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MAY 2005

- INTELLIGENCE ALERT -

**DIPROPYLTRYPTAMINE AND 5-METHOXY-*ALPHA*-METHYLTRYPTAMINE
IN ST. MARY'S COUNTY, MARYLAND**

The Maryland State Police - Forensic Sciences Division (Pikesville, Maryland) received a submission of three glass vials (approximately 4.5 x 1.3 centimeters) with (presumed) manufacturers' labels reading "N,N-Dipropyltryptamine HCl", "5-Methoxy-*alpha*-methyltryptamine (5-MeO-AMT)", and "5-Methoxy-N,N-dimethyltryptamine", along with some greenish-brown vegetable matter and a multi-colored glass-smoking device. An Emergency Medical Technician recovered the items from a college student who passed out in a campus dormitory lobby (campus located in St. Mary's County). The student later confessed to buying the vials off of the Internet, origin unknown. Two of the glass vials were blue; the label on one vial included a white horseshoe enclosed in a blue circle, and the other label included the letters "rac" in green hexagons. The third vial was brown with no logos (see Photos 1 and 2, next page). Each vial contained a sweet smelling, off-white powder (net weights not taken). Analysis by color testing, UV/Vis, FTIR, and GC/MS confirmed N,N-dipropyltryptamine, 5-MeO-AMT, and 5-methoxy-N,N-dimethyltryptamine in the vials so labelled (not quantitated). Additional analyses by color testing, UV-Vis, and GC-MS indicated that the greenish-brown vegetable matter contained no controlled substances, but that the smoking device contained 5-methoxy-N,N-dimethyltryptamine. It is suspected that the greenish-brown vegetable matter was used as a

medium for smoking the tryptamines. This was the first known submissions of these types to the Forensic Sciences Division. None of the identified tryptamines are currently controlled under Maryland statutes.

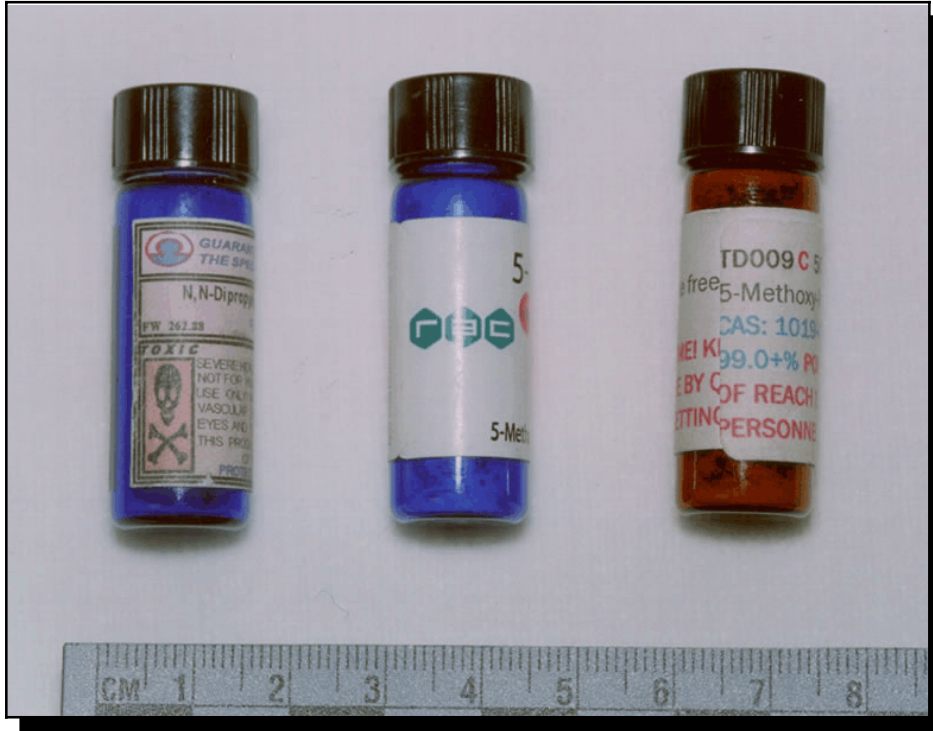


Photo 1



Photo 2

- INTELLIGENCE ALERT -

**POSSIBLE PEYOTE (PLANT MATERIAL CONTAINING MESCALINE)
IN WADSWORTH, ILLINOIS**

The Northern Illinois Police Crime Laboratory in Highland Park, Illinois recently received a plastic bag containing an atypical, dried, plant material (see Photo 3). The material (total net mass 25.05 grams) was seized in Wadsworth, Illinois, by the Lake County Sheriff's Office (circumstances of seizure not reported; Wadsworth is located nearly equidistant between Chicago, Illinois and Milwaukee, Wisconsin). The material produced a purple color when directly tested with the Marquis reagent, but a dried methanol extract produced an orange color. Analysis by GC/MS indicated mescaline, suggesting that the material was peyote or some other mescaline-containing cactus (could not be further identified). This was the first submission of this type to the Laboratory.



