

## Chipping: Could a High Tech Dog Tag Find Future American MIAs?

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### INTRODUCTION

In the early morning hours of January 17, 1991, the first day of Operation Desert Storm, U.S. Navy fighter pilot Scott Speicher took off with his squadron from the deck of the USS Saratoga and was never heard from again.<sup>1</sup> The thirty-three-year-old lieutenant commander, husband, and father of two was declared the war's first combat death when he failed to check in, after witnesses reported seeing an explosion that could have been his plane, brought down by enemy fire.<sup>2</sup> Ten years later, in January 2001, Navy officials announced that Speicher's status had been upgraded from killed to missing in action (MIA) when intelligence reports suggested that he might have survived the crash.<sup>3</sup>

In October 2002, in an unprecedented move, Speicher's status was changed again, this time to missing/captured.<sup>4</sup> Navy investigators concluded from further intelligence assessments that he would have had at least an eighty-five percent chance of surviving the 1991 crash.<sup>5</sup> Today, the fate of Speicher remains unknown.<sup>6</sup> For future MIAs, however, technology may hold the key to unlocking the answers their families seek.

This note examines subdermal microchip implantation and its

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1. *Dateline NBC: Missing in Action* (NBC television broadcast, Feb. 14, 2003).

2. *Id.*

3. Barbara Starr, *Report Suggests Missing Pilot Alive in Iraq*, CNN.com, Jan. 10, 2003, available at <http://www.cnn.com/2003/WORLD/meast/01/10/sproject.irq.scott.speicher/index.html>.

4. *Dateline NBC*, *supra* note 1.

5. *Dateline NBC*, *supra* note 1.

6. Roger Roy, *Search Continues for Last MIA from '91 Iraq War*, The Orlando Sentinel, available at <http://www.nationalalliance.org/gulf/dpmo.htm> (last visited Nov. 11, 2003).

potential application for tracking members of the U.S. military.<sup>7</sup> Part I defines subdermal microchips including the state of the art, and discusses the ways they are currently utilized. Part II analyzes the legal, moral and ethical implications of implants replacing traditional methods of identifying armed forces personnel. Applying the Constitution and military case law and statutes, including the Military Rules of Evidence, Part II considers how chipping, if implemented, could impact the following areas: enlistment and identification, discharge and administrative separation, constitutional concerns, effects on military criminal justice, and tort claims involving use of the chip. Part III examines whether subdermal microchip implantation of U.S. Military personnel could exist in the near future and whether chipping might solve the mystery of future American MIAs.

## I. FACT OR FICTION

### A. Overview

In a recent award-winning movie, the protagonist was recruited by the CIA and injected with a radioactive isotope that revealed a unique security code when bathed in the light of a particular scanner.<sup>8</sup> While the microchip implanted in the character John Nash turned out to be a figment of his beautiful mind, today chipping is a reality.<sup>9</sup> Currently used to locate lost pets, identify laboratory animals, and manage wildlife, fish, and livestock, microchips have now been adapted for use in humans.<sup>10</sup>

In 2002, fiction became fact when a Florida family was implanted with the VeriChip™, a device that serves a function similar to a MedicAlert® bracelet.<sup>11</sup> The announcement of a human chipping

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7. This procedure is commonly referred to as “chipping.” See Press Release, Applied Digital Solutions, Scott R. Silverman, CEO of Applied Digital Solutions, Invited to Speak About Subdermal RFID Solutions at ID World Congress, To Be Held In Paris, November 20-21, 2003 (Nov. 20, 2003), at <http://www.adxs.com/news/2003/112003.html>.

8. *A Beautiful Mind* (Universal Studios and DreamWorks LLC 2001).

9. *Id.* See generally Applied Digital Solutions, at <http://www.adxs.com/news/adsexpressreleases.html> (last visited Mar. 21, 2004) (press releases regarding subdermal microchip implantation).

10. See generally Applied Digital Solutions, at <http://www.adxs.com/news/adsexpressreleases.html> (last visited Mar. 21, 2004) (press releases regarding subdermal microchip implantation).

11. Jim Goldman, *Florida Family to Get VeriChip*, TechTV, Feb. 18, 2002, at <http://www.techtv.com/news/culture/story/0,24195,3372523,00.html>; MedicAlert® is a registered trademark and servicemark of MedicAlert Foundation International.

worried privacy advocates and ethicists who felt that use of microchips for “good” hardly justified their potential for abuse.<sup>12</sup> In response, the makers of VeriChip™, Applied Digital Solutions, Inc. (ADSX), temporarily removed all references to human implantation from its website and literature in 2001 to deflect criticism from concerned parties, including civil libertarians and religious groups.<sup>13</sup> There are several web sites dedicated to preaching the evils of chipping.<sup>14</sup> In the Christian community, chipping is likened to the Mark of the Beast described in the New Testament.<sup>15</sup>

He also forced everyone . . . to receive a mark on his right hand or on his forehead so that no one could buy or sell unless he had the mark, which is the name of the beast or the number of his name. . . . [There will be] no rest day or night for those who worship the beast and his image, or for anyone who receives the mark of his name.<sup>16</sup>

Some believe that it is only a matter of time until people are routinely “scanned like a box of Wheaties.”<sup>17</sup> The idea of having this technology imbedded under one’s skin is “cool” for some,<sup>18</sup> while for others, the thought of being chipped makes their skin crawl.<sup>19</sup> Visions of cyborgs, government surveillance and high-tech slavery

See <http://www.medicalert.org> (last visited Nov. 11, 2003).

12. Goldman (commenting chip crosses dangerous line because people could be monitored remotely); see also Joseph Farah, Editorial, *Meet the “Digital Angel”—From Hell*, WorldNetDaily, Feb. 14, 2000, (stating chip can “slice, dice and destroy” last vestiges of personal privacy), at [http://www.worldnetdaily.com/news/article.asp?ARTICLE\\_ID=14913](http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=14913); see also Lisa S. Dean, *Yesterday’s Fantasy is Tomorrow’s Reality*, Nov. 22, 2000, (comparing chip to electronic leash controlled by government), at <http://www.freecongress.org/centers/tp/ccl/001122.asp#story1>. See generally Jay Stanley and Barry Steinhardt, *Bigger Monster, Weaker Chains: The Growth of an American Surveillance Society*, Jan. 15, 2003, available at <http://www.aclu.org/Privacy/Privacy.cfm?ID=11573&c=39>.

13. Sherrie Gossett, “Digital Angel” lands in China: Will implantable tracking chips be used by totalitarian government?, WorldNetDaily, Mar. 28, 2002, at [http://www.worldnetdaily.com/news/article.asp?ARTICLE\\_ID=26991](http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=26991).

14. See generally Cybertime, at <http://www.cybertime.net/~ajgood/ch1p1.html> (last visited Oct. 25, 2003).

15. *Id.*; Dale Hurd, *A Microchip Makes Its Mark: VeriChip & the Beast*, CBN News, Jan. 31, 2002, at <http://www.cbn.com/cbnnews%2Fnews%2F020131a%2Easp>.

