# 53RD MILITARY JUDGE COURSE

# URINALYSIS

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# URINALYSIS

## Outline of Instruction

## I. INTRODUCTION.

A. References.

1. U.S. DEP'T OF DEF., DIR. 1010.1, MILITARY PERSONNEL DRUG ABUSE TESTING PROGRAM (9 Dec. 1994) (C1, 11 Jan. 1999).

2. U.S. DEP'T OF DEF., INSTR. 1010.16, TECHNICAL PROCEDURES FOR THE MILITARY PERSONNEL DRUG ABUSE TESTING PROGRAM (9 Dec. 1994).

3. U.S. DEP'T OF ARMY, REG. 600-85, THE ARMY SUBSTANCE ABUSE PROGRAM (2 Feb. 2009) [hereinafter AR 600-85].

4. Army Center for Substance Abuse Programs, Drug Testing Branch, Alexandria, VA. http://www.acsap.army.mil/. Telephone: (703) 681-5566.

## II. SCIENTIFIC ASPECTS OF URINALYSIS PROGRAM.

A. What Urinalysis Test Proves.

1. Urine test proves only past use; it proves that drug or drug metabolites (waste products) are in the urine.

2. Urine test does not prove:

a. Impairment.

b. Single or multiple usages.

c. Method of ingestion.

d. Knowing ingestion. In the past ten years, there have been dramatic changes regarding the use of the permissive inference for proof of "knowing" ingestion. Previously, the presence of an amount of drug metabolite allowed a permissible inference that the accused knowingly consumed a particular drug. *United States v. Mance*, 26 M.J. 244 (C.M.A. 1988). The government's burden was made considerably heavier (to raise the permissible inference) after *United States v. Campbell*, 50 M.J. 154 (C.A.A.F. 1999), *supplemented on reconsideration*, 52 M.J. 386 (C.A.A.F. 2000). The CAAF later backed off of this heavier burden in *United States v. Green*, 55 M.J. 76 (C.A.A.F. 2001). In *Green*, the CAAF emphasized the importance of the Military Judge as the "gatekeeper to determine whether . . . expert testimony has established an adequate foundation with respect to reliability and relevance." *Id*. at 80. Some of the more troubling "factors" announced by the court in *Campbell* are not mandatory but may still be applicable in urinalysis cases dealing with novel testing methods or procedures. *Id*. at 80.

B. Drugs Tested.

1. Marijuana (THC metabolite)

2. Cocaine (BZE metabolite)

3. Other drugs tested (some only upon request):

a. LSD – removed from the testing program in 2006. Still periodically screened for under the "prevalence program."
b. Opiates (morphine, codeine, 6-MAM metabolite of heroin)
c. PCP
d. Amphetamines; including designer amphetamines MDMA, MDA, MDEA
e. Oxymorphone/Oxycodone
f. Anabolic steroids – testing only done by UCLA.

C. Drug Metabolites.

1. Marijuana.

a. Main psychoactive ingredient is delta 9-tetrahydro-cannabinol (short name: delta-9 THC).

b. Main metabolite (waste product) of delta-9 THC is delta 9-tetrahydrocannabinol-9-carboxylic acid (short name: 9-carboxyl THC). This is the metabolite tested for within DOD.

c. 9-carboxyl THC is not psychoactive, and is not the only metabolite. 10-90% percent of the total number of metabolites are 9-carboxyl THC.

d. 9-carboxyl THC is found in urine only when human body metabolizes marijuana; it cannot be naturally produced by human body.

2. Cocaine.

a. Main metabolite is benzoylecgonine (BZE).

(1) This is the metabolite tested for within DOD.

(2) BZE is found in urine when human body metabolizes cocaine; it cannot be naturally produced by human body, but can be produced by introducing cocaine directly into urine (no metabolizing needed).

b. Another metabolite is ecgonine methyl ester (EME).

(1) This metabolite is not tested for within DOD.

(2) EME dissipates from the body more quickly than BZE.

(3) EME is found in urine when human body metabolizes cocaine; it cannot be naturally produced by human body and cannot be produced by introducing cocaine directly into urine.

D. Army Testing Procedures. *See* AR 600-85, Appendix E for full procedures.

1. Unit Prevention Leader (UPL).

a. Prepares urine sample bottle by placing Soldier's social security number, Base Area Code (BAC), and date on bottle.

b. Prepares DD Form 2624 (chain of custody form) listing up to 12 samples on form.

c. Prepares urinalysis ledger listing all samples.

d. Directs the Soldier to verify his information on the bottle label, unit ledger, and DD form 2624. The Soldier will then initial the bottle label. His/her initials are verification.

e. Removes a new collection bottle from the box in front of the Soldier and replace it with the Soldier's military ID card. The UPL will then affix the label to the bottle, in full view of both the Soldier and the observer, and hand it to the Soldier.

2. Observer.

a. Directly observes Soldier provide a sample of at least 30 mL (approximately half the specimen bottle) and place cap on bottle. (The observer must see urine leaving the Soldier's body and entering the specimen bottle).

b. Return with the Soldier to the UPL's station. The observer will keep the bottle in sight at all times.

c. Observes Soldier return the bottle to UPL.

3. UPL/Observer/Soldier.

a. UPL affixes red tamper evident tape seal across the bottle cap and then initials the bottle label.

b. UPL places the specimen in the collection box, removing the Soldier's ID card.

c. Observer signs the unit ledger in front of both the observer and UPL and Soldier to verify he/she complied with the collection process and directly observed the Soldier provide the sample and maintained eye contact with the specimen until it was placed in the collection box.

d. Solider will then sign the unit ledger in front of the observer and UPL verifying that he/she provided the urine in the specimen bottle and that he/she observed the specimen being sealed with tamper evident tape and placed into the collection box.

e. UPL will return the Soldier's ID card and release him/her from testing.

f. Once the UPL accepts a completed sample the specimen chain of custody begins. The specimens are sent to the drug testing laboratory.

4. Drug Testing Coordinator.

a. Receives samples from UPL (usually the same day as the sample collection). Ensures samples and forms are in proper order and signs chain of custody form.

b. Ensures bottles are sealed and mails them to laboratory for testing.

