administrator:

Name:	John Meanley		
Employee No:	115582	Title:	Sr. Subcontracts Administrator
Address:	10260 Campus Point Drive San Diego. CA 92121-1578		
Telephone No.:	858-826-5472	Location No.	0001 – Campus Point SD
Group No.:	25	Division No.	2

Group or BU Procurement Manager Name: Douglas Weiss
Group or BU Procurement Manager Employee No: 54438

C. Contract Representative:

Name:	Karen Lee Burgess		
Employee No:	95610	Title:	Dep Ops Contracts Mgr
Address:	1710 SAIC Drive, McLean, VA 22102		
Telephone No.:	843-971-2890	Location No.:	15
Group No.:	25	Division No.:	2

Group Manager Name: Jane Gabriel

D. Corporate Small Business Development Programs Small Business Liaison Officer:

Name:	Rochelle Lowe
Title:	Small Business Compliance Manager
Address:	10260 Campus Pt. Drive San Diego, CA 92121
Telephone:	(858) 826-7406
Fax:	(858) 826-2693

Duties of SBLO detailed in Master Subcontracting Plan and include those detailed in FAR 52.219-8 and 52.219-9.

F. Subcontracting Goal Summary

Period of Performance:

Base	Option	Option 2
15-Aug-10	15-Feb-12	15-Feb-13
14-Feb-12	14-Feb-13	14-Feb-14

The percentages contained in Table A represent the goals for the contract upon initial award.

	Distribution of Subcontracts	**Amount**	**Percentage of Subcontracted Dollars**
1	Total Dollars to be Subcontracted	24,143.0	100%
2a	Large Business	4,400.0	18.2%
2b(1)	Total Small Business	19,743.0	81.8%
2b(2)	Small Disadvantaged	19,743.0	81.8%
2b(3)	Small Woman-Owned	19,743.0	81.8%
2b(4)	HBCU/MI	0.0	0.0%
2b(5)	HUBZone	19,743.0	81.8%
2b(6)	Small Veteran-Owned	0.0	0.0%
2b(7)	Small Service Disabled Veteran-Owned	0.0	0.0%

TABLE A -- Goals Expressed as Percentage of Total Planned Subcontracting

The SAIC program manager plans to purchase certain computer equipment for this program. This equipment, which includes four Dell PowerEdge T610 tower chassis configured for program requirements, may be purchased from Blue Tech, Inc., a HUBZone, Small Disadvantaged, Woman-Owned business. In this plan, an additional amount, noted in Table A, is budgeted for miscellaneous supplies and materials with assumed large business status. Based on this approach, this plan allocates over 80% to SDB, WOSB and HUBZone business.

II. PROPOSED DISTRIBUTION AND DESCRIPTION OF SUBCONTRACT AWARDS

Science Applications International Corporation is committed to providing opportunities for small businesses to compete for subcontract awards. This commitment has proven effective with actual direct awards of 53.0% to Small Businesses overall with 9.8% going to Small Disadvantaged Businesses and 9.6% going to Women Owned businesses in Government Fiscal Year 2009.

The principal supplies and/or services to be subcontracted under this contract are:

- Dell PowerEdge T610 tower chassis and peripherals

		Type of Award												
Identify Service / Product	NAICS (which describes service/ product being acquired from vendor)	Full & Open Competition Source Item	Limited Competition	Single Source	Restricted Disadvantaged Competition	Small Business	SDB	WOSB	HBCU/MI	Large Business	HUBZone	VOSB	SDVOSB	ANC/Indian Tribal-owned
Computers & Peripherals	423430		X				X	X			X			

III EFFORTS TO SUBCONTRACT WITH SMALL DISADVANTAGED BUSINESS (SDB) CONCERNS

This Individual Subcontracting Plan was prepared with consideration given to positive goals for SDB participation. This included reviewing subcontracting requirements for possible opportunities for Historically Black Colleges and Universities or Minority Institutions.

