



## **An Implementation of Remote Alcohol Monitoring in Alaska**

Prepared for the  
National Law Enforcement and Corrections Technology Center–Northwest  
A program of the National Institute of Justice, United States Department of Justice

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## Summary

The Secure Continuous Remote Alcohol Monitoring (SCRAM) project was initially proposed as a National Law Enforcement and Corrections Technology Center-Northwest (NLECTC-NW) pilot community corrections project for Kotzebue. The SCRAM system is an ankle bracelet monitoring device for use as an alternative to detention, and is described in detail later in this paper. Other communities in Alaska expressed interest in such a device and the pilot project quickly turned into a full implementation.

Following a demonstration and training session in the autumn of 2003, the Anchorage Wellness Court joined with Alaska Human Services LLC. to provide SCRAM monitoring for Wellness Court clients in Anchorage, Alaska. Initially, twenty SCRAM units were acquired by NLECTC-NW and deployment was limited to Kotzebue and Anchorage. After several reorganizations, the monitoring was consolidated with Alaska Monitoring Services, LLC. (AKMS) and implemented in Anchorage, Palmer, Fairbanks, Bethel, and Kotzebue.

By July 2005 there were 130 units in operation. In 2003 and 2004, 202 clients participated in the program. In just the first half of 2005, 176 clients participated in the program. Interviews conducted with the agencies and probation officers confirmed no weather or other environmental related failures of the equipment.

## Introduction:

In early 2002 NLECTC-NW personnel conducted an outreach meeting in Kotzebue, Alaska with court, police agency and probation personnel. The Alaska Department of Corrections Kotzebue probation office had just one fulltime probation officer and was responsible for supervising a caseload of approximately 75 offenders spread over an area of 38,000 square miles. While the area includes more than a dozen remote villages, accessibility is restricted to small planes and boats (snow machines or dog sleds in the winter). The discussion identified a need for an alternate method of dealing with chronic alcohol abuse offenders.

Subsequently, NLECTC-NW personnel, attending a National Institute of Justice (NIJ) conference on Innovative Technologies in Community Corrections met with the SCRAM vendor, Alcohol Monitoring Systems, Inc.,<sup>1</sup> as well as Minnesota probation officers experienced with the system.

As a result of the expressed need for an effective alternative approach to chronic alcohol abuse in Kotzebue, NLECTC-NW hosted a demonstration of the SCRAM system in Anchorage. At the Anchorage meeting some concerns were raised about the potential effectiveness of the SCRAM units in the rural arctic Alaska setting of Kotzebue and the surrounding area. It was decided to conduct a pilot project to address the overall concern;

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<sup>1</sup> AMS, Inc: <http://www.alcoholmonitoring.com>

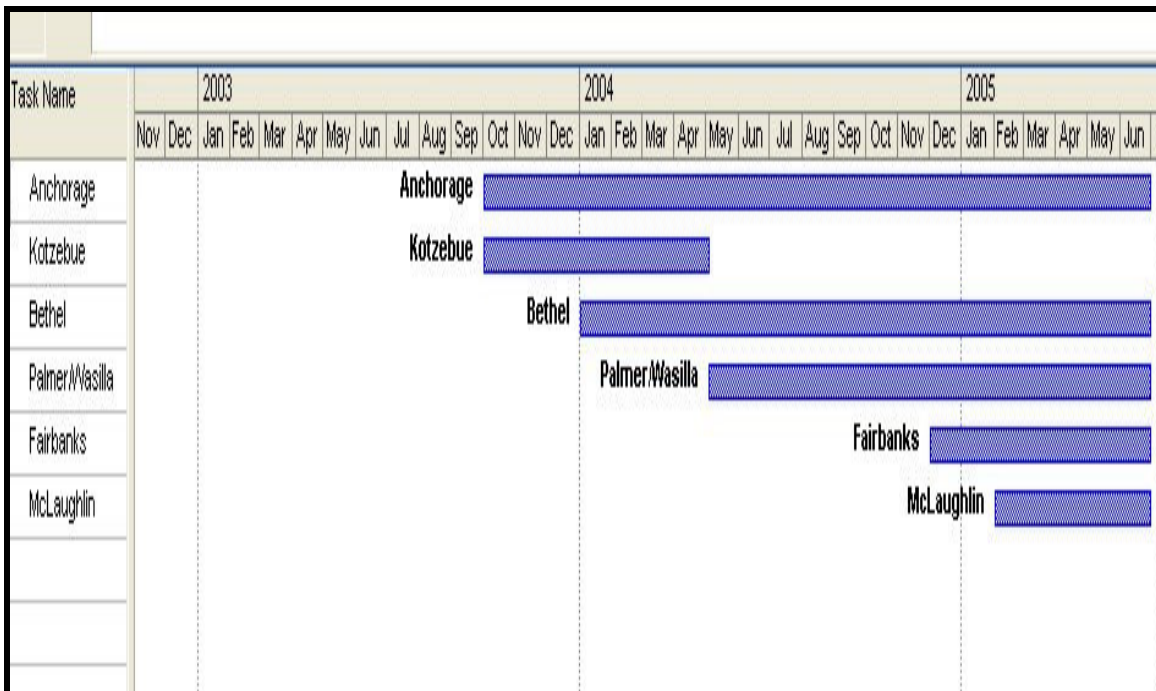
“Will the system work, given the harsh climate and the limited technological infrastructure of the region?” To address this question, the Alaska Justice Statistical Analysis Center was contacted to provide an unbiased report and to collect summary data from AMS, Inc., report data from AKMS, and conduct semi-structured interviews with the monitoring agents and probation officers.