16. *Revelation* 13:16, 14:9.

17. Sherrie Gossett, *Implanted Chip Firm Seeks Financial “Angel,”* WorldNetDaily, May 16, 2002, at [http://www.worldnetdaily.com/news/article.asp?ARTICLE\\_ID=27655](http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=27655).

18. Hurd, *A Microchip Makes Its Mark: VeriChip & the Beast*, CBN News, Jan. 31, 2002, at <http://www.cbn.com/cbnnews%2Fnews%2F020131a%2Easp> (statement of Derrick Jacobs, “I want to be the first kid to have that chip implanted in me”).

19. *Id.*

abound.<sup>20</sup>

### *B. The Technology*

Science fiction and recent news reports might lead one to believe that the Big Brother regime portrayed by George Orwell in his novel *1984* is upon us, however, a chip that can monitor the location of humans is only in its early developmental stages.<sup>21</sup> Applied Digital Solutions, Inc. (ADSX) and its subsidiaries currently own several technologies that may make the military classification MIA a thing of the past.<sup>22</sup> First, Destron Fearing Corporation (Destron), a subsidiary of ADSX, created a microchip for animals.<sup>23</sup> The chip is about the size of a grain of rice and contains a unique alphanumeric identification code.<sup>24</sup> It is coupled with an antenna and sealed in an inert glass capsule.<sup>25</sup> Injected under the skin using a procedure similar to a routine vaccination, the chip remains inactive until read with a scanner that sends a magnetic field and low radio frequency signal.<sup>26</sup> The chip is powered by the signal and sends its identification code back to the scanner.<sup>27</sup> The identification number can be linked to a database containing information about the animal or the chip can merely verify the animal's identity.<sup>28</sup>

The chip is held in place by a patented anti-migration cap called BioBond<sup>®</sup>.<sup>29</sup> This porous, polypropylene polymer sheath is attached to the chip and promotes the development of fibrocytes and collagen fibers around the chip, which impedes movement so that the chip stays in place.<sup>30</sup>

Digital Angel Corporation (DAC), the parent company to Destron and subsidiary of ADSX, combines the Destron chip with wireless,

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20. Lisa S. Dean, *Yesterday's Fantasy is Tomorrow's Reality*, Coalition for Constitutional Liberties, Nov. 22, 2000, available at <http://www.freecongress.org/centeres/tp/ccl/001122.asp#story1>.

21. George Orwell, 1984, (e-book ed., RosettaBooks, LLC 2002) (1972); Angela Swafford, *Barcoding Humans*, Boston Globe, May 20, 2003, at C9.

22. See generally Applied Digital Solutions, at <http://www.adsx.com> (last visited Nov. 1, 2003).

23. Destron Fearing, at <http://www.destronfearing.com> (last visited Nov. 1, 2003).

24. Destron Fearing, at <http://www.destronfearing.com/elect/elect.html> (last visited Nov. 1, 2003).

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.*

29. Destron Fearing, at <http://www.destronfearing.com/elect/elect.html> (last visited Nov. 1, 2003).

30. *Id.*

Global Positioning Systems (GPS) for commercial uses ranging from medical monitoring to tracking pets and assets.<sup>31</sup> For medical monitoring, the chip is embedded in a rechargeable wristband with biosensors that can transmit the pulse, blood pressure, and temperature of the wearer, as well as his location, to within seventy-five feet.<sup>32</sup> The information is transmitted to a monitoring center and can then be sent to any wireless address, including a text pager or Personal Digital Assistant (PDA).<sup>33</sup> For pets, the chip is part of the animal's collar and includes an automatic alert when the animal moves beyond preset boundaries.<sup>34</sup>

In 1997, DAC received a patent for a personal tracking and recovery system consisting of a miniature digital transceiver.<sup>35</sup> In 1999, ADSX acquired the patent rights for the transceiver, which it called Digital Angel<sup>TM</sup>.<sup>36</sup> To be effective for the recovery of military personnel, the transceiver would need to combine the size of the Destron microchip with the capability of the DAC wristband. The first step toward this goal was introduced in 2000 with the VeriChip<sup>TM</sup>.<sup>37</sup> Aggressively marketed by the company for emergency, healthcare, and security applications, the device functions like the Destron identification chip, except that it is implanted in humans, not animals.<sup>38</sup> The next step came in 2003 when ADSX announced that it had a working prototype of a subdermal GPS personal location device (PDL) that is about the size of a pacemaker.<sup>39</sup>

ADSX continues to work on enhancements for the PDL, including

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31. Digital Angel, at <http://www.digitalangel.net/commercial.asp> (last visited Oct. 22, 2003).

32. Digital Angel, at <http://www.digitalangel.net/medical.asp> (last visited Oct. 22, 2003).

33. *Id.*

34. Digital Angel, at [http://www.digitalangel.net/consumer\\_pets.asp](http://www.digitalangel.net/consumer_pets.asp) (last visited Oct. 22, 2003).

35. Applied Digital Solutions, at <http://www.adsx.com/prodservpart/patentsproprietary.html> (last visited Oct. 22, 2003). The transceiver is a personal tracking and recovery system that, according to the company, overcomes limitations of other locating and monitoring technologies, including unwieldy size, maintenance requirements, insufficient or inconvenient power-supply and activation difficulties. *Id.*

36. *Id.*

37. Applied Digital Solutions, at <http://www.adsx.com/faq/verichipfaq.html> (last visited Oct. 22, 2003).

38. *Id.*

39. Press Release, Applied Digital Solutions, Applied Digital Solutions Announces Working Prototype of Subdermal GPS Personal Location Device (May 13, 2003), at <http://www.adsx.com/news/2003/051303.html>. A pacemaker is the size of a silver dollar. *See* <http://my.webmd.com/content/healthwise/131/32562.htm?lastselectedguid={5FE84E90-BC77-4056-A91C-9531713CA348}> (last visited Nov. 11, 2003).

reducing the size of the device.<sup>40</sup> Reduction in size to that of the VeriChip™, together with another ADSX product, Thermo Life™, could turn fiction into fact: an implanted microchip capable of identifying and monitoring human beings.<sup>41</sup> In addition, the ADSX business unit, Government Telecommunication, Inc. (GTI), designs, deploys, and maintains voice, data, and video telecommunications networks for federal government agencies.<sup>42</sup> ADSX is a contractor under the Department of Defense (DoD).<sup>43</sup>

## II. LEGAL, MORAL AND ETHICAL IMPLICATIONS OF CHIPS REPLACING TRADITIONAL METHODS OF IDENTIFYING U.S. MILITARY PERSONNEL

Article I, Section 8 of the United States Constitution grants Congress the power to raise and support armies, to provide and maintain a navy, to call out the militia to execute the laws of the Nation, and to suppress insurrections and repel invasions.<sup>44</sup> To fulfill its duties under Article I, Congress established four basic routes into military services: enlistment, officer appointment, activation of reservists, and conscription, which was later replaced with selective service.<sup>45</sup>

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40. Press Release, Applied Digital Solutions, Applied Digital Solutions Announces Working Prototype of Subdermal GPS Personal Location Device (May 13, 2003), at <http://www.adsx.com/news/2003/051303.html>.