Describe anticipated product or services to be provided by SDB, technical assistance to be provided, and/or restricted competition with SDB or HBCU/MI: IT equipment, including four Dell PowerEdge T610 tower chassis configured for program requirements, will be purchased from a firm whose status is HUBZone, Small Disadvantaged and Woman-Owned business. The proposed purchase orders represent over 80% of the entire subcontracted effort.

IV. METHOD USED TO DEVELOP GOALS

A. Proposed subcontracting goals as identified in Section I, F. Subcontracting Goal Summary was developed by a joint pre-proposal review of the solicitation statement of work and performance requirements. The joint review involved program, technical and procurement personnel including, the Corporate Small Business Liaison Officer, Business Unit Manager, Contract Representative, and the identified Individual Subcontract Plan Administrator.

B. Criteria considered in the review process included:
   1. Review of the solicitation statement of work.
   2. Identification of the requirement for goods and services.
   3. Identification of the potential to subcontract for goods and services.
   4. Make - Buy Analysis.
   5. Identification of potential suppliers.
   6. Categorization of source requirements based on single source, limited competition and open competition as provided by the marketplace or could potentially be developed.

V. INDIRECT AND OVERHEAD CHARGES

Indirect and overhead charges are not included in this subcontracting plan.

VI. METHOD OF IDENTIFICATION /SOLICITATION

The development of goals as described in Section IV resulted in the identification of potential/proposed subcontracting opportunities. The review process identified provided a categorization of items available from single sources, limited competition and full and open competition. Some single source items are available from "only qualified sources" as determined from previous programs of a similar nature.

Items available for limited or open competition provide the opportunity to subcontract to small businesses. These prospective sources were identified through the mechanisms identified in Section III(c) of the Master Subcontracting Plan.

cc: Rochelle Lowe
File

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY:
0001	A	TDP ___ TM ___ OTHER ___

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR
	D10PC20008	Science Applications International

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A001	Scientific and Technical Reports		

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-MISC-81612	Section J.2, D10PC20008		

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
See Blk 16	C	See Block 16	See Block 16
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**
A		See Block 16	See Block 16

16. REMARKS

See pages 2-3

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES: Draft	Final: Reg	Final: Repro
DARPA PM via			
TFIMS			
COR via Email			
15. TOTAL →	0	0	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Maria Elemia	08/12/2010	Lisa Mattocks	08/12/2010

DD FORM 1423-1, FEB 2001 PREVIOUS EDITION MAY BE USED. Page 1 of 4 Pages

Exhibit A

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY:
0001	A	TDP ____ TM ____ OTHER ____

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR
	D10PC20008	Science Applications International

16. REMARKS *(Continued)*

INSTRUCTIONS FOR COMPLETING DD FORM 1423

(See DoD 5010.12-M for detailed instructions.)

FOR GOVERNMENT PERSONNEL

Item A. Self-explanatory.

Item B. Self-explanatory.

Item C. Mark (X) appropriate category: TDP - Technical Data Package; TM - Technical Manual; Other - other category of data, such as "Provisioning.""Configuration Management," etc.

Item D. Enter name of system/item being acquired that data will support.

Item E. Self-explanatory (to be filled in after contract award).

Item F. Self-explanatory (to be filled in after contract award).

Item G. Signature of preparer of CDRL.

Item H. Date CDRL was prepared.

Item I. Signature of CDRL approval authority.

Item J. Date CDRL was approved.

Item 1. See DoD FAR Supplement Subpart 4.71 for proper numbering.

Item 2. Enter title as it appears on data acquisition document cited in Item 4.

Item 3. Enter subtitle of data item for further definition of data item (optional entry).

Item 4. Enter Data Item Description (DID) number, military specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that defines data content and format requirements.

Item 5. Enter reference to tasking in contract that generates requirement for the data item (e.g., Statement of Work paragraph number).

Item 6. Enter technical office responsible for ensuring adequacy of the data item.

Item 7. Specify requirement for inspection/acceptance of the data item by the Government.

Item 8. Specify requirement for approval of a draft before preparation of the final data item.

Item 9. For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref. DoDD 5230.24).