Photo 3

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- INTELLIGENCE ALERT -

**CAPSULES CONTAINING A MIXTURE OF MDMA, DIAZEPAM, AND
PSILOCIN IN BELLINGHAM, WASHINGTON**

The DEA Western Laboratory (San Francisco, California) recently received a submission of five clear capsules measuring 20 millimeters in length by 7 millimeters in diameter, and containing an average of 326 milligrams of light brown powder, suspected to be a controlled substance (photo not available). The exhibit was acquired in conjunction with other MDMA and cocaine exhibits by DEA Special Agents in Bellingham, Washington. Analysis of a basic extract of the powder by GC/MS indicated a mixture of MDMA and diazepam. However, close visual observation of the light brown powder removed from the capsules also showed large particles of spongy material, consistent with psilocybin mushrooms. Further (microscopic) examination revealed blue coloring in the spongy material (also suggestive of psilocybin mushrooms). Analysis of an acetic acid/ammonia base extraction of the material by GC/IRD confirmed psilocin, MDMA and diazepam. The MDMA was quantitated at 9.9 milligrams per capsule. The psilocin and diazepam were estimated to be present at less than 1% and 5%, respectively. This was the first submission to the Western Laboratory of capsules containing a mixture of MDMA, psilocybin mushrooms, and diazepam.

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- INTELLIGENCE ALERT -

CERAMIC “SUN FACE” STATUES CONTAINING MARIJUANA BRICKS (FROM MEXICO) IN PRINCE GEORGES COUNTY, MARYLAND

The DEA Mid-Atlantic Laboratory (Largo, Maryland) recently received 35 ceramic rectangular statues with a sun face, each containing various sized bricks of compressed plant material packaged in black or pink plastic wrap, suspected marijuana (see Photos 4 and 5). The statues were shipped in wooden crates from Jalisco, Mexico to Alexandria, Virginia via a commercial mail service, and were seized by the Prince George’s County Police Department after an employee of the mail service company observed the suspected marijuana in a damaged crate. The bricks ranged from 4 to 12 inches in length, and from 0.4 to 1.0 kilograms in weight. Analysis of the plant material (total net mass 34.9 kilograms) by mass spectrometry, microscopy, and color testing confirmed marijuana (THC not quantitated). This was the Mid-Atlantic Laboratory’s first encounter with this smuggling technique for marijuana.



Photo 4



Photo 5

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- INTELLIGENCE ALERT -

“THAI TABS” CONTAINING CANNABINOL AND CAFFEINE IN BANGKOK, THAILAND

The DEA Special Testing and Research Laboratory (Dulles, Virginia) recently received four mottled green colored tablets with a “WY” logo, apparent “Thai Tabs” (see Photo 6, next page). A second exhibit submitted with the tablets was a green powder matching the tablet color. The exhibits were obtained as a free sample from a confidential source in Bangkok, Thailand.

“Thai Tabs” (also known as “Ya-Ba” tablets) usually contain 10 - 20 percent d-methamphetamine HCl and 80 - 90 percent caffeine. The tablets in this case had an average tablet weight of 103 milligrams, a diameter of 6.05 millimeters, a width of 3 millimeters, and were otherwise unremarkable. Analysis by GC, GC/MS, FTIR, and NMR, however, indicated not a mixture of methamphetamine and caffeine but rather a mixture of 1.5 milligrams of cannabinal and 90 milligrams of caffeine per tablet. The powdered material (total net mass 0.90 grams) contained 1.6 percent cannabinal and 87 percent caffeine. This is the first time the Special Testing and Research Laboratory has encountered cannabinal in any tablet form.



Photo 6

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- INTELLIGENCE ALERT -

**HASHISH LABORATORY SEIZURE IN SANTA CRUZ, CALIFORNIA
YIELDS THC-LACED FOOD PRODUCTS**

[From the NDIC *Narcotics Digest Weekly* 2005;4(14):3
Unclassified, Reprinted with Permission.]

On March 9, 2005, members of the Santa Cruz Marijuana Enforcement Team (MET) and the Santa Cruz County Narcotics Enforcement Team (SCCNET) seized a hydroponic cannabis grow site and a hashish (hash) production operation. Law enforcement officers executed a search warrant at a Santa Cruz residence from which a 41-year-old male and a 24-year-old female allegedly distributed marijuana. Officers seized 27 hydroponic cannabis plants, 22 pounds of marijuana, approximately 1.5 gallons of hash oil (or "honey oil"), about 1.5 ounces of hash powder, 2 pounds of psilocybin mushrooms, marijuana and hash production equipment, and \$2,820. Officers also seized a cheesecake, nut ball, 2 dozen chocolate chip cookies, cookie dough, and 10 pounds of butter, all laden with THC (*delta-9-tetrahydrocannabinol*), the primary psychoactive chemical in marijuana and hash. The occupants were charged with possession of marijuana with intent to distribute and with production of hash; in addition to those charges, the male occupant was charged with possession of hallucinogenic psilocybin mushrooms.

NDIC Comment: All parts of the cannabis plant, including stems and leaves that typically are discarded in many cannabis grow operations, are used in the production of hash in order to extract additional THC. Although THC is soluble in very few substances, it dissolves in butane and in fats such as butter. Cannabis was mixed into melted butter that later was used as an ingredient in the seized THC-laden food products. Hash oil was produced by steeping cannabis in liquid butane, a highly volatile and flammable substance, to extract the THC into a concentrated, honey-colored liquid. Direct contact with butane in its gaseous form can cause asphyxia and in its liquid form can cause frostbite. Hash oil cooks often attempt to hasten butane evaporation by heating the butane-cannabis mixture on a stove or other heat source, further risking asphyxiation and explosion. Hash production is uncommon in the United States.