41. Thermo Life™ is a generator, smaller than the size of a dime, which converts heat flow into energy. Applied Digital Solutions, at <http://www.adsx.com/prodservpart/thermolife.html> (last visited Nov. 1, 2003).

42. Business Wire, *Award to GTI is Part of GSA's \$35 Billion CONNECTIONS Program in Which 17 Suppliers Will Provide Telecommunications Services and Equipment to Federal Agencies* (Mar. 28, 2003), at <http://www.eetimes.com/pressreleases/bizwire/65995>. See also FY 2002 DoD Contractors, at [http://www.defenselink.mil/dodgc/defense\\_ethics/resource\\_library/contractors02.pdf](http://www.defenselink.mil/dodgc/defense_ethics/resource_library/contractors02.pdf) (last visited Mar. 21, 2004).

43. FY 2002 DoD Contractors, at [http://www.defenselink.mil/dodgc/defense\\_ethics/resource\\_library/contractors02.pdf](http://www.defenselink.mil/dodgc/defense_ethics/resource_library/contractors02.pdf) (last visited Mar. 21, 2004).

44. U.S. CONST. art. I, § 8 cl. 12, 13, 15.

45. See generally 10 U.S.C. Part II (1998) (describing military service). See also *Bell v. United States*, 366 U.S. 393, 402 (1961).

*A. Enlistment and Identification in the Military*<sup>46</sup>

Enlistment in the military is a contractual obligation and the enlistee's status changes from that of a civilian to that of a member of the military.<sup>47</sup> The typical enlistment agreement of armed forces personnel is a six to eight year service obligation, generally divided between an active duty tour and a period of reserve service.<sup>48</sup> As a member of the military, a soldier assumes new rights and duties and his relations to the State and the public are changed.<sup>49</sup> By signing the enlistment contract, the enlistee agrees to obey all lawful orders, to perform all assigned duties, to be subject to the military justice system and to be tried by military court-martial.<sup>50</sup> In addition, the enlistee will be required, upon order, to serve in combat or other hazardous situations.<sup>51</sup> The enlistment contract states that the laws and regulations governing military personnel may change without notice, such changes potentially affecting service members regardless of the provisions of the enlistment document.<sup>52</sup>

If chipping is initiated as part of enlistment in the military, must the agreement explicitly state that implantation is a condition of enlistment? Courts have regularly held that enlistment does not simply create a contractual duty, but also changes the new recruit's status to a member of the military.<sup>53</sup> While civilian personal service

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46. For consistency, this article will refer to military personnel using a neutral or male gender. The author gratefully acknowledges the contribution of women in the military, including Army Pfc. Lori Ann Piestewa, the first American servicewoman killed in action, in Operation Iraqi Freedom. *In an Instant, Indian Country Grieves for Fallen Soldier* (Apr. 7, 2003), at

<http://www.indianz.com/News/show.asp?ID=2003/04/07/reaction>. Pfc. Piestewa was also the first known Native American woman killed in combat. *Piestewa Friend Calls Hopi Woman the Real Hero* (Nov. 12, 2003), at <http://www.indianz.com/News/archives/002494.asp>. See also Statement of Senator John McCain, Hardball College Tour (Apr. 23, 2002), available at <http://www.msnbc.msn.com/id/3080616>.

47. *Bell*, 366 U.S. at 402. In *Bell*, the Army and Court of Claims denied claims for pay and allowances by enlisted men who were captured in Korea and later voluntarily declined repatriation and went to China after the Korean Armistice. *Id.* at 415. On returning to the U.S., they were found guilty of disloyalty and benefits earned before their release as prisoners of war until the date of administrative discharges were withheld. *Id.* The Court remanded the case, stating that it was for Congress to someday provide that members of the Army who failed to live up to a specified code of conduct as prisoners of war should forfeit the pay and allowances due to them under contract. *Id.* at 416.

48. 10 U.S.C. § 651 (1998).

49. *In re Grimley*, 137 U.S. 147, 152 (1890).

50. U.S. Dept. of Def., Enlistment/Reenlistment Doc., DD Form 4/1 (Jan. 2001).

51. *Id.*

52. *Id.*

53. See *Grimley*, 137 U.S. at 151 (holding breach of contract does not destroy

contracts are not normally enforceable,<sup>54</sup> a number of military cases have emphasized the contractual components of enlistment agreements.<sup>55</sup> Frequently legal cases involve plaintiffs seeking rescission of the enlistment contract and discharge from service because of alleged misrepresentations and promises by recruiters.<sup>56</sup> What if chipping were only required when the service member is ordered into combat?

Beginning in World War I, service members in combat were required to wear an identification tag (dog tag).<sup>57</sup> Worn around the neck on a bead chain, the dog tag bears the service member's name, service number and branch of service, blood type, and religion, if desired by the individual.<sup>58</sup> Two tags are worn so that one tag may be removed on death or capture, leaving the other in place with the service member.<sup>59</sup> The tag must be physically seen by graves registration personnel to confirm the identity of a service member who is killed.<sup>60</sup>

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status as member of military or relieve service member from obligations which it entails); *see also Bell*, 366 U.S. at 401-02 (stating common-law rules governing private contracts have no place in the military).

54. Restatement (Second) of Contracts § 367 cmt a (1981) (stating undesirability of specifically enforcing personal service contracts).

55. *See Grulke v. United States*, 228 Ct. Cl. 720 (1981) (holding present use of an all volunteer military implies government must bargain with recruits to gain bright, well-qualified enlistees); *see also Caola v. United States*, 404 F. Supp. 1101 (D. Conn. 1975) (holding reenlistment agreements are contracts binding both Navy and servicemen when signed).

56. *See Withum v. O'Connor*, 506 F. Supp. 1374, 1379 (D.P.R. 1981) (holding material misrepresentations related to purpose of contract distorted meaning, which compelled rescission). In *Withum*, a Boston University student alleged fraud in the inducement when she was assured that should she enlist she would be able to obtain top training and attend any college she chose while the Navy paid a substantial portion of her tuition. *Id.* at 1375. After enlisting, she was assigned menial tasks and told that a transfer to attend college could not be done. *Id.* at 1376. The court held that enlistment contracts are subject to traditional principles of contract law and that a recruit is entitled to rescind an enlistment contract if the military is unable to perform its obligation. *Id.* at 1378. In addition, a recruit can rescind if the terms of the contract are so ambiguous as to be misleading, or if the recruit is induced to enter into the contract by fraud or false representations. *Withum*, 506 F. Supp. at 1378; *see also Pence v. Brown*, 627 F.2d 872, 874 (8th Cir. 1980) (holding that even if misrepresentations are innocently made, if they are material and induced the prospective recruit to enlist, contract may be rescinded).

57. *See General Order 294*, Navy Dept., May 12, 1917, *available at* <http://www.history.navy.mil/faqs/faq59-18.htm>.