Item 10. Specify number of times data items are to be delivered.

Item 11. Specify as-of date of data item, when applicable.

Item 12. Specify when first submittal is required.

Item 13. Specify when subsequent submittals are required, when applicable.

Item 14. Enter addressees and number of draft/final copies to be delivered to each addressee. Explain reproducible copies in Item 16.

Item 15. Enter total number of draft/final copies to be delivered.

Item 16. Use for additional/clarifying information for Items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and 13; Explanation of reproducible copies in Item 14.; Desired medium for delivery of the data item.

FOR THE CONTRACTOR

Item 17. Specify appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.

a. Group I. Definition - Data which is not otherwise essential to the contractor's performance of the primary contracted effort (production, development, testing, and administration) but which is required by DD Form 1423.

Estimated Price - Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance with Government requirements, and the administration and other expenses related to reproducing and delivering such data items to the Government.

b. Group II. Definition - Data which is essential to the performance of the primary contracted effort but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.

Estimated Price - Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

c. Group III. Definition - Data which the contractor must develop for his internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.

Estimated Price - Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.

d. Group IV. Definition - Data which is developed by the contractor as part of his normal operating procedures and his effort in supplying these data to the Government is minimal.

Estimated Price - Group IV items should normally be shown on the DD Form 1423 at no cost.

Item 18. For each data item, enter an amount equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data. These estimated data prices shall be developed only from those costs which will be incurred as a direct result of the requirement to supply the data, over and above those costs which would otherwise be incurred in performance of the contract if no data were required. The estimated data prices shall not include any amount for rights in data. The Government's right to use the data shall be governed by the pertinent provisions of the contract.

CLIN 0001 **RESEARCH AND DEVELOPMENT PROJECT SUMMARY**

--CONTINUATION PAGE--

16. REMARKS.

- REPORTING PERIOD TERMINOLOGY
  - QUARTERLY REPORTING PERIODS:
    - JUL-SEP: COVERS PERFORMANCE FROM 1 JULY - 30 SEPTEMBER
    - OCT-DEC: COVERS PERFORMANCE FROM 1 OCTOBER - 31 DECEMBER
    - JAN-MAR: COVERS PERFORMANCE FROM 1 JANUARY - 31 MARCH
    - APR-JUN: COVERS PERFORMANCE FROM 1 APRIL - 30 JUNE

- ELECTRONIC SUBMISSION. THE CONTRACTOR SHALL ACCESS THE DARPA EXTRANET REPORTING PAGE https://www.tfims.darpa.mil AND ELECTRONICALLY SUBMIT ALL REQUIRED REPORTING INFORMATION ACCORDING TO ALL SPECIFICATIONS BELOW.

- POST-AWARD INITIAL SUBMISSION REQUIREMENT: SUBMIT WITHIN 30 CALENDAR DAYS OF AWARD ALL DATA ITEMS IN 1. PROJECT INFORMATION.

- MINIMAL INITIAL REPORT: **IF AWARD OCCURS WITHIN 30 CALENDAR DAYS OF END OF QUARTERLY REPORTING PERIOD** SUBMIT DATA ITEMS 2.6 ISSUES OR CONCERNS AND 3.2 PROJECT PLANS, ONLY, IN FIRST REPORT. DUE DATE FOR MINIMAL FIRST REPORT IS WITHIN 15 CALENDAR DAYS OF END OF QUARTERLY REPORTING PERIOD THAT INCLUDES AWARD DATE.