E. Testing Facilities Used by Army.

1. Army Forensic Toxicology Drug Testing Laboratory, Tripler Medical Center, Honolulu, HI. Telephone: (808) 433-5176.

2. Army Forensic Toxicology Drug Testing Laboratory, Fort Meade, MD. Telephone: (301) 677-7085.

3. The Army does utilize other DoD testing facilities.

F. Urinalysis Tests Used.

1. Laboratory tests:

a. Screening test: immunoassay (KIMS Technology) or "Enzyme Multiplied Immunoassay Technique" (E.M.I.T. - Syva Co.) depending on the drug being tested.

(1) Used at Army and Air Force laboratories. Civilian samples are tested at Fort Meade, MD.

(2) Test attaches chemical markers to metabolites and measures transmission of light through sample. Every positive screened twice.

(3) Test is not 100% accurate, but screens out most negatives.

b. Confirming test: gas chromatography/mass spectroscopy (GC/MS).

(1) Used at Army and Air Force laboratories.

(2) GC test measures period of time molecules in sample take to traverse a tube; drug metabolites traverse tube in characteristic period of time.

(3) MS test fragments molecules in sample and records the fragments on spectrum. Metabolite fragments are unique.

(4) Test is 100% accurate.

G. Cut-off Levels. DOD and urine testing laboratories have established "cut-off" levels. Samples which give test results below these cut-off levels are reported as negative. A sample is reported as positive only if it gives test results above the cut-off level during both the screening (every positive screened twice) and the confirming test.

1. Cut-off levels for screening tests (EMIT and IA):

| *Drug* | *ng/ml* |
|---|---|
| Marijuana (THC) | 50 |
| Cocaine (BZE) | 150 |
| Amphetamine/Methamphetamine | 500 |
| Designer Amphetamines (MDMA, MDA, MDEA) | 500 |
| Opiates | |
| Morphine/Codeine | 2000 |
| Oxycodone/Oxymorphone | 100 |
| 6-monoacetylmorphine (heroin) | 10 |
| Phencyclidine (PCP) | 25 |

2. Cut-off levels for GC/MS test:

| *Drug* | *ng/ml* |
|---|---|
| Marijuana (THC) | 15 |
| Cocaine (BZE) | 100 |
| Amphetamine/Methamphetamine | 100 |
| Designer Amphetamines: (MDMA, MDA, MDEA) | 500 |
| Opiates | |
| Morphine | 4000 |
| Codeine | 2000 |
| Oxycodone/Oxymorphone | 100 |
| 6-monoacetylmorphine (heroin) | 10 |
| Phencyclidine (PCP) | 25 |

H. Drug Detection Times.

1. Time periods which drugs and drug metabolites remain in the body at levels sufficient to detect are listed below. Source: U.S. Army Drug Oversight Agency & Technical Consultation Center, Syva Company, San Jose, California, telephone: 1-800-227-8994 (Syva).

| *Drug* | *Approximate Retention Time* |
|---|---|
| Marijuana (THC) (Half-life 36 Hours) | |
| Acute dosage (1-2 joints): | 2-3 days |
| Marijuana (eaten): | 1-5 days |
| Moderate smoker (4 times per week): | 5 days |
| Heavy smoker (daily): | 10 days |
| Chronic smoker: | 14-18 days (may be 20 days or longer) |
| Cocaine (BZE) (Half-life 4 Hours): | 2-4 days |
| Amphetamines: | 1-2 days (2-4 days if heavy use) |
| Barbiturates | |
| Short-acting (e.g. secobarbital): | 1 day |
| Long-acting (e.g. phenobarbital): | 2-3 weeks |
| Opiates: | 2 days |
| Phencyclidine (PCP): | 14 days |

2. Factors which affect retention times:

   a. Drug metabolism and half-life.

   b. Donor's physical condition.

   c. Donor's fluid intake prior to test.

d. Donor's method and frequency of ingestion of drug.

3. Detection times may affect:

a. Probable cause. Information concerning past drug use may not provide probable cause to believe the Soldier's urine contains traces of drug metabolites, unless the alleged drug use was recent.

b. Jurisdiction over reservists. Reservists may not be convicted at a court-martial for drug use unless use occurred while on federal duty. *United States v. Chodara*, 29 M.J. 943 (A.C.M.R. 1990) (urine sample testing positive for cocaine less than 36 hours after reservist entered active duty was insufficient to establish jurisdiction). *But see United States v. Lopez*, 37 M.J. 702 (A.C.M.R. 1993) (court, in dicta, questioned the validity of *Chodara* and stated that body continues to "use" drugs as long as they remain in the body).

## III. COMMANDERS' OPTIONS.

A. Courts-Martial. Court-martial procedures are complex and the Military Rules of Evidence apply.

B. Nonjudicial Punishment.

1. Nonjudicial punishment procedures are relatively simple. *See* U.S. DEP'T OF ARMY, REG. 27-10, MILITARY JUSTICE ch. 3 (16 Nov. 2005) [hereinafter AR 27-10].

a. Military Rules of Evidence do not apply. AR 27-10, para. 3-18j.

b. Burden of proof is beyond a reasonable doubt. AR 27-10, para. 3-18l.

2. Reservists. Reservists may not receive nonjudicial punishment under Article 15 for drug use unless use occurred while on federal duty. *See* Article 2(d)(2) (reserve component personnel may be involuntarily recalled to active duty for nonjudicial punishment only with respect to offenses committed while on federal duty) and *United States v. Chodara*, 29 M.J. 943 (A.C.M.R. 1990).

C. Administrative Separations.

1. All Soldiers who are identified as illegally abusing drugs will be **processed** for administrative separation. AR 600-85, para. 10-6. Mandatory processing does not mean mandatory separation. Commander may recommend retention if warranted.

2. Rules at administrative separations are simpler than at a courts-martial. *See* U.S. DEP'T OF ARMY, REG. 15-6, PROCEDURES FOR INVESTIGATING OFFICERS AND BOARDS OF OFFICERS (2 Oct. 2006) [hereinafter AR 15-6].

a. Military Rules of Evidence do not apply. AR 15-6, para. 3-7a.

b. Burden of proof is a preponderance of the evidence. AR 15-6, para. 3-10b.