58. Mil. Pers. Man. 1000-70 § 6, *available at* [http://bupersecd.technology.navy.mil/bup\\_updt/upd\\_CD/BUPERS/MILPERS/Milpers.pdf](http://bupersecd.technology.navy.mil/bup_updt/upd_CD/BUPERS/MILPERS/Milpers.pdf) (last visited Nov. 1, 2003).

59. *See Dept. of the Navy*, FAQs regarding UNS ID tags, "dog tags," *at* <http://www.history.navy.mil/faqs/faq70-1.htm> (last visited Mar. 21, 2004).

60. Dept. of the Navy, NavMedCom Inst. 5360.1, §§ 1-3(b), 4-7(a), *available at*

### B. Discharge and Administrative Separation

At the conclusion of service, a service member is normally granted a discharge.<sup>61</sup> In addition, the government may terminate the enlistment contract at any time.<sup>62</sup> Discharges may be administrative, or if resulting from conviction by court-martial, punitive.<sup>63</sup> Each branch of the service has its own regulations regarding administrative separation.<sup>64</sup>

Conscientious objection is one reason that an administrative discharge may be granted.<sup>65</sup> Could chipping lead to conscientious objection? A conscientious objector is a person who, because of religious training and belief, is conscientiously opposed to participation in war in any form.<sup>66</sup> The belief cannot be an essentially political, sociological, or philosophical view, or a merely personal moral code.<sup>67</sup> For example, Army regulations state that an objector is one whose "conscience . . . allows [him] no rest or inner peace if [he] is required to fulfill the present military obligation."<sup>68</sup>

### C. Constitutional Concerns

Article III of the Constitution provides the foundation for federal judicial power over cases involving national security.<sup>69</sup> Nevertheless, the Supreme Court has consistently limited its role in national security by deferring to the control of the Executive and Legislative branches.<sup>70</sup> The military is, by necessity, specialized and separate from civilian society.<sup>71</sup> Constitutional protections in military service

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<http://www.quartermaster.army.mil/dl/jointtest/jointframe/Publications/NAVMED%205360.1.pdf> (last visited Nov. 1, 2003).

61. 10 U.S.C. § 1168 (1998).

62. See U.S. Dept. of Def., *supra* note 50.

63. Exec. Order No. 12,473, 49 Fed. Reg. 17,152 (Apr. 13, 1984).

64. See AR 635-200, *available at*

[http://www.usapa.army.mil/pdffiles/r635\\_200.pdf](http://www.usapa.army.mil/pdffiles/r635_200.pdf) (last visited Oct. 28, 2003).

65. 50 U.S.C.S. § 456(j) (2000).

66. *Id.*

67. *Id.*; see also *United States v. Seeger*, 380 U.S. 163, 184 (1965) (defining test as whether religious belief occupies same place in life of objector as orthodox belief in God holds in life of one clearly qualified for exemption).

68. AR 600-43, *available at* [http://www.usapa.army.mil/pdffiles/r600\\_43.pdf](http://www.usapa.army.mil/pdffiles/r600_43.pdf) (last visited Oct. 31, 2003).

69. U.S. CONST. art. III, § 2, cl. 1.

70. See *Parisi v. Davidson*, 405 U.S. 34, 41 (1972) (holding that courts should be reluctant to interfere with military judicial proceedings); see also *Woodrick v. Hungerford*, 800 F.2d 1413, 1417 (5th Cir. 1986) (indicating courts have few resources and less competence in running military).

71. *Parker v. Levy*, 417 U.S. 733, 743 (1974). In *Parker*, a court-martialed

are different than in civilian life.<sup>72</sup> For instance, the need for order and discipline can outweigh an individual's interest in pursuing particular religious practices.<sup>73</sup> Can a service member refuse an order to be chipped? A service member cannot raise religious practice in defense of a refusal to obey a lawful order.<sup>74</sup> The test for legality of an order was set out in *United States v. Martin*.<sup>75</sup> All activities that are reasonably necessary to safeguard and protect the morals, discipline, and usefulness of the members of a command and are directly connected with the maintenance of good order in the services are subject to the control of the officers upon whom the responsibility of the command rests.<sup>76</sup>

In *United States v. Chadwell*, two Marines refused an order requiring them to submit to inoculation against certain diseases based on their religious belief.<sup>77</sup> The court held that the order was legal and

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army captain brought a habeas corpus proceeding seeking discharge from confinement in a federal penitentiary. *Id.* at 736. Captain Lev's conduct in publicly urging enlisted personnel to refuse to obey orders which might send them into combat and in urging African-American enlisted men not to go to Vietnam prejudiced order and discipline in the armed forces in violation of general articles of the Uniform Code of Military Justice (UCMJ). *Id.* at 736-37. The Court stated that military society was a society apart from civilian society, and that military law was a jurisprudence which exists separate and apart from the law which governs civil courts. *Id.* at 744. As such, to maintain the discipline essential to perform its mission effectively, the military developed the customary military law. *Parker*, 417 U.S. at 744. The Court held that the articles of the UCMJ authorizing court-martial for Levy's conduct were not unconstitutionally vague, nor were they facially invalid as punishment for misconduct that disrupted command and discipline in military service. *Id.* at 757.

72. See *Ben-Shalom v. Marsh*, 881 F.2d 454, 460, (7th Cir. 1989) (reasoning character of military community and mission requires applying constitutional protections in way that yields to demands of discipline and duty).

73. See *United States v. Burry*, 36 C.M.R. 829, 831 (1966) (holding seaman had no constitutional right to refuse legal order to perform his duties as cook on his Sabbath).

74. See *United States v. Cupp*, 24 C.M.R. 565, 571-72 (1957) (holding soldier required to salute despite religious objections).

75. *United States v. Martin*, 5 C.M.R. 102 (1952). In *Martin*, a member of the crew of the USS Sabine was convicted by summary court-martial for willful disobedience of an order from a superior officer in violation of Paragraph 2, Article 4, of the Articles for the Government of the Navy, 34 U.S.C. § 1200. *Id.* at 103. The sailor bartered cigarettes after an officer told him to keep the cigarettes for personal use and specifically not to barter them. *Id.*

76. *Martin*, 5 C.M.R. at 104. At the time the order was given, the ship was en route to a foreign port where American cigarettes were at a premium and where black markets flourished. The court held that in view of the difficulties encountered in controlling under-cover transactions and the disorders they create, the authority of the executive officer could reasonably include any order or regulation which would tend to discourage the participation of American military personnel in such activities. *Id.*

77. *United States v. Chadwell*, 36 C.M.R. 741, 742 (1965). *Chadwell* was a test

necessary in order to protect the health and welfare of the military community and that no constitutional or statutory rights of the accused were violated.<sup>78</sup> To permit otherwise, the court held, would be to make alleged religious belief superior to military orders and in effect would permit every soldier to disrupt discipline and duty.<sup>79</sup>

#### *D. Military Criminal Justice*

The military court system is organized much like civilian courts.<sup>80</sup> Trials are conducted by courts-martial with review by two tiers of specialized appellate courts.<sup>81</sup> The Supreme Court reviews judgments of the highest military court.<sup>82</sup> As noted in *Burns v. Wilson*, however, the review of military law exists separate and apart from civil judicial interpretation.<sup>83</sup>