- GENERAL QUARTERLY SUBMISSION REQUIREMENTS
  - FREQUENCY: BLOCK 10. INPUT FOUR (4) TIMES YEARLY, ONCE FOR EACH OF THE QUARTERLY REPORTING PERIODS CITED ABOVE, FOR DURATION OF CONTRACT.
  - REPORTING PERIOD: BLOCK 11. REPORT ON PERFORMANCE DURING THE MOST RECENT QUARTERLY REPORTING PERIOD.
  - DUE DATE: BLOCK 12 AND BLOCK 13. SUBMIT WITHIN FIFTEEN (15) CALENDAR DAYS AFTER THE END OF MOST RECENT QUARTERLY REPORTING PERIOD, BEGINNING WITH REPORTING PERIOD APR-JUN. DUE DATE IS JULY 15 FOR INITIAL REPORT, I.E.
    - FOR REPORTING PERIOD JUL-SEP, DUE DATE IS OCTOBER 15
    - FOR REPORTING PERIOD OCT-DEC, DUE DATE IS JANUARY 15
    - FOR REPORTING PERIOD JAN-MAR, DUE DATE IS APRIL 15
    - FOR REPORTING PERIOD APR-JUN, DUE DATE IS JULY 15

- QUARTERLY CONTENT REQUIREMENTS
  - IF CURRENT SUBMISSION IS FINAL SUBMISSION FOR THIS CDRL ITEM INCLUDE ALL PARAGRAPHS OF REFERENCED DATA ITEM DESCRIPTION (DID), ELSE
    - FOR THE APR-JUN QUARTERLY REPORT, INCLUDE ALL PARAGRAPHS OF REFERENCED DID
      FOR 3.2.1. PLANNED ACTIVITIES, IN ADDITION TO REPORTING PLANNED ACTIVITIES FOR NEXT QUARTER, INCLUDE A TOP-LEVEL BULLET LIST OF PLANNED ACTIVITIES FOR TIME PERIOD BEGINNING 1 OCTOBER OF CURRENT YEAR AND ENDING 31 DECEMBER OF NEXT YEAR.
    - FOR ALL OTHER QUARTERLY REPORTS, INCLUDE ALL PARAGRAPHS OF THE REFERENCED DID **EXCEPT** FOR DID PARAGRAPH 1.2 PROGRAMMATIC INFORMATION (AND ALL SUB-ELEMENTS OF 1.2)

- GENERAL MONTHLY SUBMISSION REQUIREMENTS
  - FREQUENCY: BLOCK 10. INPUT TWELVE (12) TIMES YEARLY FOR DURATION OF CONTRACT.
  - REPORTING PERIOD: BLOCK 11. REPORT ON PERFORMANCE DURING PREVIOUS MONTH.
  - DUE DATE: BLOCK 12 AND BLOCK 13. SUBMIT WITHIN FIFTEEN (15) CALENDAR DAYS AFTER END OF PREVIOUS MONTH.

- MONTHLY CONTENT REQUIREMENTS
  - FOR DURATION OF CONTRACT, SUBMIT REFERENCED DID ITEMS 2.1 INCURRED EXPENSES THIS PERIOD, AS LUMP SUM TOTAL ONLY.

- CONCURRENT SUBMISSION REQUIREMENTS
  - FOR DURATION OF CONTRACT SUBMIT 2.2 INVOICES THIS PERIOD, AS INVOICES ARE SUBMITTED FOR PAYMENT. PERIOD IN 2.2 DENOTES TIME SINCE LAST SUBMISSION OF INVOICE(S).

- FORMAT
  - GENERAL FORMAT INSTRUCTIONS: COMPLY WITH ALL INSTRUCTIONS DELINEATED ON THE DARPA EXTRANET REPORTING PAGE.

  - SPECIAL FORMAT INSTRUCTIONS: SUBMIT 3.1.7, PUBLICATIONS THIS PERIOD, IN ADOBE ACROBAT (PDF) FILE FORMAT. SUBMIT 1.2.2.4, SCHEDULE GRAPHIC IN EITHER POWERPOINT (PPT), JPG, TIFF, OR PDF FILE FORMAT. SUBMIT 1.2.2.7, QUAD-CHART, IN MICROSOFT POWERPOINT (PPT) FILE FORMAT.