3. Reservists. Reservists may be separated for drugs even though use did not occur while on federal duty. *See* U.S. DEP'T OF ARMY, REG. 135-178, ENLISTED ADMINISTRATIVE SEPARATIONS (13 Mar. 2007) and U.S. DEP'T OF ARMY, REG. 135-175, SEPARATION OF OFFICERS (28 Feb. 1987).

## IV. CONSTITUTIONALITY OF URINALYSIS PROGRAM.

A. Probable Cause Urinalysis.

1. A urinalysis test is constitutional if based upon probable cause. Mil. R. Evid. 312(d) and 315.

2. A positive urinalysis provides probable cause to seize hair sample for drug testing. *United States v. Bethea*, 61 M.J. 184 (C.A.A.F. 2005).

3. A warrant or proper authorization may be required.

a. *Schmerber v. California*, 384 U.S. 757 (1966). Warrantless blood alcohol test was justified by exigent circumstances.

b. *United States v. Pond*, 36 M.J. 1050 (A.F.C.M.R. 1993). Warrantless seizure of urine to determine methamphetamine use was not justified by exigent circumstances because methamphetamine does not dissipate quickly from the body.

B. Inspections.

1. A urinalysis is constitutional if it is part of a valid random inspection. Mil. R. Evid. 313(b); *United States v. Gardner*, 41 M.J. 189 (C.M.A. 1994). The fact that the results of urinalysis inspections are made available to prosecutors did not make the inspection an unreasonable intrusion. (*Note*: This ruling has not been challenged since the U.S. Supreme Court's decision in *Ferguson v. City of Charleston*, 532 U.S. 67 (2001), which found a similar policy unconstitutional). *See also Skinner v. Railway Labor Executives*, 489 U.S. 602 (1989) (urine tests of train operators involved in accidents are reasonable searches) and *National Treasury Employees Union v. Von Raab*, 489 U.S. 656 (1989) (urine testing of employees who apply to carry firearms or be involved in drug interdiction does not require a warrant). *Chandler v. Miller*, 520 U.S. 305 (1997) (to conduct urinalysis without probable cause, must show "special need").

2. Authority to order urinalysis inspections. *United States v. Evans*, 37 M.J. 867 (A.F.C.M.R. 1993). Commander of active duty squadron to which accused's reserve unit was assigned had authority to order urinalysis inspection. *But see United States v. DiMuccio*, 61 M.J. 588 (A.F. Ct. Crim. App. 2005) (Commander of 162nd FW, a national guard unit, had no authority to order accused to submit to urinalysis because accused was at the time in "Title 10" status vice "Title 32" status even though accused was still part of 162nd FW); *United States v. Miller*, 66 M.J. 306 (C.A.A.F. 2008) (where urinalysis which was the product of an order issued by a civilian Air Reserve Technician who did not have command authority to issue the order, and thus was not incident to command, was unlawful).

3. Subterfuge under Mil. R. Evid. 313(b).

a. Report of Offense. *United States v. Shover*, 45 M.J. 119 (C.A.A.F. 1996). Marijuana was planted in an officer's briefcase. During the investigation to find the "planter," the commander ordered a urinalysis. The accused tested positive for methamphetamines. Although the test triggered the subterfuge rule of Mil. R. Evid. 313(b), the government met its clear and convincing burden. The primary purpose for the inspection was to end the finger pointing and hard feelings caused by the investigation. The judge ruled the primary purpose was to "resolve the questions raised by the incident, not to prosecute someone." The CAAF affirmed.

b. Knowledge of subordinates.

(1) *United States v. Taylor*, 41 M.J. 168 (C.M.A. 1994). Urinalysis test results were properly admitted, even though the urinalysis inspection followed reports that accused had used drugs and even though accused's section was volunteered for inspection on basis of reports. Commander who ordered inspection was ignorant of reports. *But see United States v. Willis*, No. 96-00192, 1997 WL 658748 (N-M. Ct. Crim. App. Feb. 21, 1997) (unpublished).

(2) *United States v. Campbell*, 41 M.J. 177 (C.M.A. 1994). Urinalysis test results were improperly admitted where urinalysis inspection was conducted because first sergeant heard rumors of drug use in unit and selected accused to be tested based on his suspicions. Judge erred in finding that government proved, by clear and convincing evidence, that inspection was not subterfuge for criminal search.

c. Primary Purpose. *United States v. Brown*, 52 M.J. 565 (A. Ct. Crim. App. 1999). Several members of unit allegedly were using drugs. Because of this, the commander ordered random 30% inspection. The commander's primary purpose was because he "wanted to do a large enough sampling to validate or not validate that there were drugs being used in his company, and he additionally was very concerned about the welfare, morale, and safety of the unit caused by drugs." This met the primary purpose test of Mil. R. Evid. 313(b).

4. Targeting Soldiers for inspection. *United States v. Moore*, 41 M.J. 812 (N-M. Ct. Crim. App. 1995). Military judge improperly excluded urinalysis results where accused was placed in nondeployable "legal" platoon after an Article 15, and regimental commander inspected accused's platoon more frequently than others. Commander did not target. More frequent tests were based on disciplinary problems.

C. Consent Urinalysis.

1. A urinalysis is constitutional if obtained with consent. Mil. R. Evid 314(e).

2. Consent must be voluntary under totality of the circumstances. *United States v. White*, 27 M.J. 264 (C.M.A. 1988).

a. Consent is involuntary if commander announces his intent to order the urine test should the accused refuse to consent. Mil. R. Evid. 314(e)(4).

b. Consent is voluntary if the commander does not indicate his "ace in the hole" (authority to order a urinalysis). *United States v. White*, 27 M.J. 264 (C.M.A. 1988). *See also United States v. Whipple*, 28 M.J. 314 (C.M.A. 1989). Consent was voluntary where accused never asked what options were and commander never intimated that he could order him to give a sample. *See also United States v. Vassar*, 52 M.J. 9 (C.A.A.F. 1999) (permissible to use trickery to obtain consent as long as consent was not coerced).

c. If Soldier asks "what if I do not consent?"