There are two basic sources of this specialized jurisprudence: the Uniform Code of Military Justice (UCMJ) and the Manual for Courts-Martial (MCM).<sup>84</sup> The Constitutional basis for a separate judicial system for military related crimes is Article I.<sup>85</sup> The court-martial system is created under the executive branch and is not an Article III court.<sup>86</sup>

Jurisdiction of a court-martial depends on the military status of the accused and not on whether the offense is connected to military

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case in which two Marines disobeyed a lawful general regulation (Article 1227, U.S. Naval Regulations, 1948) and a lawful order of their superior officer to submit to immunization against smallpox, typhoid, paratyphoid and influenza. *Id.* After enlisting, both had accepted the tenets of the Apostolic Faith and its belief in absolute divine healing, making inoculations a sin. *Id.*

78. *Chadwell*, 36 C.M.R. at 748-50. *See also* *Jacobson v. Massachusetts*, 197 U.S. 11, 39 (1905) (holding that compulsory vaccination by local boards of health did not violate liberty secured by Constitution and that failure to take such shots represented substantial threat to public health and military safety).

79. *Chadwell*, 36 C.M.R. at 748, *paraphrasing* *Reynolds v. United States*, 98 U.S. 145 (1878).

80. *See* R.C.M. 1203-04 (2000), *available at* <http://www.au.af.mil/au/awc/awcgate/law/mcm.pdf> (last visited Mar. 21, 2004).

81. *Id.*

82. *Id.* at 1205.

83. *Burns v. Wilson*, 346 U.S. 137, 140 (1953) (holding rights of men in armed forces must necessarily be conditioned to meet certain overriding demands of discipline and duty and civil courts should not determine precise balance to be struck in this adjustment).

84. R.C.M. Part I ¶ 4.

85. U.S. CONST. art. I, § 8, cl. 14 (stating Congress has power to make rules for government regulation of land and naval forces).

86. *Dynes v. Hoover*, 61 U.S. 65, 79 (1858) (holding that Congress has power to provide for the trial and punishment of military and naval offences entirely independent of Article III judicial power).

service.<sup>87</sup> Jurisdiction over enlisted service members attaches when a valid enlistment contract is signed.<sup>88</sup> There is no jurisdiction over a person whose military status has been completely terminated before an offense is committed.<sup>89</sup> The courts, however, have carved out several exceptions to this general rule.

First, jurisdiction extends to offenses committed during the incarceration of a person in the military serving a sentence imposed by court-martial, even though the offense was committed after the prisoner's status as a service member ended.<sup>90</sup> Second, jurisdiction attaches where the offense charged allegedly took place while the service member was on active duty, so long as some action with a view to trial was commenced before the date of termination of the enlistment contract.<sup>91</sup> Third, jurisdiction remains over offenses committed on a previous tour of duty when military status terminates

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87. *Solorio v. United States*, 483 U.S. 435, 439 (1987). Solorio was on active duty in the Seventeenth Coast Guard District in Juneau, Alaska, when he allegedly sexually abused two young daughters of fellow coastguardsmen. *Id.* at 436. There was no base or post where Coast Guard personnel lived and worked in Juneau. *Id.* Consequently, nearly all Coast Guard military personnel resided in the civilian community and Solorio's offenses were committed in his privately owned home. *Id.* at 437. After the general court-martial was convened, the court-martial judge granted a motion to dismiss, ruling that the offenses were not sufficiently "service connected" to be tried in the military criminal justice system. *Id.* The Court held that the requirements of the Constitution were not violated where a court-martial was convened to try a serviceman who was a member of the Armed Services at the time of the offense charged. *Solorio*, 483 U.S. at 450-51. The test for jurisdiction is one of status, namely, whether the accused in the court-martial proceeding is a person who can be regarded as falling within the term "armed forces personnel." *Id.* at 439.

88. *United States v. Williams*, 302 U.S. 46, 49-50 (1937) (holding that upon enlistment sailor became entirely subject to control of United States in respect of all things pertaining to or affecting his service).

89. Exec. Order No. 12,586, 52 Fed. Reg. 7103 (March 3, 1987).

90. *Kahn v. Anderson*, 255 U.S. 1, 7-8 (1921). In *Kahn*, military prisoners at Leavenworth were placed on trial before a general court-martial for conspiracy to murder a fellow prisoner in violation of the ninety-sixth Article of War (Comp. St. § 2308(a)). *Id.* at 5. The Court held that military prisoners undergoing punishment under previous sentences were subject to military law and subject to trial by court-martial for offenses committed during such imprisonment, even though the previous sentences resulted in their discharge as soldiers. *Id.* at 6.

91. *Messina v. Commanding Officer, United States Naval Station*, 342 F. Supp. 1330, 1333 (S.D. Cal. 1972). In *Messina*, a serviceman allegedly sold marijuana and hashish to another serviceman while they were in Naval Weapons Center, China Lake, California. *Id.* at 1332. The court stated that the conduct was sufficiently service-connected to sanction the exercise of jurisdiction by the military court. *Id.* at 1335. The court held that where the criminal charges were initiated against the serviceman nearly two months before his enlistment was due to expire, the military court had statutory authority to automatically continue the serviceman on active duty until final resolution of charges. *Id.*

and there is immediate reenlistment.<sup>92</sup> Fourth, retired members of regular armed forces branches, who are entitled to receive pay, technically remain in military service and may be tried by court-martial.<sup>93</sup> Finally, jurisdiction over a service member exists until the member's military status is terminated by formal discharge, regardless of any delay by the government, even if the delay is unreasonable.<sup>94</sup>

The basic sources for the rules of discovery in military proceedings are the MCM and, provided they are not inconsistent with military

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92. *See generally* United States v. Gallagher, 22 C.M.R. 296 (1957). On November 2, 1950, while serving in combat in Korea, Gallagher was captured by the Chinese. *Id.* at 297. It was alleged that the murders and other atrocities of which he was convicted occurred while he was a prisoner of war. *Id.* He returned to the hands of American Forces as a result of Operation "Big Switch" and was returned to the U.S. where he was granted leave. *Id.* Upon return from leave in October 1953, he requested re-enlistment for a period of three years. *Gallagher*, 22 C.M.R. at 297. His prior term of enlistment had expired in 1951, although he continued to remain subject to military jurisdiction while in enemy hands and at least until he was discharged from his then current enlistment. *Id.* The crucial question asked on certification was if court-martial jurisdiction as to the offenses committed during his prior enlistment no longer existed by reason of the honorable discharge dated one day before the re-enlistment papers came through. *Id.* The court held that jurisdiction was constitutional under the circumstances of the case. *Id.* at 302.

Will not discipline, morale and good order suffer measurably if one who murders his compatriot can remain in the service and escape punishment because he re-enlists before his crime is detected? Should the authority of military justice to punish the wrong done depend upon the illogical and fortuitous contingency of an intervening honorable discharge when it is delivered only after the accused has re-enlisted in the service? The answer should be obvious—and is to us.