- INPUT OF PROPRIETARY INFORMATION:
  - PROPRIETARY INFORMATION MAY BE ENTERED ONLY FOR THE FOLLOWING ITEMS AND ONLY IN THOSE AREAS DESIGNATED FOR SUCH INPUT ON THE DARPA EXTRANET REPORTING PAGE
    - 1.2.2.3 DETAILED DESCRIPTION OF TECHNICAL APPROACH AND COMPARISON WITH CURRENT TECHNOLOGY
    - 3.1.2 TECHNICAL ACCOMPLISHMENTS THIS PERIOD
    - 3.2.1 PLANNED ACTIVITIES

- CLASSIFICATION: THE ENTIRE REPORT SHALL BE UNCLASSIFIED.

- INCLUDE THIS R&D PROJECT SUMMARY ON THE FINAL DD FORM 250.

DATA ITEM DESCRIPTION

Title: RESEARCH AND DEVELOPMENT (R&D) PROJECT SUMMARY

Number: DI-MISC-81612A **Approval Date: 20031215**

AMSC Number: D7442 **Limitation:**

DTIC Applicable: N/A **GIDEP Applicable: N/A**

Preparing Activity: OSD-SO

Applicable Forms: N/A

Use, Relationships:

The R&D Project Summary reports key project administrative, programmatic, technical and financial data. The R&D Project Summary includes administrative and funding information, research objectives, innovative approaches, accomplishments, plans, technology transitions, technology transfers, and issues. The technical and financial information contained in the R&D Project Summary enables comprehensive assessment of project goals, progress and status. This Data Item Description (DID) contains format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract statement of work (SOW).

Requirements:

1. Project Information.

1.1. Administrative Information.

1.1.1. Subcontractors. Verify each subcontractor.

1.1.2. Performing Organization Contacts.

1.1.2.1. Principal Investigator(s) Contact. Verify the name, organization, business address, business phone, business fax, and e-mail address of each principal investigator.

1.1.2.2. Administrative Contact. Verify the name, organization, business address, business phone, business fax, and e-mail address of the administrative point of contact.

1.1.2.3. Financial Data Contact. Verify the name, organization, business address, business phone, business fax, and e-mail address of the contact for financial data.

1.1.2.4. Programmatic/Technical Reporter Contact. If the Principal Investigator is not the reporter of the programmatic/technical data verify the name, organization, business address, business phone, business fax, and e-mail address of the programmatic/technical reporter point of contact.

1.2. Programmatic Information.

1.2.1. Project Uniform Resource Locator (URL). Provide the project URL.

1.2.2. Project Description.

1.2.2.1. Research Objectives.

1.2.2.2. Problem Description. Provide a concise description of the problem area addressed by this research project.

1. Research Goals. Identify specific research goals of this project. Identify and quantify expected performance improvements from this research. Identify new capabilities enabled by this research. Identify and discuss salient features and capabilities of developmental hardware and software prototypes.

2. Expected Impact. Describe the expected impact of the research project, if successful, to the problem area.

1.2.2.3. Technical Approach.

3. Detailed Description of Technical Approach. Provide a detailed description of the technical approach that will be used in this project to achieve the research goals. Specifically identify and discuss innovative aspects of the technical approach.

4. Comparison with Current Technology. Describe state-of-the-art approaches and the limitations within the context of the problem area addressed by this research.

1.2.2.4. Schedule and Milestones.

5. Schedule Graphic. Provide a graphic representation of the project schedule including detail down to the individual task effort level. Show all project milestones. Use absolute time designations for all dates.

6. Detailed Individual Task Descriptions. Provide detailed task descriptions for each individual task in the schedule graphic.

1.2.2.5. Deliverables Description. List and provide a detailed description for each planned deliverable. Specify receiving organization(s) and expected delivery dates for each deliverable.

1.2.2.6. Technology Transition and Technology Transfer Targets and Plans. Discuss plans for technology transition and transfer. Identify specific military and commercial organizations for technology transition or transfer. Specify anticipated dates for transition or transfer.