- INTELLIGENCE BRIEF -

LARGE SEIZURE OF BLACK TAR HEROIN IN CICERO, ILLINOIS

The DEA North Central Laboratory (Chicago, Illinois) recently received four cylindrical packages, each wrapped in black and red electrical tape, and each containing several white plastic bags, which in turn contained a very hard, compressed mass of a dark brown solid (total net mass 2004 grams), suspected black tar heroin (see Photo 7). The exhibits were acquired in Cicero, Illinois by Special Agents from the DEA Chicago Division. Analysis of a composited sample (ground to 20 mesh size) by GC and GC/MS confirmed 14 percent heroin (calculated as the hydrochloride salt), along with



Photo 7

O6-monoacetylmorphine (about 19 percent of the heroin peak), acetylcodeine (about 13 percent of the heroin peak), and several minor components: Papaverine, noscapine, meconin, and hydrocotarnine (each less than 1 percent of the heroin peak). Color testing and FTIR analyses were also performed; however, due to the consistency of the exhibit, these latter tests were inconclusive. It is not known why these exhibits were so hard. The North Central Laboratory rarely receives exhibits of black tar heroin of this size.

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- INTELLIGENCE BRIEF -

MDMA LABORATORY SEIZED NEAR UNIVERSITY IN BLACKSBURG, VIRGINIA

[From the NDIC *Narcotics Digest Weekly* 2005;4(14):1
Unclassified, Reprinted with Permission.]

On February 16, 2005, the U.S. Attorney for the Western District of Virginia announced the unsealing of a three-count, federal grand jury indictment dated February 10, 2005, that charges two men with the operation of a clandestine MDMA (3,4-methylenedioxymethamphetamine, also known as ecstasy) laboratory in Blacksburg. On February 1, 2005, Drug Enforcement Administration (DEA) agents, Blacksburg Police Department officers, and Virginia State Police officers served a search warrant at a Blacksburg residence, which was located less than 600 feet from a university campus, and seized the laboratory. The laboratory was located in the basement and had been operational for 2 years but less than 350 grams of MDMA had been produced in three production cycles - 100 grams each in the first and second cycles and 150 grams in the third cycle. At the time of the seizure, the laboratory operator was in the midst of the fourth

production cycle; he had hoped to produce his largest quantity - 500 to 1,000 grams. The accused laboratory operator was an undergraduate computer science major at the local university who had taken several chemistry courses. The second defendant, the alleged distributor, sold the MDMA in capsules containing approximately 80 milligrams for \$14 to \$16 per capsule in the Blacksburg area and in other cities in Virginia and North Carolina, and in Washington, D.C. The defendants also hosted rave parties in their basement laboratory, resulting in endangerment charges. Federal authorities seek the forfeiture of more than \$150,000, including laboratory cleanup costs. The defendants face a maximum penalty of 70 years in prison and/or a fine of \$3.25 million.

NDIC Comment: According to the Virginia State Police, this was the first laboratory seized in the Western District of Virginia and the largest MDMA laboratory seized in the state. Most of the MDMA available in Virginia - and in the continental United States - is produced in Europe. However, MDMA laboratories have been seized near universities in Arizona, California, Louisiana, New York, Pennsylvania, Tennessee, Texas, and Wisconsin. It is fairly common for laboratory operators to gain knowledge of chemical techniques by taking college courses. Teenagers and young adults are the primary MDMA abusers, and producers and distributors of the drug may choose to operate near universities because of the disproportionately high number of young adults in those areas. This laboratory was one of the larger MDMA laboratories seized in the United States, according to El Paso Intelligence Center (EPIC) National Clandestine Laboratory Seizure System (NCLSS) data. Although the laboratory operator had produced small quantities of MDMA before the laboratory seizure, the production capacity during the final cycle was 500 to 1,000 grams--or 1.1 to 2.2 pounds. Of the 16 MDMA laboratories seized in the United States in 2004 and reported to the NCLSS, only two had a production capacity of 2 pounds or more.

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- INTELLIGENCE BRIEF -

**ROUTINE TRAFFIC STOP NEAR SALEM, OREGON RESULTS IN THE
SECOND-LARGEST SEIZURE OF MDMA IN STATE HISTORY**

[From the NDIC *Narcotics Digest Weekly* 2005;4(14):4
Unclassified, Reprinted with Permission.]

On February 27, 2005, a routine traffic stop on Interstate 5 south of Salem led to the discovery of approximately 6.5 pounds of MDMA, reportedly the largest seizure of MDMA in the last 2 years in Oregon and the second largest in the state. An Oregon State Police (OSP) trooper stopped the driver of a rental vehicle for speeding and failure to signal a lane change. A consensual search of the vehicle revealed 9,876 light green MDMA tablets packaged in three cellophane-wrapped bags hidden in the trunk--two bags in the spare tire compartment and one behind the wheel well side paneling. Each bag was the size of a 2-pound bag of brown sugar. Currency totaling \$1,061 also was seized. The driver, a resident of Henderson (NV), claimed he was a physical fitness consultant and a bodyguard and told OSP authorities that he had flown to Seattle and was driving back to Las Vegas. Rental documentation indicated that the vehicle was to be dropped off in Las

Vegas within a 24-hour period. The driver was arrested and charged with possession and delivery of a Schedule I controlled substance.

NDIC Comment: Stringent security measures at airports throughout the country have caused drug traffickers to use private and commercial vehicles to transport drugs via highways. In this case, the suspect flew to Seattle - a major Pacific Region drug distribution center - to obtain MDMA and rented a vehicle to drive the drug to Las Vegas - a major MDMA consumption market - avoiding detection by airport security.