(1) *United States v. Radvansky*, 45 M.J. 226 (C.A.A.F. 1996). Totality of the circumstances, not a bright-line rule, controls consent to urinalysis in the face of a command request. Notwithstanding First Sergeant's comment that accused could "give a sample of his own free will or we could have the commander direct you to do so," accused voluntarily consented to urinalysis. The mere remark that a commander can authorize a search does not render all subsequent consent involuntary.

(2) *But see United States v. White*, 27 M.J. 264 (C.M.A. 1988). Consent is involuntary if commander replies that he or she will order urine test.

d. Consent is voluntary if commander meaningfully explains the consequences of a consent sample versus a fitness for duty or probable cause sample. *United States v. White*, 27 M.J. 264, 266 (C.M.A. 1988) (dicta). *See also United States v. McClain*, 31 M.J. 130 (C.M.A. 1990).

3. Probable cause may cure invalid consent. *United States v. McClain*, 31 M.J. 130 (C.M.A. 1990). Urinalysis was inadmissible where consent was obtained involuntarily even though commander had probable cause to order urinalysis. However, the Court stated that probable cause to order urine test may provide an alternative basis upon which to admit urine sample obtained through invalid consent where:

a. Commander deals directly with accused in requesting consent, and would have authorized seizure of urine based on probable cause but for belief that he or she had valid consent; or,

b. Commander actually orders urinalysis based on probable cause, but relaying official asks for consent (which later is found to be invalid).

4. Requesting consent is not interrogation under Article 31, UCMJ, or the Fifth Amendment. *United States v. Schroeder*, 39 M.J. 471 (C.M.A. 1994). Civilian police officer apprehended accused for suspected use of drugs and later asked if he would consent to a urinalysis. This question was not custodial interrogation under the Fifth Amendment.

5. Attenuation of taint from prior unwarned admissions. *United States v. Murphy*, 39 M.J. 486 (C.M.A. 1994). Accused's consent to urinalysis test was not tainted by prior admissions obtained prior to rights warnings. Prior questioning was not coercive and consent was given voluntarily.

6. *Consent.* It's OK to Trick. *United States v. Vassar*, 52 M.J. 9 (C.A.A.F. 1999). NCO told accused he needed to consent to urinalysis because of a head injury. Permissible to use trickery to obtain consent as long as it does not amount to coercion.

D. Medical Urinalysis. A urinalysis is constitutional if conducted for a valid medical purpose. Mil. R. Evid. 312(f).

1. *United States v. Fitten*, 42 M.J. 179 (C.A.A.F. 1995). Forced catheterization of accused did not violate the Fourth Amendment or Mil. R. Evid. 312(f) where it was medically necessary to test for dangerous drugs because of accused's unruly and abnormal behavior. Diversion of a part of the urine obtained from medical test to drug laboratory to build case against accused was permissible. *But see United States v. Stevenson*, 66 M.J. 15 (C.A.A.F. 2008), which overrules *Fitten* ". . . to the extent that [it] . . . stand[s] for the proposition that there is a *de minimus* exception to the Fourth Amendment or to Mil. R. Evid. 312."

2. In the Army, most medical tests may only be used for limited purposes. AR 600-85, para. 10-13, and Table 10-1.

E. Fitness for Duty Urinalysis.

1. A commander may order a urinalysis based upon reasonable suspicion to ensure a Soldier's fitness for duty even if the urinalysis is not a valid inspection and no probable cause exists. Results of such tests may only be used for limited purposes. *United States v. Bair*, 32 M.J. 404 (C.M.A. 1991). *See* AR 600-85, para. 10-13(a).

2. Reasonable suspicion required for a fitness for duty urinalysis is the same as reasonable suspicion required for a "stop and frisk" under the Fourth Amendment. *United States v. Bair*, 32 M.J. 404 (C.M.A. 1991).

F. Use in Rebuttal.

1. *United States v. Graham*, 50 M.J. 56 (C.A.A.F. 1999). Military Judge erred in allowing single rebuttal question by trial counsel about a prior positive marijuana result four years earlier, of which accused was acquitted in court-martial, after accused stated he was "flabbergasted" at having tested positive. *Accord United States v. Roberts*, 52 M.J. 333 (C.A.A.F. 2000). *But see* United States v. Tyndale, 56 M.J. 209 (C.A.A.F. 2001).

2. *United States v. Matthews*, 53 M.J. 465 (C.A.A.F. 2000). The CAAF holds that extrinsic evidence may not be used to rebut good military character.

G. Results of Violation of Constitution.

1. Administrative Separations. Evidence obtained in violation of the Constitution is admissible, unless it was obtained in bad faith (*i.e.* the officials conducting the urinalysis knew it was unlawful). A urinalysis conducted in bad faith is admissible only if the evidence would inevitably have been discovered. AR 15-6, para. 3-7c(6).

2. Nonjudicial Punishment under Article 15. Evidence obtained in violation of the Constitution is admissible. AR 27-10, para. 3-18j. However, Soldier may demand trial by court-martial. AR 27-10, para. 3-18d.

3. Court-martial. Evidence obtained in violation of the Constitution is inadmissible. *See* Mil. R. Evid. 311.

## V. LIMITED USE POLICY.

A. Limited Use.

1. Under the limited use policy, the results of the following tests may not be used as a basis for an Article 15 or court-martial or to determine the "character of service" in an administrative separation action. AR 600-85, para. 10-14c.

a. Competence for Duty Tests. AR 600-85, para. 10-13a(1).

b. Medical Tests. The limited use policy applies to tests obtained as a result of Soldier's emergency medical care for an actual or possible drug overdose, unless such treatment resulted from apprehension by military or civilian law enforcement officials. AR 600-85, para. 10-13a(3).

2. If drug use discovered during a limited use test is introduced during an administrative separation, the Soldier must receive an honorable discharge.

3. The limited use policy does not preclude use of limited use tests in rebuttal or initiation of disciplinary action based on independently derived evidence. AR 600-85, para. 10-13d(1).