1.2.2.7. Quad Chart. Provide a Quad Chart as one (1) landscape-oriented page divided into four (4) quadrants and suitable for use in briefings using the following format:

Project Title	
GRAPHIC: A visually compelling graphic that conveys the key technological idea(s) or the expected impact of the research.	**NEW IDEAS:** List at least 3 new technical ideas embodied by the research.
IMPACT: At least 3 quantitative statements discussing how this research can revolutionize an area of importance to the Department of Defense	**SCHEDULE:** At least 2 scheduled events or project milestones per year, depicted on a horizontal timeline with at least Quarter resolution (3 month increments) starting with the Quarter that contains the project start and ending with the Quarter that contains the scheduled project end. Quarters begin on 1 October, 1 January, 1 April, and 1 July. Use absolute time designations for all dates.

2. Funding Report.

2.1. Incurred Expenses this Period. Specify the expenses incurred during this reporting period (direct and indirect costs on the awardee's accounting system including labor, overhead, G&A, equipment purchases, travel, material, and any subcontract charges known by the prime).

2.2. Invoices this Period. Specify the invoice date, number, and amount of each invoice submitted during this reporting.

2.3. Date Incurred Expenses will equal Obligated Funding. Specify the anticipated dates that incurred expenses will equal 75% and 100% of the obligated funding, respectively.

2.4. Planned Incurred Expenses. Specify the total expenses planned to be incurred for each of the next three (3) quarters.

2.5. Projected Funding Increment. Specify the funding increment required for the period beginning with "Date Incurred Expenses will equal 100% of Obligated Funding" and ending with 31 December of the next calendar year. If contract ends prior to 31 December of the next calendar year, specify the funding increment required up to the contract end date. Obligated funding increments are additions to currently available funds, not additions to the total contract value.

2.6. Issues or Concerns. Summarize any funding, technical, programmatic and other issues or concerns as well as recommended actions for Government consideration. Indicate if an anticipated funding increment has not been received.

3. Technical Report.

3.1. Project Progress.

3.1.1. Progress Against Planned Objectives. Update the status of the specific objectives identified in the last reporting period as "Specific Objectives for Next Period". For each objective, indicate if the objective was or was not accomplished. For each objective not accomplished, detail the current status of the objective.

3.1.2. Technical Accomplishments this Period. Describe the technical accomplishments made during this reporting period.

3.1.3. Improvements to Prototypes this Period. Provide a detailed, quantitative description of significant new features, capabilities and performance enhancements to hardware and software prototypes made during this period.

3.1.4. Significant Changes to Technical Approach to Date. Identify and provide a detailed description of and rationale for significant changes to the technical approach since the start of the research project.

3.1.5. Deliverables this Period. Report the deliverables (excluding Technology Transition and Transfer covered under 3.1.6.) submitted during this reporting period. List the Deliverable Name, Type of Deliverable (e.g. hardware or software item, demonstration, milestone, design study or other documentation), and Date of Submission. List the Contract Line or Data Item Number (CLIN or DIN), when applicable. Specify the name, organization, business phone, fax number, and e-mail address of a point of contact for the organization(s) that received the deliverable.

3.1.6. Technology Transition and Transfer this Period.

3.1.6.1. Technology Transition and Transfer Description. List and describe the features and performance capabilities for each technology transitioned or transferred this period.

3.1.6.2. Technology Transition and Transfer List. For each technology transitioned or transferred this period, identify the specific military, commercial, or other transition or transfer organization(s) and the application context.

3.1.6.3. Technology Transition and Transfer Contacts. For each technology transitioned or transferred this period, specify the name, organization, business address, business phone, business fax, and e-mail address of a cognizant point of contact for the organization(s) that received the transitioned or transferred technology.

3.1.7. Publications this Period. Provide an electronic copy of each publication sponsored fully or in part by this contract during the reporting period. For each publication, specify the:

(1) Title
(2) Author(s)
(3) Publication date
(4) Publication venue (e.g. journal, conference or magazine name)
(5) Publication keywords

3.1.8. Meetings and Presentations this Period. List all meetings (conferences, workshops, demonstrations, and other coordination meetings) participated in during the reporting period that were sponsored fully or in part by this contract. For each meeting, specify the:

(1) Meeting Name
(2) Meeting Purpose
(3) Meeting Start and End Dates
(4) Meeting Location (place and name of facility)
(5) Meeting Attendees from this project
(6) Presentations Made

3.1.9. Issues or Concerns. Summarize any funding, technical, programmatic, or other issues or concerns as well as recommended actions for Government consideration. Indicate if an anticipated funding increment has not been received.