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Selected Intelligence Brief

Anabolic Steroid Control Act of 2004 (Additional Information)

On October 22, 2004 the President signed into law the Anabolic Steroid Control Act of 2004, Public Law 108-358 (see *Microgram Bulletin* 2004;37(12):210). The new provision became effective January 20, 2005, and brought to 59 the total number of steroids controlled. Per numerous requests to the *Microgram* Editor, the 59 steroids are listed below:

(i) androstenediol:

(I) 3 β ,17 β -dihydroxy-5 α -androstane; and

(II) 3 α ,17 β -dihydroxy-5 α -androstane;

(ii) androstenedione (5 α -androst-3,17-dione);

(iii) androstenediol:

(I) 1-androstenediol (3 β ,17 β -dihydroxy-5 α -androst-1-ene);

(II) 1-androstenediol (3 α ,17 β -dihydroxy-5 α -androst-1-ene);

(III) 4-androstenediol (3 β ,17 β -dihydroxy-androst-4-ene); and

(IV) 5-androstenediol (3 β ,17 β -dihydroxy-androst-5-ene);

(iv) androstenedione:

(I) 1-androstenedione ([5 α]-androst-1-en-3,17-dione);

(II) 4-androstenedione (androst-4-en-3,17-dione); and

(III) 5-androstenedione (androst-5-en-3,17-dione);

(v) bolasterone (7 α ,17 α -dimethyl-17 β -hydroxyandrost-4-en-3-one);

(vi) boldenone (17 β -hydroxyandrost-1,4,-diene-3-one);

- (vii) calusterone (7 β ,17 α -dimethyl-17 β -hydroxyandrost-4-en-3-one);
- (viii) clostebol (4-chloro-17 β -hydroxyandrost-4-en-3-one);
- (ix) dehydrochloromethyltestosterone (4-chloro-17 β -hydroxy-17 α -methyl-androst-1,4-dien-3-one);
- (x) Δ^1 -dihydrotestosterone (a.k.a. "1-testosterone") (17 β -hydroxy-5 α -androst-1-en-3-one);
- (xi) 4-dihydrotestosterone (17 β -hydroxy-androstan-3-one);
- (xii) drostanolone (17 β -hydroxy-2 α -methyl-5 α -androstan-3-one);
- (xiii) ethylestrenol (17 α -ethyl-17 β -hydroxyestr-4-ene);
- (xiv) fluoxymesterone (9-fluoro-17 α -methyl-11 β ,17 β -dihydroxyandrost-4-en-3-one);
- (xv) formebolone (2-formyl-17 α -methyl-11 α ,17 β -dihydroxyandrost-1,4-dien-3-one);
- (xvi) furazabol (17 α -methyl-17 β -hydroxyandrostan-2,3-c-furazan);
- (xvii) 13 β -ethyl-17 α -hydroxygon-4-en-3-one;
- (xviii) 4-hydroxytestosterone (4,17 β -dihydroxy-androst-4-en-3-one);
- (xix) 4-hydroxy-19-nortestosterone (4,17 β -dihydroxy-estr-4-en-3-one);
- (xx) mestanolone (17 α -methyl-17 β -hydroxy-5 α -androstan-3-one);
- (xxi) mesterolone (1 α -methyl-17 β -hydroxy-[5 α]-androstan-3-one);
- (xxii) methandienone (17 α -methyl-17 β -hydroxyandrost-1,4-dien-3-one);
- (xxiii) methandriol (17 α -methyl-3 β ,17 β -dihydroxyandrost-5-ene);
- (xxiv) methenolone (1-methyl-17 β -hydroxy-5 α -androst-1-en-3-one);
- (xxv) 17 α -methyl-3 β , 17 β -dihydroxy-5 α -androstane;
- (xxvi) 17 α -methyl-3 α ,17 β -dihydroxy-5 α -androstane;
- (xxvii) 17 α -methyl-3 β ,17 β -dihydroxyandrost-4-ene.
- (xxviii) 17 α -methyl-4-hydroxynandrolone (17 α -methyl-4-hydroxy-17 β -hydroxyestr-4-en-3-one);
- (xxix) methyldienolone (17 α -methyl-17 β -hydroxyestra-4,9(10)-dien-3-one);
- (xxx) methyltrienolone (17 α -methyl-17 β -hydroxyestra-4,9-11-trien-3-one);
- (xxxi) methyltestosterone (17 α -methyl-17 β -hydroxyandrost-4-en-3-one);