4. A fitness for duty urinalysis or medical test may serve as the basis for administrative action, to include requesting a second urinalysis. In *United States v. Williams*, 35 M.J. 323 (C.M.A. 1992), the exclusionary rule did not preclude admission of accused's incriminating statements or consensual second urinalysis even though the questioning and the request for the second urinalysis were based upon prior positive fitness for duty urinalysis. The taint from the fitness for duty urinalysis was sufficiently attenuated.

B. Full Use. The limited use policy does not apply to the types of tests listed below. These tests may be used at courts-martial, Article 15 proceedings, and administrative separations:

1. Probable cause tests.

2. Inspections.

3. Consent tests. In *United States v. Avery*, 40 M.J. 325 (C.M.A. 1994), the accused was not entitled to protection of Air Force limited use policy, which precludes the use of certain evidence derived from a service member's voluntary self-identification as a drug abuser. The accused voluntarily consented to a urinalysis after his wife revealed his drug use to his chain of command. The accused never admitted using drugs.

4. Medical tests which are **not** covered by the limited use policy described above.

a. Obtained as a result of Soldier's emergency medical care for an actual or possible drug overdose, where the treatment resulted from apprehension by military or civilian law enforcement officials. AR 600-85, para. 10-13a(3).

b. Routine tests directed by a physician which are not the result of suspicion of drug use and not taken in conjunction with ASAP. AR 600-85, para. 10-13a(3).

C. Command Directed Tests. Be wary of the term "command directed" urinalysis. The ability or inability to use the test results for UCMJ or separation purposes depends on the type of test, not on whether or not it is labeled command directed. In *United States v. Streetman*, 43 M.J. 752 (A.F. Ct. Crim. App. 1995), the accused was convicted of marijuana use. The court held that the letter reissuing the original inspection order but labeled as "Commander Directed" (Air Force equivalent to fitness for duty) and ordering accused to submit to drug testing did not transform prior legitimate random urinalysis inspection into a fitness for duty test that would preclude the admission of drug test results.

## VI. PROSECUTING URINALYSIS CASES.

A. Procedures for Taking Test.

1. Observation During Testing. *Unger v. Ziemniak*, 27 M.J. 349 (C.M.A. 1989). Direct observation of female officer providing sample by female enlisted person at a distance of eighteen inches did not make collection of urine unreasonable.

2. Refusal to Provide Sample. *United States v. Turner*, 33 M.J. 40 (C.M.A. 1991). Accused's submission of toilet water as urine sample did not constitute obstruction of justice, but could have been charged as disobedience of an order.

3. Inspection of AWOL (UA) Personnel.

a. Soldiers who are absent without leave may be subjected to compulsory urinalysis testing pursuant to command policy to inspect the urine of such Soldiers. *Cf. United States v. Bickel*, 30 M.J. 277 (C.M.A. 1990) (compelling Soldiers who previously tested positive for drug use to submit to second urinalysis is a proper inspection).

b. Such an inspection must be conducted in accordance with command policy.

(1) *United States v. Daskam*, 31 M.J. 77 (C.M.A. 1990). Accused, who was late for duty, was not an unauthorized absentee within meaning of policy requiring unauthorized absentees to submit to urinalysis; test of accused's urine was not a proper inspection.

(2) *United States v. Patterson*, 39 M.J. 678 (N.M.C.M.R. 1993). Testing of Soldier returning from unauthorized absence was not a proper inspection because it was not conducted in accordance with instruction requiring such inspections. Commander who ordered test did so based on the "seriousness" of the absence, rather than on a random basis.

4. Retesting Soldiers. Requiring retesting, during next random urinalysis, of all Soldiers who tested positive during previous urinalysis is a proper inspection. *United States v. Bickel*, 30 M.J. 277 (C.M.A. 1990). Commander's policy letter which required retesting of Soldiers who were positive on previous urinalysis was proper.

5. Retesting Samples. Selection of negative samples for additional testing is improper unless done on a random basis. *United States v. Konieczka*, 31 M.J. 289 (C.M.A. 1990). Installation alcohol and drug control officer's decision to select urine sample which had pre-tested negative for further testing at drug laboratory based on belief that sample might test positive constituted unreasonable inspection.

6. Deviations in Procedures.

a. Deviations from regulations generally do not affect admissibility of test results. *United States v. Pollard*, 27 M.J. 376 (C.M.A. 1989); *United States v. Timoney*, 34 M.J. 1108 (A.C.M.R. 1992).

b. Gross deviations from urinalysis regulation may allow exclusion of positive test results. *United States v. Strozier*, 31 M.J. 283 (C.M.A. 1990).

c. Accused randomly selected by computer for urinalysis testing as allowed by the applicable Air Force Instruction. Method was proper even if there were minor administrative deviations. *United States v. Beckett*, 49 M.J. 354 (C.A.A.F. 1998).

B. Proving Knowing Ingestion of Drugs.

1. To be guilty of wrongful use of drugs the accused must know that (1) he or she consumed the relevant substance; and, (2) the substance was contraband. *United States v. Mance*, 26 M.J. 244 (C.M.A. 1988).

2. Presence of drug metabolite in urine permits permissible inference that accused knowingly used drug, and that use was wrongful. *United States v. Green*, 55 M.J. 76, 81 (C.A.A.F. 2001); *United States v. Mance*, 26 M.J. 244 (C.M.A. 1988); *United States v. Alford*, 31 M.J. 814 (A.F.C.M.R. 1990).

3. Permissive inference of wrongfulness may be sufficient to support conviction despite defense evidence that ingestion was innocent. *United States v. Ford*, 23 M.J. 331 (C.M.A. 1987) (permissive inference overcame accused's suggestion that wife may have planted marijuana in his food without his knowledge).

4. Ensure that the instruction on permissive inference as to knowledge and wrongfulness is not crafted in such a manner as to make it a mandatory presumption. A permissive inference is constitutional; a mandatory presumption is not. *United States v. Brewer*, 61 M.J. 425 (C.A.A.F. 2005) (instruction that military judge gave was confusing to the extent that it appeared to shift the burden to the accused to assert one of the three exceptions as to wrongfulness; findings and sentence set aside).