**Implementation:**

Initially, twenty SCRAM units were acquired and distributed to Kotzebue and Anchorage. Community acceptance of the units was such that new orders were placed approximately every two months by AKMS. Operations were expanded to other communities and to juvenile offenders. As of July 2005, there were 130 units in operation. Palmer/Wasilla has 35, Bethel and McLaughlin Youth Center each have 4, Fairbanks has 18 and the rest are in Anchorage.

AKMS is the current oversight organization for the operations. AKMS purchases the units, works on installation and analysis, directly monitors the majority of the clients and helps organize and train the probation officers that monitor clients at McLaughlin and Bethel.

The following chart shows the implementation timeline to date. The bars represent the active periods of use from start up until June 30, 2005. Anchorage and Kotzebue both became operational in the autumn of 2003, and new units and new communities were added every few months.



## Findings:

AMS, Inc. summary data, table 1, lists the numbers of clients by compliant/non-compliant and the compliance percentage. It also lists the number of days monitored, readings, alerts and confirmations.

	2003 and 2004	2005	Total
Clients	202	176	319 *
Compliant	124	99	175 *
Non-Compliant	78	77	144 *
Compliance %	61%	56%	56%*
Monitored Days	10,652	8,135	18,787
Readings	252,327	200,886	453,213
Alerts	12,247	7,933	20,180
Confirmed Alerts	196	212	408
Average Monitoring Period			41 days
* columns reflect year end totals and do not account for carry over from year to year			

Table 1

- Compliant Offenders: No confirmed violations during monitoring period.
- Non-Compliant Offenders: One or more confirmed drinking or tamper event.
- Compliant %: Those offenders with no confirmed alerts during duration of monitoring period
- Alerts: System-generated drinking or tamper alerts before data interpretation and analysis step (SCRAM generates the following alert types: drinking, obstruction, tamper or removal, and communication failures)

AKMS data was examined for patterns and details that were then addressed in the semi-structured interviews. The basic interview questions addressed, among other things, the pros and cons of the SCRAM system, ease of use, and specifics of failures due to cold or other inclement conditions including transmission and infrastructure problems. The extended interview questions probed for additional details based on the response to the question. For example, if an interviewee indicated that they had worked with systems other than SCRAMS, they were then asked to compare and contrast the systems used. Likewise, if problems were noted, they were asked for more detail concerning the nature of the problem.

Results from the interviews were remarkably consistent. With the exception of a moisture problem in Kotzebue, quickly corrected by AMS, Inc., there were no reports of mechanical failures or problems with the bracelets, modems, or network. Even in the cold of a Fairbanks winter or clients released to work on the North Slope the system worked reliably. In one instance, a client waded into and stood fishing in a cold river, and an analysis of the readouts accurately identified the conditions. Several clients worked outside construction jobs while wearing the bracelets; and even in these conditions the system still performed well.

While the initial idea of an extended pilot project in Kotzebue never really emerged and the SCRAM technology usage was halted in Kotzebue, it was not due to any failure of the technology itself. The Kotzebue jail was closed, key personnel retired or left, and attention was diverted to other communities. As Kotzebue Superior Court Judge Richard Erlich wrote in June of 2004, "...I really wanted to make sure you understand how really thankful we are for the use of this technology. It has made a difference in many people's lives."

While it may be argued that Fairbanks is not as rural a community as many other Alaska towns and regions, it still addresses issues of cold and other inclement conditions. It also remains the case that the SCRAM technology was tested in other regions where difficult conditions prevail. In all cases the technology has proven useful and, given the increase in use, the technology remains viable. Interview results show:

- 1) SCRAMS function well in using the rural Alaska satellite network.
- 2) There were no reports of failures with the bracelets, modems, or network.
- 3) The system is operational even in extreme cold and other inclement conditions.