- (xxxii) mibolerone (7 α ,17 α -dimethyl-17 β -hydroxyestr-4-en-3-one);
- (xxxiii) 17 α -methyl- Δ ¹-dihydrotestosterone (17 β -hydroxy-17 α -methyl-5 α -androst-1-en-3-one) (a.k.a. “17-a-methyl-1-testosterone”);
- (xxxiv) nandrolone (17 β -hydroxyestr-4-en-3-one);
- (xxxv) norandrostenediol:
- (I) 19-nor-4-androstenediol (3 β ,17 β -dihydroxyestr-4-ene);
 - (II) 19-nor-4-androstenediol (3 α ,17 β -dihydroxyestr-4-ene);
 - (III) 19-nor-5-androstenediol (3 β ,17 β -dihydroxyestr-5-ene); and
 - (IV) 19-nor-5-androstenediol (3 α ,17 β -dihydroxyestr-5-ene);
- (xxxvi) norandrostenedione:
- (I) 19-nor-4-androstenedione (estr-4-en-3,17-dione); and
 - (II) 19-nor-5-androstenedione (estr-5-en-3,17-dione);
- (xxxvii) norbolethone (13 β ,17 α -diethyl-17 β -hydroxygon-4-en-3-one);
- (xxxviii) norclostebol (4-chloro-17 β -hydroxyestr-4-en-3-one);
- (xxxix) norethandrolone (17 α -ethyl-17 β -hydroxyestr-4-en-3-one);
- (xl) normethandrolone (17 α -methyl-17 β -hydroxyestr-4-en-3-one);
- (xli) oxandrolone (17 α -methyl-17 β -hydroxy-2-oxa-[5 α]-androstan-3-one);
- (xlii) oxymesterone (17 α -methyl-4,17 β -dihydroxyandrost-4-en-3-one);
- (xliii) oxymetholone (17 α -methyl-2-hydroxymethylene-17 β -hydroxy-[5 α]-androstan-3-one);
- (xliv) stanozolol (17 α -methyl-17 β -hydroxy-[5 α]-androst-2-eno[3,2-c]-pyrazole);
- (xlv) stenbolone (17 β -hydroxy-2-methyl-[5 α]-androst-1-en-3-one);
- (xlvi) testolactone (13-hydroxy-3-oxo-13,17-secoandrosta-1,4-dien-17-oic acid lactone);
- (xlvii) testosterone (17 β -hydroxyandrost-4-en-3-one);
- (xlviii) tetrahydrogestrinone (13 β ,17 α -diethyl-17 β -hydroxygon-4,9,11-trien-3-one);
- (xlix) trenbolone (17 β -hydroxyestr-4,9,11-trien-3-one);

and any salt, ester, or ether of a drug or substance described in this list.

Selected Intelligence Brief

Supreme Court Confirms That a Dog Sniff of a Car During a Traffic Stop is not a Fourth Amendment Search

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[From *The Police Chief* 2005;72(3):8
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A dog sniff of an inanimate object that law enforcement officers have lawfully seized is not a search within the meaning of the Fourth Amendment. The U.S. Supreme Court once again confirmed this principle in the Court's recent decision of *Illinois v. Caballes*. [1] In *Caballes* the Court addressed the use of a narcotics-detection dog to sniff a car during the course of a traffic stop. In a 6-2 vote overturning the judgment of the Illinois Supreme Court, the U.S. Supreme Court stated that a "dog sniff conducted during a concededly lawful traffic stop that reveals no information other than the location of a substance that no individual has any right to possess does not violate the Fourth Amendment." [2]

The Traffic Stop

In *Caballes* an Illinois state trooper stopped the defendant for speeding. After the trooper informed the dispatcher that he was making the stop, another trooper who heard the radio transmission immediately went to the location of the stop with his narcotics-detection dog. The trooper who made the traffic stop had not requested the assistance of the canine unit.

When the canine unit arrived at the scene, the defendant's car was parked on the shoulder of the highway. The defendant was sitting in the car of the trooper who had pulled him over for the traffic violation and that trooper was still writing him a warning ticket. The second trooper walked his dog around the defendant's car. The dog quickly alerted to the defendant's trunk. The troopers searched the trunk and found marijuana inside. The U.S. Supreme Court specifically noted that the "entire incident lasted less than 10 minutes." [3]

The trial court denied the defendant's motion to suppress and found the defendant guilty after a bench trial. The trial court sentenced the defendant to a \$256,136 fine and 12 years' imprisonment. The appellate court affirmed. The Illinois Supreme Court reversed the judgments of the lower courts and concluded that the use of the dog in the case unjustifiably expanded the scope of the traffic stop without the requisite level of suspicion to suggest drug activity.

The Dog Sniff

In *Caballes* the U.S. Supreme Court agreed to review the case [4] to address the narrow question of "whether the Fourth Amendment requires reasonable, articulable suspicion to justify using a drug-detection dog to sniff a vehicle during a legitimate traffic stop." [5] Because the Court proceeded under the assumption that the trooper who walked the dog around the car had no information about the defendant other than that he had been stopped for speeding, the Court omitted any reference to any facts about the defendant that may have been suspicious.

The Court found that the trooper's stop of the defendant for speeding was a concededly lawful seizure based on probable cause. The Court stated, however, that it "is nevertheless clear that a seizure that is lawful at its inception can violate the Fourth Amendment if its manner of execution unreasonably infringes interests protected by the Constitution." [6] The Court explained that a traffic stop could become unlawful if the seizure is justified only by the interest in issuing a warning ticket and it "is prolonged beyond the time reasonably required to complete that mission." [7]

The U.S. Supreme Court took issue with the Illinois Supreme Court's position that the canine sniff outside of the defendant's car made the initially lawful stop for the speeding violation an unlawful seizure. The Illinois Supreme Court had expressed the view that the use of the dog without any reasonable suspicion that the defendant's car contained narcotics converted the police-citizen encounter from the traffic stop into a drug investigation. In considering this issue, the U.S. Supreme Court stated:

"In our view, conducting a dog sniff would not change the character of a traffic stop that is lawful at its inception and otherwise executed in a reasonable manner, unless the dog sniff itself infringed respondent's constitutionally protected interest in privacy. Our cases hold that it did not." [8]