C. Use of Expert Testimony.

1. Expert testimony required at court-martial. Expert testimony is required to prove wrongful use of drugs; results of test alone (paper case) are inadequate. *United States v. Green*, 55 M.J. 76 (C.A.A.F. 2001); *United States v. Campbell*, 50 M.J. 154 (C.A.A.F. 1999), *supplemented on reconsideration*, 52 M.J. 386 (C.A.A.F. 2000); *United States v. Murphy*, 23 M.J. 310 (C.M.A. 1987).

a. Expert testimony must establish not only that the drug or metabolite was in the accused's body but that the drug or metabolite is not naturally produced by the body or any other substance but the drug in question. *United States v. Harper*, 22 M.J. 157 (C.M.A. 1986). In addition, for the permission inference of wrongfulness, the government may have to satisfy the three prongs of *United States v. Campbell*, 50 M.J. 154 (C.A.A.F. 1999), *supplemented on reconsideration*, 52 M.J. 386 (C.A.A.F. 2000) (at least in cases where novel testing procedures or methods were used).

b. Judicial notice is generally an inadequate substitute for expert testimony. *United States v. Hunt*, 33 M.J. 345 (C.M.A. 1991). *But cf. United States v. Green*, 55 M.J. 76, 81 (C.A.A.F. 2001); *United States v. Phillips*, 53 M.J. 758, 763 (A.F. Ct. Crim. App. 2000) (Chief Judge Young, concurring, argues that military judges should be able to take judicial notice of certain adjudicative facts in urinalysis cases).

c. Stipulations may be an adequate substitute for expert testimony.

(1) *United States v. Ballew*, 38 M.J. 560 (A.F.C.M.R. 1993). A stipulation of expected testimony that expert would testify that accused ingested cocaine was not a confessional stipulation. No providency inquiry was required before the stipulation could be received.

(2) *United States v. Hill*, 39 M.J. 712 (N.M.C.M.R. 1993). Evidence was insufficient to support conviction of use of marijuana where stipulations of fact, documentary evidence, and testimony failed to link positive urine sample to accused.

d. Expert evidence other than that used to meet the three-prong standard needs to meet evidentiary requirements of reliability and relevance. *United States v. Campbell*, 50 M.J. 154 (C.A.A.F. 1999), *supplemented on reconsideration*, 52 M.J. 386 (C.A.A.F. 2000), *citing Daubert v. Merrell Dow Pharmaceuticals, Inc*., 509 U.S. 579, 589 (1993); *Kumho Tire C., Ltd. v. Carmichael*, 526 U.S. 137, 153–55 (1999). Although the three-prong standard announced in *Campbell* was watered-down in *United States v. Green*, 55 M.J. 76 (C.A.A.F. 2001), it may still be required in cases where novel testing methods or procedures were used.

2. Experts at counsel table. *United States v. Gordon*, 27 M.J. 331 (C.M.A. 1989). Government urinalysis expert may remain in courtroom to assist in explaining testimony while another government expert testifies about lab testing procedures.

3. "Non-expert" expert. *United States v. Smith*, 34 M.J. 200 (C.M.A. 1992). Allowing undercover agent to testify that he had never tested positive for drugs although he was often exposed to them was permissible to rebut accused's defense of passive inhalation.

4. Use and Choice of Experts. *United States v. Short*, 50 M.J. 370 (C.A.A.F. 1999). Defense counsel asked for an expert who was not employed by the DOD drug lab to assess chain of custody and procedures and to assist with scientific evidence. The defense also raised a passive inhalation defense. Military judge denied defense request to provide assistance. Defense failed to show that the case was not "the usual case." Accused is not entitled to independent, non-government expert unless there is a showing that the accused's case is not "the usual case." Available government expert from lab was sufficient to provide expert testimony on passive inhalation/innocent ingestion.

D. Sixth Amendment Confrontation Clause issue. In *Crawford v. Washington*, 541 U.S. 36 (2004), the Supreme Court held that a "testimonial" statement can only be admitted against an accused if the declarant is present at trial or there has been a prior opportunity for cross-examination.

1. *United States v. Magyari*, 63 M.J. 123 (C.A.A.F. 2006). In the context of random urinalysis screening, where the lab technicians do not equate specific samples with particular individuals or outcomes, and the sample is not tested in furtherance of a particular law enforcement investigation, the data entries of the technicians are not "testimonial" in nature. Lab reports must meet reliability standard from *Ohio v. Roberts*, 448 U.S. 56 (1980).

2. *United States v. Harcrow*, 66 M.J. 154 (C.A.A.F. 2008). In the context of a probable cause seizure of items suspected to contain drug residue, where lab technicians know the items came from a "suspect," the data entries of the technicians are testimonial statements. Confrontation Clause must be satisfied.

3. *Melendez-Diaz v. Massachusetts*, 129 S.Ct. 2527 (2009). In the context of a probable cause seizure of items suspected to contain drugs, where lab technicians are required by law to test the items and produce an "affidavit" for trial, those affidavits are testimonial. Absent a showing of unavailability and a prior opportunity to cross-examine, the lab technicians must be present to testify in court.

E. Negative Urinalysis Results. A urine sample containing drug metabolites in concentrations below the regulatory cut-off level for positive results will be declared negative, even though the sample may indicate drug use.

1. Negative test results are usually inadmissible. *United States v. Johnston*, 41 M.J. 13 (C.M.A. 1994). Judge did not abuse discretion by excluding defense evidence of urinalysis test which was negative for the presence of marijuana three days after last charged use of marijuana. Admission of results of a negative, defense conducted, radioimmunoassay (RIA) test would have been too confusing. The proper testing methodology was GC/MS, and the RIA test showed the presence of marijuana (but below the cut-off level). The C.M.A. stated that the Mil. R. Evid. should be used to determine if negative test results are admissible and overruled *United States v. Arguello*, 29 M.J. 198 (C.M.A. 1989) (which prevented the government from using negative test results because such use was contrary to regulation).

2. Use of negative test results is permitted in the Coast Guard. *United States v. Ryder*, 39 M.J. 454 (C.M.A. 1994), *rev'd on other grounds*, 515 U.S. 177 (1995). Government's introduction of "negative" test results, which showed presence of marijuana, but at amount below cut-off, was not plain error. Results were used to corroborate testimony of witnesses who saw accused smoke marijuana and Coast Guard Regulation did not prohibit use of such test results.