3.2. Project Plans.

3.2.1. Planned Activities. Describe the planned activities for the next reporting period. Discuss the risks and payoffs corresponding to the planned activities. Include a discussion of planned experiments, demonstrations, presentations, and technical papers.

3.2.2. Specific Objectives for Next Period. Report the significant technical and programmatic objectives planned to be completed during the next reporting period. These are dynamic objectives driven by the progress of the project and not necessarily long-term milestones. Report specific and measurable objectives, rather than simple declarations of continued or sustained effort. For each objective, provide:

(1) Objective Name

1. ADMINISTRATIVE

1.1 Confirmation Sheet/Cover Sheet

VOLUME 1—TECHNICAL PROPOSAL

BROAD AGENCY ANNOUNCEMENT (BAA) 10-34

"ROBUST AUTOMATIC TRANSCRIPTION OF SPEECH"

TECHNICAL AREA 3, EVALUATION

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Total Cost Proposed	**$1,596,885**
Base (18 months)	$758,247
Option 1 (12 months)	$482,362
Option 2 (12 months)	356,276
Contractor Reference Number:	F00455.A.2311.010.000
Large Business	

1.2 Table of Contents

1.2 Table of Contents (continued)

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2.1 Innovative Claims for Proposed Research

As the Robust Automatic Transcription of Speech (RATS) Program's Evaluator, SAIC will design, execute and support an evaluation process that encourages maximum innovation in RATS technologies. We seek to maximize overall program effectiveness and minimize risk. Our proposal builds on the BAA's evaluation plan with a set of technology experimentation and evaluation insights that are tailored to drive innovation throughout the RATS Development, Data Collection, and Evaluation technical areas. These insights are described in **figure 2.1-1**.

2.1.1 Problem Description

The BAA describes the broad requirements for Rapid Automated Transcription of Speech (RATS) Program Technical Area 3 as a series of phased evaluations of speech transcription technologies that progress from unclassified to classified environments over the course of the program. The essential problem for the Evaluation Team is to design and implement an evaluation process and framework that integrates research algorithms with classified and unclassified data to measure progress toward validating the program claims and to do so in a way that enhances the research progress that is the central goal of the program.

2.1.2 Research Goals

The goals of the evaluation team are to create the materials, specifications, and processes necessary to foster advances in RATS research and to measure these advances clearly in unclassified and classified environments. The Evaluation Team must achieve the following technical and evaluation goals:

- Extend the BAA's broad evaluation plan into a detailed specification document that provides clear guidance to algorithm developers and facilitates their research progress while ensuring effective measurement of that progress against program metrics.
- Develop a flexible evaluation framework that provides continuous testing services for advances in RATS technologies while delivering objective evaluation tests and results.
- Support the Data Collection team in developing data sets and test/training partitions that allow effective evaluation across multiple dimensions while emphasizing relevance to transition partners and DOD missions.
- Support potential transition of RATS technologies more broadly to DOD and the IC.

2.1.3 Expected Impact

The Evaluation Team's clearest impact will be enabling DARPA to measure progress in RATS technology. This is achieved by implementing a fair, valid, replicable, insightful, and accurate evaluation methodology and process that can shift smoothly from unclassified to classified environments. Equally important will be the value of evaluation to algorithm developers, who will be able to measure their own research progress against program metrics continuously within the evaluation framework and will receive detailed results from end of phase tests that will reveal strengths and weaknesses of their algorithmic approaches.