The U.S. Supreme Court cited a number of its prior decisions in reaching the conclusion that the use of the dog in *Caballes* did not violate the Fourth Amendment. For example, the court cited the 1984 case of *United States v. Jacobsen*. [9] The *Jacobsen* case involved a Drug Enforcement Administration (DEA) agent who opened a damaged package containing four plastic bags of white powder concealed in a tube initially opened by employees of an overnight delivery company. The agent removed a trace amount of the powder from one of the bags, conducted a field test, and determined the substance to be cocaine. The Court concluded: "A chemical test that merely discloses whether or not a particular substance is cocaine does not compromise any legitimate interest in privacy." [10] Citing to *Jacobsen*, the Court in *Caballes* stated: "Official conduct that does not 'compromise any legitimate interest in privacy' is not a search subject to the Fourth Amendment." [11]

The Court also mentioned *United States v. Place* [12] and *Indianapolis v. Edmond* [13], two prior U.S. Supreme Court cases that addressed narcotics-detection dog sniffs. The 1983 case *United States v. Place* involved the exposure of a temporarily detained piece of luggage to a narcotics-detection dog. In *Place* agents seized Place's bag and, 90 minutes later, submitted it to a canine sniff. The Court found the initial seizure of Place's luggage legitimate based on a reasonable suspicion that it contained contraband. However, the Court proceeded to find that the length of the detention of the bag, standing alone, constituted a Fourth Amendment violation in the absence of probable cause. After stating that a person has a privacy interest protected by the Fourth Amendment in the contents of luggage, the Court concluded that the exposure of the luggage to a canine sniff did not constitute a search. The Court stated:

"A 'canine sniff' by a well-trained narcotics-detection dog, however, does not require opening the luggage. It does not expose noncontraband items that otherwise would remain hidden from public view, as does, for example, an officer's rummaging through the contents of the luggage. Thus, the manner in which the information is obtained through this investigative technique is much less intrusive than a typical search. Moreover, the sniff discloses only the presence or absence of narcotics, a contraband item. Thus, despite the fact that the sniff tells the authorities something about the contents of the luggage, the information obtained is limited. This limited disclosure also ensures that the owner of the property is not subjected to the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods." [14]

In *City of Indianapolis v. Edmond* officers walked a narcotics-detection dog around cars stopped at a narcotics checkpoint established by police. Although the Court found that the checkpoints violated the Fourth Amendment, the Court stated the following with respect to the canine sniffs:

“The fact that officers walk a narcotics-detection dog around the exterior of each car at the Indianapolis checkpoints does not transform the seizure into a search. Just as in Place, an exterior sniff of an automobile does not require entry into the car and is not designed to disclose any information other than the presence or absence of narcotics. Like the dog sniff in Place, a sniff by a dog that simply walks around a car is ‘much less intrusive than a typical search.’” [15]

Reaffirming this principle in *Caballes*, the Court stated that it had previously treated a narcotics-detection dog sniff as unique “because it ‘discloses only the presence or absence of narcotics, a contraband item.’” [16]

In *Caballes* the Court found it significant that the second trooper walked the dog around the outside of the defendant's car while he was lawfully seized for speeding. The Court stated: “Any intrusion on respondent's privacy expectations does not rise to the level of a constitutionally cognizable infringement.” [17] This is consistent with the previous positions taken by the Court in both *Place* and *Edmond*. The Court also stated that there was no evidence or findings in the record to support the defendant's argument that dog alert error rates call into question whether narcotics-detection canines only alert to contraband.

The Court ended its short opinion in *Caballes* with a discussion of its 2001 decision in *Kyllo v. United States*. [18] In *Kyllo* the court ruled that “the use of a thermal-imaging device to detect the growth of marijuana in a home constituted an unlawful search.” [19] The *Kyllo* Court had been concerned about using a device to detect lawful activity taking place in a person's home. The Court distinguished the *Caballes* decision from *Kyllo* by specifically stating: “The legitimate expectation that information about perfectly lawful activity will remain private is categorically distinguishable from respondent’s hopes or expectations concerning the nondetection of contraband in the trunk of his car.” [20]

Summary

The holding in *Caballes* is a narrow one, but the case provides important guidance for law enforcement. Following the logic of the *Caballes* majority, the Court confirmed that there is no legitimate privacy interest in contraband. Because a dog sniff by a well-trained narcotics-detection dog is likely to disclose only the presence or absence of a contraband item, that sniff is not a Fourth Amendment search when done during a lawfully made and ongoing traffic stop. The Court has confirmed, once again, the principle that once the police lawfully seize an item, the use of a narcotics-detection dog to sniff the item without a search warrant or other applicable exception to the search warrant requirement does not transform the seizure into an unlawful search.

It also should be noted that the Court stated that an initially lawful seizure could be transformed into an unlawful seizure if “its manner of execution unreasonably infringes interests protected by the Constitution.” [21] If a narcotics-detection dog sniff were conducted during an unlawful detention, the Court implied that the use of the dog and any resulting discovery of contraband would be found to constitute the product of an unlawful seizure. [22] Because of the narrowness of the Court's decision in *Caballes*, officers should continue to consult with their legal advisors regarding the use of narcotics-detection dogs during traffic stops and in other investigative situations and contexts. [23]

1. 125 S. Ct. 834, 2005 WL 123826 (U.S.).
2. Id. at 838, 2005 WL 123826 at *3.