F. Using Positive Test Results as Rebuttal Evidence.

1. *United States v. Graham*, 50 M.J. 56 (C.A.A.F. 1999). Accused testified that he was "flabbergasted" at having tested positive. Military Judge erred in allowing single rebuttal question by trial counsel about a prior positive marijuana result four years earlier, of which accused was acquitted in court-martial. The CAAF held that the prior positive marijuana result was not logically relevant: statistical probability is unknown as to whether accused might test positive twice within four years and there is no necessary logical connection between testing positive twice and being flabbergasted. *Accord United States v. Roberts*, 52 M.J. 333 (C.A.A.F. 2000). *But see* United States v. Tyndale, 56 M.J. 209 (C.A.A.F. 2001).

2. *United States v. Matthews*, 53 M.J. 465 (C.A.A.F. 2000). Accused tested positive for marijuana and was later given a command-directed urinalysis. At trial, the accused raised a good military character defense. The CAAF set aside the findings and sentence. The appellant was found guilty of a single specification of wrongful use of marijuana (between 1 and 29 April 1996). She testified that she did not use marijuana and that she did not know why she tested positive. The government then asked to use a subsequent command-directed urinalysis (conducted on 21 May 1996) for impeachment. The trial judge admitted the evidence for impeachment and ruled it was also admissible under Mil. R. Evid. 404(b) to show her prior use was knowing and conscious. The lower court found that her testimony raised the issue of innocent ingestion, but that it did not directly contradict that she knowingly used marijuana during the charged period. However, the lower court did find that the second urinalysis was relevant to the appellant's credibility and to rebut evidence of her good military character. The CAAF disagreed, finding that extrinsic evidence may not be used to rebut good military character.

G. *See generally* Captain David E. Fitzkee, *Prosecuting a Urinalysis Case: A Primer*, ARMY LAW., Sept. 1988, at 7, and Major R. Peter Masterton and Captain James R. Sturdivant, *Urinalysis Administrative Separation Boards in Reserve Components*, ARMY LAW., Apr. 1995, at 3.

## VII. DEFENDING URINALYSIS CASES.

A. Defenses.

1. Passive inhalation. For this defense to be successful, a Soldier generally must have been exposed to concentrated drug smoke in a small area for a significant period of time. *See* Major Wayne E. Anderson, *Judicial Notice in Urinalysis Cases*, ARMY LAW., Sept. 1988, at 19.

2. Innocent ingestion.

a. *United States v. Ford*, 23 M.J. 331 (C.M.A. 1987). Accused suggested wife planted marijuana in his food without his knowledge.

b. *United States v. Prince*, 24 M.J. 643 (A.F.C.M.R.1987). Accused's wife allegedly put cocaine in his drink without his knowledge to improve his sexual performance.

c. *United States v. Robertson*, 39 M.J. 211 (C.M.A. 1994). Accused's roommate testified that she put cocaine in beer which accused unwittingly drank. Government improperly cross-examined roommate on prior arrest for conspiracy and attempted burglary, but error was harmless.

3. Innocent inhalation.

a. *United States v. Perry*, 37 M.J. 363 (C.M.A. 1993). Accused's explanation that he unwittingly smoked a filtered cigarette laced with cocaine 28 hours before test was not credible, given expert's testimony that (1) accused would have to ingest an almost toxic dose of cocaine to achieve the 98,000 ng/ml test result his sample yielded, and (2) cocaine mixed with a cigarette would not work since cocaine will not vaporize or pass through a filter. Erroneous admission of evidence that accused acted as informant was harmless.

b. *United States v. Gilbert*, 40 M.J. 652 (N.M.C.M.R. 1994). Accused allegedly borrowed cigarettes from a civilian which, unknown to the accused, contained marijuana. At trial, the civilian refused to answer questions about what the cigarettes contained. Defense counsel was ineffective for not seeking to immunize the civilian.

4. Innocent absorption through contact with drugs on currency: unlikely to be a successful defense. *See* Mahmoud A. ElSohly, Ph.D., *Letter to the Editor: Urinalysis and Casual Handling of Marijuana and Cocaine*, 15 J. Analytical Toxicology 46 (1991).

5. Use of hemp related products. Hemp products come from the same plant as marijuana. *See* The Art of Trial Advocacy, *Tips in Hemp Product Cases*, ARMY LAW., Dec. 1998, at 30. Note: AR 600-85, para. 4-2m, prohibits the ingestion of products containing hemp and hemp oil.

6. Switched Samples ("chain of custody" broken).

a. *United States v. Gonzales*, 37 M.J. 456 (C.M.A. 1993). Where observer had no recollection of how the urine was transferred from one container to another, but testified that the urine was never out of her sight, military judge properly overruled chain of custody objection.

b. *United States v. Montijo*, No. 30385, 1994 WL 379793 (A.F.C.M.R. June 28, 1994) (unpublished). Government was not required to establish chain of custody for sample bottle from the time of its manufacture until its use.

7. Laboratory Error.

a. *Unites States v. Manuel*, 43 M.J. 282 (C.A.A.F. 1995). Urinalysis test results were improperly admitted where laboratory failed to retain accused's positive urine sample after test was completed. Regulation requiring retention of sample conferred substantive right upon accused. Conviction set aside.

b. Problems at Fort Meade Laboratory. On 24 July 1995, the commander of the Fort Meade Forensic Toxicology Drug Testing Laboratory discovered that lab technicians had violated procedures by switching quality control samples. All positive test results were still scientifically supportable, since the GC/MS tests were not affected.

8. Good Military Character. *United States v. Vandelinder*, 20 M.J. 41, 47 (C.M.A. 1985). Good military character is pertinent to drug charges against an accused because it may generate reasonable doubt in the fact-finder's mind.

