## Department of the Navy SBIR/STTR Transition Program

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Topic # N202-098 Voice Recognition to Support Assessment of Cross Platform Situational Awareness and Decision Making Knowledge Based Systems, Inc.

WHO SYSCOM: NAVAIR		Taray Bando Bando Angelo	WHAT Operational Need and Improvement: Inefficient use of voice data for training performance measurement Lack of contextual understanding for voice and text		
Sponsoring Program: Na Systems Division (NAWC)	Javal Air Warfare Center Training CTSD)		Cognitive overload for Training Instructors Limited support for persistent data capture, reach-back, and re-use		
<b>Transition Target:</b> Next C Analysis and Reporting To	Generation Threat System Tool (NGTS ART)	Warrishe Training and Assessment Warrishe Training Advances that Advances that Advance	Increasing training life cycle costs Specifications Required: Seamless integration into existing Naval training systems		
<b>TPOC:</b> (407) 380-8130		Controllogy Controllogy denied variables for Alternationary (p.o.e)	Improved after action report capability		
	ning Systems Center	Image copyright 2021, Knowledge Based Systems Inc. SR cell to improve after action reviews and student	<b>Technology Developed:</b> Noise-robust speech recognition with voice profiling Natural language processing engine with advanced semantic analysis Context-specific performance measurement with integrated voice data 'Instructor in a box' solution for BREVITY term training and assessment Intuitive AAR / Debrief visualization Open architecture based implementation for affordable integration with NGTS ART and other Navy training systems		
			<ul> <li>Warfighter Value: Improved Air Defense Integrated training effectiveness through the use of efficient methods in performance measurement through exploiting information in voice data</li> <li>Significant reduction in instructor workload through automated analysis and objective assessment of voice data</li> <li>Enhanced diagnostic feedback by correlating voice data and tactical execution data in near real-time</li> <li>Significant reduction on time to prepare AAR debrief</li> <li>Reduced training life cycle costs</li> <li>Contextual understanding for military audio files</li> </ul>		
WHEN c	Contract Number: N68335-21-C-0	0709 <b>Ending on:</b> Aug 31, 2023	HOW		
Milestone	Risk Level Measure of Suc	ccess Ending TRI Date	Projected Business Model: KBSI is currently pursuing a Software as a Service or SAAS business model for the Balvaire technology.		

Milestone	Risk Level	Measure of Success	Ending TRL	Date
Initial prototype demo	Medium	Sponsor Review	4	1st QTR FY23
Updated prototype demo	Medium	End User Review	5	3rd QTR FY23
Hardened prototype demo	Low	End User Evaluation and Review	5	1st QTR FY24
Validated prototype demo	Low	End User Provisional Acceptance	6	3rd QTR FY24

for the ReVoice technology.

**Company Objectives:** KBSI's company objective is to make the ReVoice service available to the greater public as well as additional government entities who might have interest in audio to text conversion.

Potential Commercial Applications: Commercial aviation communication translation services Enhance commercial aviation training systems after action reports and documentation