3. Id. at 835, 2005 WL 123826 at *1.
4. 541 U.S. 972 (2004).
5. 125 S. Ct. 834, 2005 WL 123826 (U.S.).
6. Id. at 835, 2005 WL 123826, at *1.
7. Id. at 837, 2005 WL 123826, at *2.
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[Notes: Selected references are a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Listed mailing address information (which is sometimes cryptic or incomplete) exactly duplicates that provided by the abstracting services. Patents are reported only by their *Chemical Abstracts* citation number.]

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THE DEA FY - 2005 AND FY-2006 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The remaining FY - 2005 schedule for the DEA's State and Local Forensic Chemists Seminar is as follows:

July 11 - 15, 2005
September 19 - 23, 2005

The FY-2006 schedule is as follows:

November 14 - 18, 2005
February 6 - 10, 2006
May 8 - 12, 2006
July 10 - 14, 2006
September 11 - 15, 2006

Note that the school is open only to forensic chemists working for law enforcement agencies, and is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge for this course. The course is held at the AmeriSuites Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of the August 2004 issue of *Microgram Bulletin*. Completed applications should be mailed to the Special Testing and Research Laboratory (Attention: Pam Smith or Jennifer Kerlavage) at: 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, call 703/668-3337.

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SCIENTIFIC MEETINGS

- 1. Title:** 17th Triennial Meeting of the International Association of Forensic Sciences (IAFS) (Second Bimonthly Posting)
Sponsoring Organization: International Association of Forensic Sciences
Inclusive Dates: August 21 - 26, 2005
Location: Hong Kong Convention and Exhibition Centre (Hong Kong)
Contact Information: See Website
Website: www.iafs2005.com

2. Title: 15th Annual CLIC Technical Training Seminar

(First Monthly Posting)

Sponsoring Organization: Clandestine Laboratory Investigating Chemists Association

Inclusive Dates: September 7 - 10, 2005

Location: St. Louis, MO

Contact Information: O. Carl Anderson, Kansas Bureau of Investigation, [carl.anderson -at- kbi.state.ks.us](mailto:carl.anderson@kbi.state.ks.us)

Website: None

3. Title: Midwestern Association of Forensic Scientists (MAFS) Annual Fall Meeting

(First Monthly Posting)

Sponsoring Organization: Midwestern Association of Forensic Scientists

Inclusive Dates: October 3 - 7, 2005

Location: St. Louis, MO

Contact Information: Bryan Hampton, [bhampton -at- saintcharlescounty.org](mailto:bhampton@stcharlescounty.org)

Website: None

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Computer Corner

ASCLD/LAB-*International* Accreditation - What's New?

#194

by Michael J. Phelan
DEA Digital Evidence
Laboratory

The American Society of Crime Laboratory Directors / Laboratory Accreditation Board (ASCLD/LAB) was established in 1981, and has been accrediting crime laboratories in the United States and many other countries since its inception. Approximately 300 crime laboratories have been accredited over the last 24 years. Accreditation is a quality assurance process that has as its goals to: 1) Improve the quality of laboratory services; 2) develop and maintain standards which can be used to assess a laboratory's level of performance; 3) provide independent, impartial, and objective reviews of laboratory operations and quality control; and 4) provide the public with a recognizable means to identify laboratories that meet ASCLD/LAB standards. The original program was based upon a set of approximately 140 standards that covered laboratory administration, evidence handling, quality assurance, and examination practices. ASCLD/LAB currently offers accreditation in many forensic disciplines, including controlled substances, firearms and tool marks, latent fingerprints, DNA, toxicology, trace evidence, questioned documents, and crime scene analysis. In 2003, ASCLD/LAB recognized the discipline of digital evidence, with four

sub-disciplines: Computer forensics, audio analysis, video analysis, and digital imaging analysis.

In 2004, ASCLD/LAB began to offer a second accreditation program based upon the requirements of International Organization on Standards (ISO) 17025 (1999 general requirements for the competence of testing), supplemented by the 2003 ASCLD/LAB-Legacy program and the International Laboratory Accreditation Cooperative's November 2002 Guidelines for Forensic Sciences (ILAC G-19). This second accreditation program is known as the ASCLD/LAB-*International* accreditation program.

The DEA Digital Evidence Laboratory was accredited by ASCLD/LAB in February, 2005, becoming the first to be accredited under the new *International* program.

The DEA Laboratory system's experience with the ASCLD/LAB-*International* assessment process has been very positive. In retrospect, DEA's Digital Evidence Laboratory clearly benefitted from a complete review of all operating and quality control practices. This has improved the work product, the work process, supporting documentation, and

quality control infrastructure. It has also provided direction for future laboratory management activities and initiatives because accreditation is not a static, one-time achievement, but rather an ongoing process that requires continual effort to maintain the required standards.

The *International* program has much in common with the original accreditation program. The similarities include examination best practices, examination controls (positive and negative), evidence handling and control, examiner proficiency testing (external and internal), examiner training, new examiner qualification testing, instrument monitoring, tool validation, laboratory security, the laboratory facility (facilities), and laboratory administration issues.

The *International* program is based on the need for laboratories to have well documented operating and quality assurance policy and procedures. Much of the assessment is based upon a laboratory's ability to demonstrate conformance to its own standard operating procedures and quality assurance policies and procedures.

The *International* assessment for forensic laboratories involves approximately 300 criteria.

Most of these criteria apply to digital evidence laboratories. The *International* program requires 100 percent compliance with all relevant criteria in order to be accredited. Conforming to all criteria is a challenge, but it is achievable if sufficient time, resources, and upper management support are provided.