*Gallagher*, 22 C.M.R. at 297.

93. United States v. Tyler, 105 U.S. 244, 245 (1881). *Cf.* Hooper v. United States, 326 F.2d 982 (1964) (providing retired officer can be dismissed from service by court-martial for offenses against UCMJ but not addressing question of confinement). In *Hooper*, a naval officer who was retired for years of service and not on active duty was charged with violations of the UCMJ for alleged homosexual acts occurring at a private residence. *Id.* at 983-84. Without being recalled to active duty, and over his objection, he was subjected to trial by naval court-martial and sentenced to dismissal and forfeiture of all pay and allowances. *Id.* at 984.

94. United States v. Poole, 30 M.J. 149, 151 (1990). Seaman Poole was tried by special court-martial on a charge of unauthorized absence. *Id.* at 149. Poole's term of enlistment had expired and he was still awaiting discharge a few weeks later when he absented himself. *Id.* at 150. The court explained that the UCMJ made no express exception to military jurisdiction continuing until a serviceman's military status is terminated by discharge from his enlistment. *Id.* The court held that jurisdiction exists despite delay, even unreasonable delay, by the Government in discharging that person at the end of an enlistment and that no constructive discharge results when a serviceman is retained on duty beyond the end of an enlistment. *Id.* at 151.

justice, the Federal Rules of Criminal Procedure.<sup>95</sup> The Jencks Act, requiring the production at trial of pretrial statements of government witnesses, is also applicable.<sup>96</sup> Additionally, military law incorporates executive orders such as the Military Rules of Evidence (MRE) and regulations of the individual services.<sup>97</sup>

As in civilian criminal cases, there are some limitations on discovery in court-martial proceedings. The most important limitations relate to privileged information. Military secrets, state secrets, and classified material are not subject to discovery.<sup>98</sup> Many offenses specified in the UCMJ are strictly military in nature. Other offenses, denounced by military law rather severely because of the nature of military duty and martial responsibilities, would be minor offenses under civilian law. For example, members of the armed services can be disciplined for participating in parades and demonstrations as a means of protest.<sup>99</sup> In addition, the UCMJ states that any member of the armed forces who, without authority, fails to go to his appointed place of duty or absents himself from his unit at the time prescribed shall be punished as a court-martial may direct.<sup>100</sup> Could chipping make these offenses easier to prove? Absence Without Leave (AWOL) does not require specific intent.<sup>101</sup> It may be established merely by proof of the unauthorized absence and the

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95. See App. 21 R.C.M. 905(c) (2000), available at <http://www.au.af.mil/au/awc/awcgate/law/mcm.pdf> (last visited Mar. 21, 2004).

96. 18 U.S.C. § 3500 (1998); see also *United States v. Albo*, 46 C.M.R. 30, (1972) (holding Jencks Act applicable to courts-martial).

97. See generally R.C.M Part III, IV (2000), available at <http://www.au.af.mil/au/awc/awcgate/law/mcm.pdf> (last visited Mar. 21, 2004).

98. Mil. R. Evid. 505.

99. See generally *Cortright v. Resor*, 447 F.2d 245 (2d Cir. 1971). In *Cortright*, members of an Army Band leading a Fourth of July parade pre-arranged for the fiancé of one member and the wives of four other band members to march with the band while carrying signs protesting the war in Vietnam. *Id.* at 247-48. The spectators and one parade participant reacted with violence. *Id.* at 248. Subsequently, the band members were each transferred to different stations to avoid similar incidents. *Id.* at 249. *Cortright* brought a writ of mandamus compelling the cancellation of the transfer orders, contending that it chilled his First Amendment rights. *Cortright*, 447 F.2d at 249. The court pointed out that the Army had large scope in striking a proper balance between a serviceman's assertions of the right of protest and the maintenance of the effectiveness of military units to perform their assigned tasks. *Id.* at 255. The court held that the military constitutes a specialized community governed by a separate discipline from that of the civilian. *Id.* at 254. Therefore, deferential government requires that the judiciary not interfere with legitimate Army matters. *Cortright*, 447 F.2d at 254. The context of this case was precisely the area where a soldier wearing his uniform and performing a military assignment with his unit could be subjected to discipline for contributing to disorder, and a civilian could not. *Id.* at 253.

100. 10 U.S.C. § 886 (1998).

101. Exec. Order No. 12,473, 49 Fed. Reg. 17,152 (April 13, 1984).

accused actual knowledge of the appointed time and place of duty.<sup>102</sup> Actual knowledge may be proved by circumstantial evidence.<sup>103</sup>

Use of microchips as evidence raises several issues. The MRE are substantially the same as the Federal Rules of Evidence, with modifications that adapt the rules to military practice.<sup>104</sup> The Fifth Amendment right against self-incrimination is one area that could be affected. The Constitution prohibits compelling any person to incriminate himself in a criminal case.<sup>105</sup> Article 31 of the UCMJ generally conforms to this prohibition, and has been construed as granting greater protection in some respects.<sup>106</sup> A service member has the protections of both the Fifth Amendment and Article 31 against self-incrimination.<sup>107</sup> The privilege most beneficial to the individual will be applied.<sup>108</sup> Blood or urine samples, handwriting and other evidence obtained from visual or physically intrusive examinations are admissible, so long as they do not conflict with other rules of admissibility.<sup>109</sup>

Herein lies the problem with a service member who is chipped. Rule 301 states that the privilege against self-incrimination applies only to evidence of a testimonial or communicative nature.<sup>110</sup> Information regarding the service member's whereabouts and physical condition may be conveyed via the chip.<sup>111</sup> This brings up questions of whether the chip actually communicated, whether the information communicated is hearsay, and whether the information falls under one of the exceptions to the general rule.<sup>112</sup> For example, the business records exception in Rule 803 states that the term "business" includes armed forces.<sup>113</sup> Records of regularly conducted activity include morning reports and other personnel accountability documents, service records, logs, unit personnel diaries, and individual equipment records each fall under this exception to the hearsay rule.<sup>114</sup> Is information generated from the chip a document,

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102. *Id.*

103. *Id.*

104. *See generally* Exec. Order No. 12,473 at Part III.

105. U.S. CONST. amend. V.

106. Mil R. Evid. 301; *see also* United States v. Lopez, 35 M.J. 35, 41 (1992) (listing various rights available to service members not available to defendants in state or federal criminal justice system).

107. Mil. R. Evid. 301.

108. *Id.*

109. Mil. R. Evid. 312.

110. Mil. R. Evid. 301.

111. *See* discussion *supra* Part I B.

112. *See generally* Mil. R. Evid. 801.

113. Mil. R. Evid. 803(6).

114. *Id.*; *see also* United States v. Casey, 45 M.J. 623, 626 (1996) (holding

log or equipment record that falls under this exception as well?

