

**RESULTS OF CONFORMANCE TESTING OF  
SCREENING DEVICES  
TO MEASURE ALCOHOL IN BODILY FLUIDS**

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**JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER  
U. S. DEPARTMENT OF TRANSPORTATION  
CAMBRIDGE MA 02142**

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**INTERIM REPORT**

**PREPARED FOR**

**U. S. DEPARTMENT OF TRANSPORTATION  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
OFFICE OF IMPAIRED DRIVING and OCCUPANT PROTECTION**

**and**

**OFFICE OF RESEARCH and TECHNOLOGY**

**WASHINGTON, D. C. 20590**

Under National Highway Traffic Safety Administration Model Specifications for Screening Devices To Measure Alcohol in Bodily Fluids (59 FR 39382), Alcohol Screening Devices are devices which measure alcohol present in fluid from a human subject to indicate whether or not alcohol is present in the blood of that subject at or above a concentration of 0.02 BAC (grams alcohol per 100 ml blood). Any bodily fluid may be used for this determination, provided that a demonstrated scientific method for converting the measurement into BAC is available.

One breath test device was submitted to the U.S. Department of Transportation Volpe National Transportation Systems Center for evaluation during this reporting period:

<u>Device</u>	<u>Manufacturer</u>
Alcoscan AL-6000(MAX)	AK Solutions, Inc. / Sentech Korea Corp.

The AK Solutions, Inc. AL-6000 is a small hand-held screening device with a "Taguchi type" semiconductor detector. This screener is intended for personal use, but could be used by police or workplace testing personnel. The Alcoscan-6000 has a digital display. This device was found to meet all applicable requirements. Test results are tabulated below.

The Model Specifications are appended.

Test	Pass
1. Precision & Accuracy. 20 trials at 0.008 BAC    # positive    0 20 trials at 0.032 BAC    # negative    0	yes
2. Blank Reading: 20 trials at 0.000 BAC    # positive    0 # negative    20	yes
3. Light Conditions	*NA
4. Cigarette Smoke. 5 trials at 0.000 Bac    # positive    0	yes
5. Temperature. 5.1 at 10degC 20 trials at 0.008 BAC    # positive    0 20 trials at 0.032 BAC    # negative    0 5.2 at 40degC 20 trials at 0.008 BAC    # positive    0 20 trials at 0.032 BAC    # negative    0	yes  yes
6. Vibration. 20 trials at 0.008 BAC    # positive    0 20 trials at 0.032 BAC    # negative    0	yes

BAC: grms alcohol /210 liters air @34degC

Requirements:

Not more than one negative at 0.032 BAC

Not more than one positive at 0.008 BAC

Not more than one negative greater than zero and  
no positives at 0.000 BAC

Test 4: no positives

\*Not applicable. Device read-out does not require