The original ASCLD/LAB program has a total of 145 potential criteria. Most apply to digital evidence. Criteria that are designated “essential” (by ASCLD/LAB) require 100 percent compliance. Additionally, criteria that are designated as “important” must have at least 75 percent compliance in order to be accredited. Similarly, criteria that are designated as “desirable” must have at least 50 percent compliance. ASCLD/LAB currently offers accreditation using either the original program criteria or the recently approved *International* criteria.

It is important to understand that the role of the ASCLD/LAB original program Inspector and ASCLD/LAB-*International* Assessor are different. The Inspector is tasked with evaluating compliance with the published ASCLD/LAB standards. The Assessor is tasked with assessing laboratory policies and procedures and laboratory conformance. Under the *International* program (using ISO methodologies), the burden of proof is placed on the Assessor to demonstrate non-conformance by the laboratory. This is a subtle but

important point, and it manifests itself in the required supporting documentation that ASCLD/LAB-*International* laboratories must have in order for the Assessors to perform their job.

There are three principal differences between *International* and the original accreditation programs. First, the *International* program requires substantially more policy and procedure documentation of most aspects of laboratory operations and quality assurance. Second, there is greater emphasis placed on customer needs and requirements. Third, there is more emphasis on standards and reference collection documentation (i.e., that they should be traceable and controlled). A fourth area dealing with quantitative measurement uncertainty is also emphasized, but it is not applicable to the digital evidence discipline at this time.

The DEA Digital Evidence Laboratory approached the accreditation challenge by first reviewing all assessment criteria and determining how the requirements apply to digital evidence. Many of the criteria are articulated using generic ISO laboratory testing and calibration language, and are therefore more easily interpreted if the terms “digital analysis laboratory” or “forensic laboratory” are substituted for the term “testing laboratory.” As previously noted, there are special requirements for calibration laboratories, but they are not applicable to digital evidence

examination laboratories.

The DEA Digital Evidence Laboratory was fortunate to be able to write its standard operating procedures and quality assurance manual with *a priori* knowledge of the *International* and Legacy criteria. It is important that all criteria be addressed in either the laboratory’s standard operating procedures or quality control systems. In fact, laboratory management will have to provide (in advance of the actual assessment visit) policy and procedural references, and supporting documentation showing how the laboratory conforms to each criteria.

The effort to prepare for an ASCLD/LAB accreditation assessment visit is substantial. It took DEA’s Digital Evidence Laboratory many work-months of effort to prepare. It is recommended that any laboratory considering accreditation: 1) Secure top management support; 2) familiarize themselves with the ASCLD/LAB criteria; 3) designate a Quality Assurance Manager as soon as possible to begin to assemble the needed supporting documentation and operating procedures; 4) meet with management personnel from other digital evidence laboratories that have successfully completed the ASCLD/LAB accreditation process and learn from their experiences; 5) consider having an outside pre-inspection conducted prior to the scheduled inspection date to identify weakness or deficiencies; 6) correct all identified

deficiencies; and 7) anticipate that there will be some corrective action responses needed based upon the assessment team's formal visit.

Deficiencies under the *International* program are categorized at two Levels, designated as Levels I and II. A Level I finding (referred to as a non-conformity) directly affects and has a fundamental impact on the work product of the laboratory, or on the integrity of the evidence. For example, a deficiency in evidence handling or an examination protocol could result in a Level I finding. A Level II non-conformity does not, to any significant degree, affect the fundamental reliability of the work product of the laboratory or on the integrity of the evidence. Examples of Level II findings include concern over the supporting file system organization or in the level of detail of the supporting documentation. Additional comments that suggest improvements or recommendations regarding laboratory practices (but which do not constitute a finding of non-conformity or have a bearing on accreditation) may also be made. All non-conformities (including all corrective action responses) are presented to the laboratory director at the conclusion of the assessment visit in a Summary Assessment Conference. A formal full assessment report (reviewed by ASCLD/LAB) is completed within 15 days of the Summation Assessment Conference and provided to the laboratory.

Every laboratory is given a fixed period of time to correct all deficiencies identified in the assessment visit. All Level I non-conformities must be corrected within 180 days of the assessment summation conference, and must be corrected before the lead assessor may make a recommendation for a laboratory to be accredited. All Level II non-conformities must be corrected before the next annual surveillance visit. DEA's Digital Laboratory had eight non-conformities identified, all of which were corrected within 60 days.

ASCLD/LAB-*International* accreditation is granted for five years from the date that the ASCLD/LAB Board of Directors accepts the recommendation of the Lead Assessor. Each accredited laboratory must continuously maintain the ASCLD/LAB standards and satisfy the requirement to successfully have an annual "surveillance" visit conducted by an ASCLD/LAB approved ISO assessor. Other required compliance monitoring techniques include completion of an annual audit accreditation report, and submission of proficiency testing reports by approved test providers must be submitted annually.

Digital evidence laboratory accreditation is a relatively new forensic science initiative. ASCLD/LAB recognized the discipline of Digital Evidence in July, 2003. It is recommended that all organizations that are considering accreditation design their operating and quality

control programs using the ASCLD/LAB-*International* criteria. The additional level of effort and time on the part of laboratory staff and management will gain international recognition of the program's work product. A global world requires a global work product that meets global standards.

Questions or comments?:
E-mail: Michael.J.Phelan-usdoj.gov