### *E. Tort Claims*

Military personnel are often precluded from asserting tort claims against the government they serve.<sup>115</sup> The Federal Tort Claims Act (FTCA) waives government immunity for common law torts, however, FTCA also bars claims arising out of combatant activities of the armed forces during time of war, either declared or undeclared.<sup>116</sup> Claims arising in a foreign country are also barred.<sup>117</sup>

If a service member is injured due to implantation of the chip, would he have grounds for a personal injury or products liability claim? Under the *Feres* doctrine, members of the armed services whose injuries are incident to their military service cannot recover under FTCA.<sup>118</sup> The Supreme Court has expanded the *Feres* doctrine to preclude government liability when a command decision led to a claim not incident to service.<sup>119</sup> The Court has also barred claims against civilian employees of government agencies.<sup>120</sup> In addition, the

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computer generated records can be entered into evidence as business records exception).

115. 28 U.S.C. § 2680(j)-(k)(1998).

116. *Id.*

117. *Id.*; see also *Koochi v. United States*, 976 F.2d 1328, 1334 (9th Cir. 1992), *cert. denied* 508 U.S. 960, (1993) (holding claim under FTCA barred by exception for combatant activities in time of war, even though no formal declaration of war in connection with "tanker war" during Iran-Iraq conflict). In the tanker war, Iran and Iraq attacked vessels carrying the other's oil. *Id.* at 1330. In 1986, Iran focused its attacks on ships calling at Kuwaiti ports, especially those flying the Kuwaiti flag. *Id.* Those ships, according to Iran, were carrying cargo, primarily oil, destined for Iraq. *Id.* Kuwait appealed to the United States for help in protecting its shipping. *Id.*

118. *Feres v. United States*, 340 U.S. 135, 146 (1950). In *Feres*, a serviceman on active duty died by fire in the barracks at Pine Camp, New York. *Id.* at 137. Negligence was alleged in quartering him in barracks known or which should have been known to be unsafe because of a defective heating plant, and in failing to maintain an adequate fire watch. *Id.* The issue raised was whether FTCA extended its remedy to one sustaining injury "incident to the service" and under what circumstances would there be an actionable wrong. *Id.* at 138. The Court responded that, without exception, the relationship of military personnel to the Government had been governed exclusively by federal law. *Feres*, 340 U.S. at 146. The Court concluded that in the absence of express congressional language, the FTCA effect of waiving immunity from recognized causes of action was not to visit the Government with novel and unprecedented liabilities. *Id.* at 142; see also *United States v. Brown*, 348 U.S. 110, 112 (1954) (explaining that such suits would undermine military discipline).

119. *United States v. Shearer*, 473 U.S. 52, 59 (1985) (holding no recovery for negligent supervision of service member who committed murder).

120. *United States v. Johnson*, 481 U.S. 681, 686 (1987) (holding military status of alleged tortfeasor not essential element of *Feres* doctrine). In *Johnson*, the

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*Feres* doctrine bars non-FTCA claims against the federal government for constitutional torts.<sup>121</sup>

The U.S. Food and Drug Administration (FDA) has not yet approved chipping, although ADSX has submitted a 510(k) application seeking the agency's permission to market VeriChip's healthcare information applications in the United States.<sup>122</sup> The use of chips in military personnel could be classified as experimental research.<sup>123</sup> The Defense Authorization Act (DAA) states that funds appropriated to the DoD may not be used for research involving a

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respondent's husband, a helicopter pilot for the Coast Guard, was killed when his helicopter crashed during a rescue mission. *Id.* at 682-83. Shortly before the crash, air traffic controllers from the Federal Aviation Administration, a civilian agency of the Federal Government, had assumed positive radar control over the helicopter. *Id.* at 683. The respondent filed an FTCA action seeking damages from the Government on the ground that the controllers' negligence had caused the crash. *Id.* The Court held that the *Feres* doctrine bars an FTCA action on behalf of a service member killed during an activity incident to service, even if the alleged negligence was by civilian employees of the Federal Government. *Johnson*, 481 U.S. at 692.

121. *Chappell v. Wallace*, 462 U.S. 296, 304 (1983) (holding no recovery from superior officer for alleged racial discrimination).

122. Telephone interview with N. M. Landers, Center for Devices and Radiological Health, U.S. Food and Drug Admin. (May 22, 2003); Press Release, Applied Digital Solutions, 510(K) Application Submitted to Food and Drug Administration Seeking Permission to Market Subdermal RFID Verichip's Healthcare Applications in the United States (Oct. 29, 2003) at <http://www.adsx.com/news/2003/102903.html>; *see also* discussion *supra* Part I B. Medical devices and "radiation emitting devices" fall under the Federal Food, Drug, and Cosmetic Act (FD&C). 21 U.S.C. §§ 301-399 (2003). It is unclear whether regulation of the VeriChip™ by the FDA would be required in the context of identification of armed forces personnel. In October 2002, the FDA ruled that VeriChip™ is a regulated medical device when marketed as a device that provides information in the diagnosis or treatment of injury or illness. Press Release, Applied Digital Solutions, 510(K) Application Submitted to Food and Drug Administration Seeking Permission to Market Subdermal RFID Verichip's Healthcare Applications in the United States (Oct. 29, 2003) at <http://www.adsx.com/news/2003/102903.html>. In that same ruling, the FDA determined that VeriChip™ was not a regulated device for its "security, financial, and personal identification/safety applications." *Id.*

123. Manufacturers, distributors, or importers are required to get FDA clearance before marketing certain types of new medical devices in the United States. FDA, Center for Devices and Radiologic, Health at <http://www.fda.gov/cdrh/devadvice/314.html> (last visited Nov. 1, 2003). In most cases, this clearance is obtained by submitting a file, called a 510(k), for FDA review. *Id.* The 510(k) must demonstrate that the new device is "substantially equivalent" to a named device (the "predicate") that has already been legally marketed in the United States for the same purpose. *Id.* If the device involves new technology, a manufacturer may need to develop new testing methods, since existing standards may not apply. *See* Robert Mosenkis, *Strategies for Bench Testing Medical Devices*, Med. Device & Diagnostic Industry (Apr. 2003), at 3, available at <http://www.citechtest.com/863MD.pdf>.

human being, however, there are several exceptions to the rule.<sup>124</sup> Using service members as experimental subjects is authorized when the service member gives informed consent in advance.<sup>125</sup> In cases where the research is intended to be beneficial to the subject, informed consent of the subject or his legal representative is sufficient.<sup>126</sup> In addition, the ban against using humans as subjects can be waived by the Secretary of Defense if the specific research involves the development of a medical product that may benefit the subject, is necessary to the armed forces, and is carried out in accordance with other applicable laws.<sup>127</sup> Does chipping fall within these exceptions?