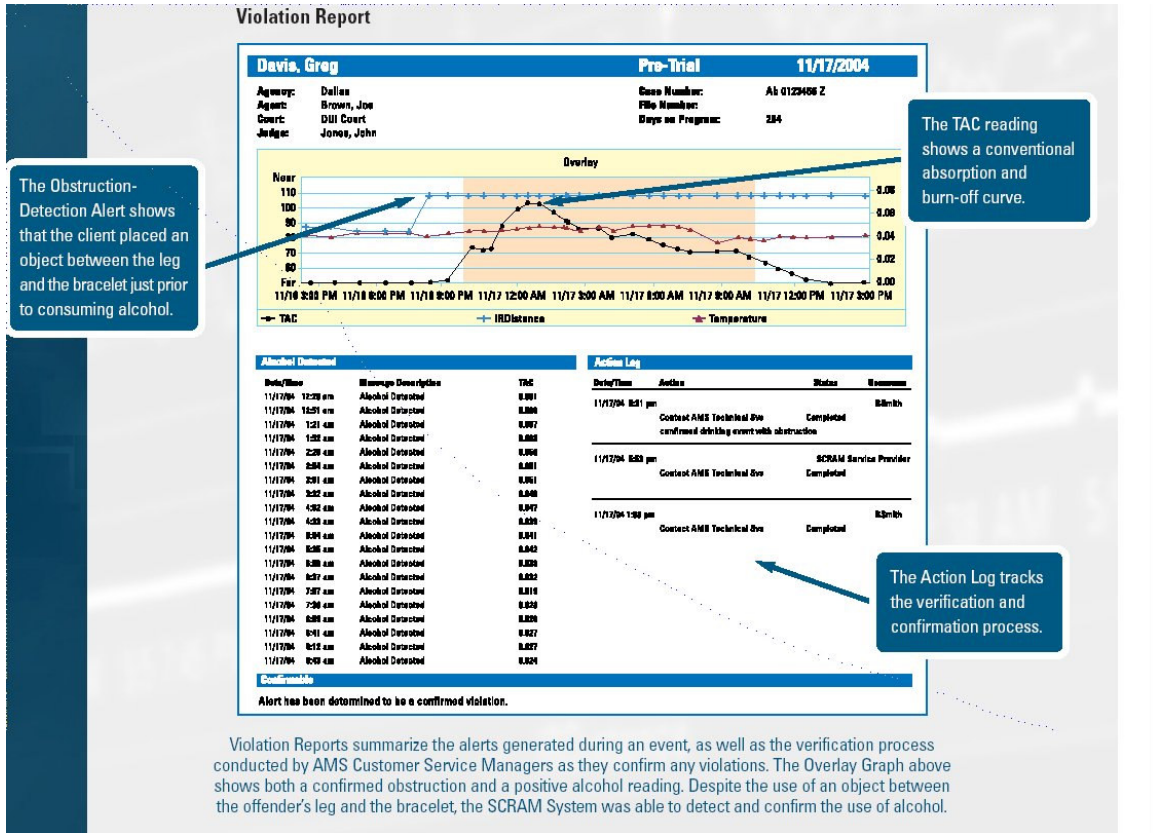
## **Technology:**

Secure Remote Alcohol Monitoring is an AMS, Inc. implementation of transdermal analysis to provide remote continuous monitoring of a clients' alcohol usage. Transdermal analysis is a method of sampling clients' sweat and measuring the amount of alcohol contained in the sweat. AMS, Inc.'s implementation uses an ankle bracelet to conduct the sampling and send the sampling information wirelessly to a modem which on a pre-selected schedule transmits the information to a central web site. Authorized personnel log on to the site at their convenience and check the monitoring. Alternatively, the system can be configured to send notices (i.e. e-mail) to the monitoring agent about potential tampering or violations.

Designed specifically for application in long-term monitoring programs where alcohol abstinence is required, SCRAM's continuous testing protocol is:

- 1) **Customizable.** Agencies can develop testing and reporting schedules unique to each offender.
- 2) **Cost-Effective.** Get 24 to 48 alcohol tests per day at a fraction of the cost of incarceration. Ninety percent of SCRAM offenders pay all or a significant portion of the daily fee.
- 3) **Passive.** Offenders maintain normal daily routines, including work, counseling, and family obligations, and testing does not have to be supervised.
- 4) **Tamper-Resistant.** The patented tamper system automatically alerts the supervising authority to any attempts to tamper or obstruct, and it can ensure readings are from the proper offender. The system will generate alerts about drinking, obstructions, tampers, removals, and communications failures.

The following chart, provided by AMS, Inc., shows various aspects of the SCRAM online report system's monitoring capabilities. The graph has a date/time stamp for the sample and levels for the three indicators: alcohol level, obstruction, and temperature. A table lists the date/time stamp and a description of the reading. The report also contains a tracking log to list actions taken regarding the readings or a set of events.



Violation Reports summarize the alerts generated during an event, as well as the verification process conducted by AMS Customer Service Managers as they confirm any violations. The Overlay Graph above shows both a confirmed obstruction and a positive alcohol reading. Despite the use of an object between the offender's leg and the bracelet, the SCRAM System was able to detect and confirm the use of alcohol.

For more information on NLECTC-NW:

<http://www.nlectc.org/nlectcnw/>

For information on the Alaska Justice Statistical Analysis Center:

<http://www.ajsac.state.ak.us>

For information on the Justice Center, University of Alaska, Anchorage:

<http://justice.uaa.alaska.edu/>

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