OO-ALC TECHNOLOGY REQUIREMENTS WORKSHEET

TECH REQUIREMENT TITLE:	
DATE: 08/09/2005	Remote Visual Assessment (RVA)

I. CONTACT INFO

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II. WEAPON SYSTEM ID

NAMES OF ALL AFFECTED WEAPON SYSTEMS: The Improved Minuteman Physical Security System (IMPSS)

ASSOCIATED MAJCOM (mark all that apply)

ACC	AETC	AFMC	AMC	AFSC	AFSOC	AFRC	USAFE	PACAF
		X						

III. DEFICIENCY DESCRIPTION

1. WHAT IS THE DEFICIENCY? (what happens, when does it occur, location/part #, etc.)

The current nuclear-certified intrusion detection system, IMPSS, sends OZ/IZ alarms to Launch Control Center (LCC) over **slow link** (HICS). It takes a few minutes before crew member receives an alarm. IMPSS does not have **visual assessment capabilities** that allow the security personnel to tailor the response level to the threat level. Without visual assessment capabilities, it's difficult to determine a real intrusion alarm. Missile Silos are geographically widely separated, with no available communication infrastructure in place. Security Response Team (SRT) might take several hours get to the site, checking for cause of the alarm. Sometimes, it turns out to be a false alarm such as a rabbit triggers alarm within the outer zone (OZ). It wastes time and resources.

2. HOW LARGE IS THE DEFICIENCY? (how many platforms does it affect, how many of each platform)

The only affected platform is the Improved Minuteman Physical Security System (IMPSS) at the Missile Silos (Launch Facilities). IMPSS is a microprocessor-based surveillance system designed to detect inner/outer zone intruders.

3. WHAT IS THE QUANTIFIED IMPACT OF THE DEFICIENCY? (dollar cost, man-hours, depot flow, MTBF, system downtime, etc.)

Man-hours: False alarms waste SF time and resources. Every false alarm means that all the security people go through all of their security procedures.

4. WHAT OTHER FACTORS EXIST? (technology issues, government regulations, security, classifications, etc.)

None

5. WHAT MISSION DOES THE DEFICIENCY IMPACT? (Operation Iraqi Freedom (OIF), Combating Terrorism Technology Task Force CTTTF, etc.)

Security of the Minuteman Weapon System.

IV. SOLUTION & COST
1. PROPOSED SOLUTION? (do you have one and if yes, what is it, to include estimate ROI)
Remote Visual Assessment (RVA) will provide a **new capability to visually observe** topside Launch Facility (LF) activity using cameras and a variety of sensors. New advances in software-based analysis of video, fused with data from other sensors in an environment, enable security officers to automate surveillance over an entire area, track potential threats and issue alerts in **real-time**. During an intrusion, RVA will work in conjunction with the existing nuclear-certified intrusion detection system (IMPSS) and new detection capability (VMD) to automatically report assessment information to monitoring location(s) without operator action. The system will consist of surveillance, detection, reporting, display, and data transmission elements. Data transmitted to the operator will enable a tailored response required to neutralize threats. The current IMPSS system provides only an alarm that something moved. RVA will provide images to Security Forces to assess alarms and tailor responses**.**
2. HOW LONG WILL IT TAKE TO IMPLEMENT? (how many years)
Approximately 7 years.
3. SCHEDULE (what is the timeline for the process)
FY06: System Design & Development (SDD) (Assuming the RVA funding is available in FY06) FY08: Initial Operation Capability (IOC) – 2 years FY13: Full Operation Capability (FOC) – 5 years.
4. DELIVERABLES (what needs to be established/researched/developed
System Design & Development (SDD) - Two production prototype units will be installed and tested at HILL AFB. Initial Operation Capability (IOC) - Install production units at 20 LFs and 2 MAFs. Full Operation Capability (FOC) - Install full 565 production units at all three wings, training and test facilities. (500 LF's, 50 MAF's, 3 MSC's, 12 other training and test facilities).
5. IMPLEMENTATION ISSUES (any larger issues that need authorization)
None
6. WHAT FUNDING WOULD BE REQUIRED? (COTS, SBIR, ATD, etc.)
Commercial-Off-The-Shelf (COTS) architecture will support scalable, affordable, sustainable and extensible growth for future systems and technology expansion. The RVA solution will maximize the use of Commercial off the Shelf (COTS) technology to simplify integration and reduce both long and short-term costs.
7. WHAT SOURCES OF FUNDING ARE AVAILABLE? (if applicable)
Currently, there is no funding available for RVA.