The courts have interpreted these limitations broadly. For example, in *Doe v. Sullivan*, a service member and his wife brought suit challenging an FDA interim regulation permitting the DoD to use unapproved, investigational drugs on military personnel, without the service member's informed consent, in certain combat-related situations.<sup>128</sup> The service member argued that the FDA regulation was facially invalid under the DAA.<sup>129</sup> The court held that the DAA did not block the FDA action because the DoD's interest in accomplishing the military goals of Operation Desert Storm, by administering the drugs to troops to protect them from chemical and biological attacks, satisfied any Fifth Amendment challenge to the FDA rule.<sup>130</sup>

Military medical personnel are immune from individual liability in tort cases because the Military Malpractice Act makes the FTCA the sole basis for malpractice suits.<sup>131</sup> In *Borden v. Veterans Admin.*, this principle was extended to civilian medical employees at military hospitals.<sup>132</sup> The court stated that the test was not where the treatment

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124. 10 U.S.C. § 980 (1998).

125. 10 U.S.C. § 980(a).

126. *Id.*

127. 10 U.S.C.A. § 980(b).

128. *Doe v. Sullivan*, 938 F.2d 1370 (D.C. Cir. 1991).

129. *Id.* at 1382-83.

130. *Id.* at 1383. The statutory section in question emphasized the professional judgment of the experts responsible for administering the unapproved new drugs to human subjects, permitting exceptions "where [those experts] deem [consent] not feasible." *Id.* at 1381-82; *see also* 21 U.S.C. § 355(i). In *Doe*, the court agreed that FDA interpretation of "not feasible" included "impracticable," taking into account particularly urgent circumstances: a combat-zone setting, the safety of military personnel at that location, and the compelling need to promote success of the service members' mission, was well within the ordinary meaning of the words Congress used in the legislative text. *Doe*, 938 F.2d at 1382.

131. 10 U.S.C. § 1089 (1998).

132. *Borden v. Veterans Admin.*, 41 F.3d 763 (1st Cir. 1994).

was rendered or by whom, but rather the service member's status at the time of the treatment.<sup>133</sup>

Military contractors are also immune from tort liability, at least in products liability cases.<sup>134</sup> In *Boyle v. United Technologies Corp.*, the father of a drowned service member claimed that his son's death could have been prevented if not for a defectively designed emergency escape system in a military helicopter.<sup>135</sup> The Court held that liability for design defects could not be imposed on contractors when the government approved reasonably precise specifications, the equipment conformed to those specifications, and the supplier warned the government about the dangers.<sup>136</sup>

### III. CONCLUSION

Subdermal microchip implantation of U.S. Military personnel could be very real in the near future. It will likely be only a matter of time until Digital Angel™ is reduced to the size of the VeriChip™ and combined with the power source Thermo Life™ for instant identification, location, and physical condition of service members around the world. This combination could lead to a future where the status of MIA no longer exists.

If chipping is initiated as part of enlistment in the military, the enlistment agreement would need to specifically state that implantation is a condition of enlistment. Otherwise, a recruit

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133. *Id.* at 763-64. In *Borden*, the plaintiff argued on appeal that the *Feres* doctrine did not apply because he was "off duty," playing basketball, when he suffered his knee injury, and the medical care he received in military hospitals was rendered in part by civilian employees. *Id.* at 763. The court affirmed that FTCA's limited waiver of sovereign immunity did not extend to "injuries to servicemen where the injuries arise out of or are in the course of activity incident to service." *Feres*, 340 U.S. at 146.

134. *Boyle v. United Techs. Corp.*, 487 U.S. 500, 512 (1988).

135. *Id.* at 502-503. Boyle was killed when his CH-53D helicopter crashed off the coast of Virginia Beach during a training exercise. *Id.* at 502. Although he survived the impact of the crash, he was unable to escape from the helicopter and drowned. *Id.* Claims included that Sikorsky had defectively repaired a device called the servo in the helicopter's automatic flight control system, which malfunctioned and caused the crash, and that Sikorsky had defectively designed the copilot's emergency escape system. *Id.* at 503. The escape hatch opened out instead of in and was therefore ineffective in a submerged craft because of water pressure, and access to the escape hatch handle was obstructed by other equipment. *Boyle*, 487 U.S. at 503.

136. *Boyle*, 487 U.S. at 512. The Court held that military contractor liability was exempted because the selection of the appropriate design of military equipment was a discretionary function within the FTCA. *Id.* at 511. The financial burdens of judgments would ultimately be passed to the United States because contractors would raise prices to insulate against potential liability for Government-ordered designs. *Id.* at 511-12.

ordered to submit to chipping after enlistment could have a case for rescission based on material misrepresentation. The recruit would need to understand from the start that chipping is or may be required if he wishes to serve in the Armed Forces.

Chipping may only be required if the recruit is ordered to serve in combat. The traditional use of dog tags for identification of military personnel presents problems in combat. In the realities of war, dog tags can be lost or misplaced. Service members can be misidentified by accidentally wearing another's tags or by mistakes on the tag itself. The dog tag does not offer any clue as to the fate of a service member captured or missing in action. A chip could solve these problems because it would not require physical presentation, would not be lost and could not be worn by another service member. The GPS system imbedded in the chip would confirm the service member's location and minimize speculation as to the soldier's physical condition because the chip relays blood pressure, pulse and other vital functions.

Chipping could lead to a rise in administrative discharge requests. The chip has been equated to the Mark of the Beast, and for Christian soldiers, sailors, airmen, and marines, an order sending them into combat could spark conscientious objection. If the service member is not opposed to participation in war, but based on his religious belief is opposed to being chipped, it must be determined whether the refusal qualifies for an administrative discharge. So long as it is clearly represented to the enlistee that he could be chipped when ordered into combat, a recruit could have only conscientious objection to support his right of refusal.

Other than by separation based on conscientious objection, a service member may not be able to refuse a lawful order to be chipped. The chip is implanted by injection, similar to a vaccination. Under *Chadwell*, it is likely that courts will hold that chipping is crucial to the protection of service members because of its ability to identify and locate them in combat.

Disadvantages of chipping include that a chip could assist the military prosecution of certain offenses. Chipping could make certain absence offenses exceptionally simple to prove, particularly AWOL, making a prosecutor's job easier by establishing with accurate finality that a service member was not where he was supposed to be. In another example, if a soldier were chipped, his participation in a protest would be easier to prove. The chip could pinpoint the service member at the location of the demonstration. There would be no question as to whether the person seen at the protest by witnesses was the accused.

The legality of using information from the chip as evidence, however, remains to be determined. Military secrets, state secrets, and classified material are not discoverable. The location of a service member, as related by the chip, could fall under this limitation. United States incursions into Cambodia during the Vietnam War are an example of such proprietary location information. In fact, depending on the deployment of chipping, the very use of the technology may be classified.

Tort claims in relation to the implantation of the chip would likely be barred due to the *Feres* doctrine, and a soldier would likely be denied recovery for any claim relating to injury due to a defective chip in product liability cases because military contractors are also immune from liability. If implantation is classified as experimental research, the need for the service member's informed consent may be deemed waived under the DDA. Chipping would likely be considered a medical device that benefits military personnel and is necessary to the armed forces.

For some, the benefits of microchips replacing dog tags outweigh constitutional concerns. Service members would no longer be classified as MIA because the status would not occur. Military personnel would have definitive information when a service member is killed or captured. Rescue operations could be more easily mounted, for less cost, both financially and in terms of human loss. Families like Scott Speicher's would have the answers they seek.