9. Specific Instances of Non-Drug Use to Rebut Permissive Inference. In *United States v. Brewer*, 61 M.J. 425 (C.A.A.F. 2005), the defense requested four witnesses to testify that they knew MSgt Brewer and that they had never seen MSgt Brewer smoke marijuana as part of the defense "mosaic" innocent ingestion defense. The military judge denied the proffered witness testimony ruling that this was improper character evidence under Mil. R. Evid. 405, as specific instances of conduct of non-use. The CAAF held that the military judge erred in denying the requested witnesses because it was relevant. Findings and sentence set aside.

B. Defense Requested Tests.

1. Tests for EME metabolite of cocaine.

a. The government is not required to perform the test for EME metabolite when requested by defense if the sample tested positive for BZE and the chain of custody is not contested. *United States v. Metcalf*, 34 M.J. 1056 (A.F.C.M.R. 1992); *United States v. Pabon*, No. 29878, 1994 WL 108866 (A.F.C.M.R. Mar. 25, 1994) (unpublished), *aff'd*, 42 M.J. 404 (C.A.A.F. 1995).

b. Positive test result for BZE (metabolite tested for within DOD) is sufficient to support conviction for wrongful use of cocaine; test for EME metabolite unnecessary. *United States v. Thompson*, 34 M.J. 287 (C.M.A. 1992).

c. If tests for BZE and EME metabolites conflict, results may be insufficient to support conviction for wrongful use of cocaine. *United States v. Mack*, 33 M.J. 251 (C.M.A. 1991). Test results inadequate where test for BZE was positive and test for EME was negative.

2. Tests for contaminants. *United States v. Mosley*, 42 M.J. 300 (C.A.A.F. 1995). Military judge did not abuse his discretion by ordering retest of accused urine sample for BZE, EME, and raw cocaine. Such tests fall into a "middle ground" where military judges are not required to order such testing, but do not abuse their discretion if they do.

3. Blood tests and DNA tests. *United States v. Robinson*, 39 M.J. 88 (C.M.A. 1994). Military judge did not abuse discretion in denying defense request for "secretor test" to show accused was not source of positive sample where defense was unable to show discrepancies in collection or testing of sample.

4. Polygraphs. *United States v. Scheffer*, 523 U.S. 303 (1998). *Per se* rule against admission of polygraph evidence (Mil. R. Evid. 707) in court martial proceedings did not violate the Fifth or Sixth Amendment rights of accused to present a defense to charge that he had knowingly used methamphetamine. *Per se* rule serves several legitimate interests, such as ensuring that only reliable evidence is introduced at trial. *See also United States v. Williams*, 39 M.J. 555 (A.C.M.R. 1994) (Mil. R. Evid. 707 is unconstitutional), *set aside*, 43 M.J. 348 (C.A.A.F. 1995) (accused waived issue of admissibility of polygraph because he did not testify). *But see United States v. Wheeler*, 66 M.J. 590 (N-M. Ct. Crim. App. 2008).

5. Hair.

a. *United States v. Bush*, 47 M.J. 305 (C.A.A.F. 1997). Accused was convicted of use of cocaine. The CAAF held that mass-spectrometry hair analysis evidence was sufficiently reliable to be admitted into evidence in court-martial to establish cocaine use, even though there was some disagreement between experts about the procedure. *See also United States v. Cravens*, 56 M.J. 370 (C.A.A.F. 2002).

b. *United States v. Nimmer*, 43 M.J. 252 (C.A.A.F. 1995). Military judge precluded defense from introducing negative hair test results, because the test would not have ruled out a one-time use of cocaine. Case remanded for re-litigation of this issue using the proper standard of *United States v. Gipson*, 24 M.J. 246 (C.M.A. 1987) and *Daubert v. Merrell Dow Pharmeceuticals, Inc.*, 509 U.S. 579 (1993).

c. *See* Major Samuel J. Rob, *Drug Detection by Hair Analysis*, ARMY LAW., Jan. 1991, at 10. *See also United States v. Adens*, 56 M.J. 724 (A. Ct. Crim. App. 2002); *United States v. Cravens*, 56 M.J. 370 (C.A.A.F. 2002).

C. Experts.

1. Defense consultants. *United States v. Kelly*, 39 M.J. 235 (C.M.A. 1994). Defense counsel did not demonstrate necessity of presence of defense urinalysis consultant at trial where he had telephonic access to expert consultant and did not identify any irregularity in test.

2. Expert witnesses. *United States v. George*, 40 M.J. 540 (A.C.M.R. 1994). Military judge improperly precluded defense expert from testifying that the presence of cocaine on everyday objects may have led to contamination of the urine sample.

3. Choice of Experts. *United States v. Short*, 50 M.J. 370 (C.A.A.F. 1999). Accused not entitled to independent, non-government expert unless there is a showing that the accused's case is not "the usual case."

D. Use of Negative Urinalysis Results.

1. Negative test results are generally not admissible. *United States v. Johnston*, 41 M.J. 13 (C.M.A. 1994). The military judge did not abuse his discretion by excluding defense evidence of a urinalysis test which was negative for the presence of marijuana three days after the last charged use of marijuana. Admission of test results would have been too confusing.

2. The defense may use negative test results only if relevant to the charged use. *United States v. Baker*, No. 28887, 1993 WL 502185 (A.F.C.M.R. Nov. 30, 1993) (unpublished). The military judge properly excluded evidence that the accused gave a urine sample which tested negative for use of illegal drugs where the sample was given over a month outside the charged period. The defense failed to show the relevance of the negative test.

E. After *United States v. Campbell*, 50 M.J. 154 (C.A.A.F. 1999), *supplemented on reconsideration*, 52 M.J. 386 (C.A.A.F. 2000), the best defense may be a good offense. Raising the bar for the government has opened the door for defense to be successful in attacking the government's case primarily on the second prong of *Campbell*. *But see United States v. Green*, 55 M.J. 76 (C.A.A.F. 2001) (stating that the three-prong standard in *Campbell* is not mandatory).

F. *See generally* Captain Joseph J. Impallaria, *An Outline Approach to Defending Urinalysis Cases*, ARMY LAW., May 1988, at 27, and Major R. Peter Masterton and Captain James R. Sturdivant, *Urinalysis Administrative Separation Boards in Reserve Components*, ARMY LAW., Apr. 1995, at 3.