A more subtle, but perhaps more important, impact of the Evaluation Team's work is to support eventual transition of RATS technologies to operational users across DOD and the IC. During Phases 2 and 3, algorithm developers will be delivering fully functioning, field-trainable software systems for evaluation. SAIC will structure evaluation tasks to maximize relevance to operational users and will perform classified evaluations that demonstrate performance on operational data. As desired by the government, SAIC will also develop a process for mapping from current Measures of Performance (MOPs) – the official program metrics – to the Measures of Effectiveness (MOEs) that will serve as the basis for transition planning. Finally, SAIC's access to a wide audience of potential RATS technology experiment and transition partners across the DOD and the IC will provide crucial exposure for RATS technologies and allow for demonstrations and field tests that could increase Technical Readiness Levels (TRLs) and create new transition opportunities.

Innovation	Features	Benefits
1. Comprehensive alignment of evaluation methodology, expertise, and automated software tools for the assessment of speech technology	Leverage best practices and existing framework of previous IC and DoD evaluations to provide customized RATS solution	Independent, repeatable process consistent with best practices in speech technology evaluation – focused 100% on supporting the research process
2. Evaluation framework shared with research teams supporting continuous measurement of progress	Evaluation framework software provided to teams early in phase 1 by leveraging existing software framework with updates tailored to RATS program needs	Consistent measurement during research and evaluation – seamlessly integrating the evaluation into each phase of the research
3. Understanding of cross-IC and DoD missions used to tailor operationally relevant scenario-based evaluations for speech analysis technology	Expertise in experimental design for IC and DoD evaluations supported by automated tools and data handling	High relevance of resulting performance measures to potential operational users will increase opportunities for transition of RATS technologies.
4. Collaborate with data collection performer on collection design, annotation, and test/training partition	Specific recommendations to Technical Area 2 performer for audio segmentation and events for LID, SID, and KWS, leveraging knowledge gained in prior IC/DoD audio technology evaluations	Measurable and consistent performance reporting with high confidence levels
5. Multi-dimensional results reporting to algorithm developers to identify areas of high and low performance in multiple dimensions	Data characterized for training and testing in a consistent manner with that anticipated for evaluation	Effective and comprehensive evaluation measurement in support of research objectives and processes
6. Experimental design captures information required to estimate (and provides limited measurement of) end to end performance	Separate trials for technology and overall performance across individual and combinations of technologies	Better alignment with program objectives, enabling rapid progression from measures of performance (MOP) to measures of effectiveness (MOE) in support of possible transitions
7. In-depth dimensional performance analysis using comprehensive experimental designs	Breakdown by dimensions such as noise level/source, gender, number of speakers, and closed/open sets for speaker and language identification	Insight into comparative performance and possible tradeoffs analyses for development teams across different parts of the problem space
8. Streamlined, low-risk process for shifting evaluation from unclassified to classified environment	Leverage process used for 150+ successful classified evaluations of unclassified tools	Minimize risks of security, integration, and performance problems that plague classified evaluations of research algorithms
9. Consistent annotation of classified data sets with unclassified data	Train cleared target language linguists to perform unclassified annotation using technical area 2 methodology and data prior to annotation of classified data and test inter-rater agreement	Maximize consistency between unclassified and classified data sets to ensure comparability of evaluation results
10. Test system trainability on unknown speaker and keyword set in preparation for classified evaluation	Sequester technical area 2 products for targeted speakers and keywords during the data partitioning task and use these to evaluate performance after training	Smooth transition to classified data where targets cannot be revealed to algorithm developers.
11. Evaluation methodology and experience that supports transition to DoD and IC customers	Leverage experience transitioning research products, including speech analysis tools, to operational users	Alignment of research goals and evaluation results with DoD/IC transition processes to the Technology Readiness Level desired by DARPA
12. Unique understanding of a broad set of DoD and IC customers, missions, and data	Leverage metrics development and experimental design experience from Programs such as Research and Development Experimental Collaboration (RDEC) program	Operationally relevant scenarios and access to potential transition partners, allowing for mapping of MOPs to MOEs for more efficient transition of RATS technology

Figure 2.1-1. SAIC proposes a comprehensive set of innovations that will promote research progress in RATS and ensure fair and comprehensive evaluation.