Appendix B
U.S. Statutes Governing Outer Space

The National Aeronautics and Space Act[1] does not refer specifically to "space debris;" rather its provisions for environmental protection are based upon the National Environmental Policy Act (NEPA)[2] and its pertinent regulations.[3] This means that whenever NASA's actions may affect the quality of the environment it must either have an environmental assessment (EA)[4] or submit an environmental impact statement (EIS).[5] Both U.S. and ESA reports rely upon the international legal definition of '(global commons," which are those territories outside the jurisdiction of any states. This definition provides the broadest, most general basis for including outer space within those "global commons, " and would provide a mandate for protection of the space environment. Such a mandate would necessitate recognition and prioritization of some of the legal issues which involve mitigation and control of space debris.[6] This definition is also the basis for the Outer Space Treaty's provision that no state shall claim sovereignty over outer space, the Moon, or other celestial bodies.[7] However, NASA regulations that provide for environmental protection appear to characterize the global commons much more narrowly, and it is argued that NASA regulations do not mandate protection of the outer space environment, per sea For example, NASA regulation 14 CFR 1216.321(a) (1988) states that the analysis by the Headquarters Official of actions under his/her supervision shall include consideration of the environmental effects abroad as well as potential effects upon the global commons (i.e., "oceans and the upper atmosphere") (emphasis added). That argument might be stronger if the agency created by the Act was simply the "National Aeronautics Administration," but the title includes SPACE; therefore the regulations appear to have been constructed in ways to leave U.S. obligations to the outer space environment in the international forum, rather than expanding domestic regulations. Consequently, an environmental assessment or environmental impact statement is not a legal requirement for space activities in outer space, which could produce space debris.

The application of the *National Environmental Protection Act.* according to the U.S. report, has been stated by various government agencies as legally inappropriate for application to space debris problems because neither civil nor military regulatory law provide standards SPECIFIC to space law.[9] Such agencies may choose to conduct environmental assessments for their activities involving space transportation and communication as a matter of policy, but do not consider such

[1] National Aeronautics and Space Act, 72 Stat. 426 (1958) (codified at 42 U.S.C. 2451 [1978 & supp. 19871).

242 U.S.C. 4321-4370 (1978& supp. 1987). NEPA states that all Federal agencies must comply with its requirements. (42 U.S.C. 4321).

[3] 40 CFR 1500- 1517 (1987). The NASA regulations implement the directives of NEPA to "protect and enhance the quality of the environment . . . (from) actions which may have an impact on it." 14 CFR 1216.102(a) (d) (1984).

[4] EAs are generally required "or". "specific spacecraft development and flight projects in space and terrestrial applications; reimbursable launches of nonNASA spacecraft or payload;. . . and actions to alter ongoing operations at a NASA installation which could lead either directly or indirectly to natural or physical environmental effects. " 14 CFR 1216.306(c)(2) (1984).

[5] A type of specific action that would require NASA to do a more formal EIS would be. ". . . development and operation of space vehicles likely to release substantial amounts of foreign materials into the Earth's atmosphere, or into space. " Ibid. (c)(2).

[6] National Security Council, *Report on Orbital* Debris by Interagency Group (Space), February 1989, p. 43.

[7] Outer Space Treaty, Article II.

[8] Howard Baker, Space Debris: Legal and Policy Implications (Dordrecht: Martinus Nijhoff Publishers, 1989), p. 70.

[9] National Security Council, op. cit., footnote 6, p. 43.

assessments to be required, under essentially the same argument as that stated above for the NASA environmental protection regulations. A similar decision has been made with regard to Executive Order 12114 for certain Federal actions that may affect the "global commons outside the jurisdiction of any nation (e.g., the oceans or Antarctica)": the specification of examples is interpreted as an intention to narrow the environmental considerations. [10]

The Commercial Space Launch Act ***of 1984, as*** *amended* [11] establishes a licensing process that addresses hazards from space debris generated by commercial launch activities.[12] In addition, for certain payloads, the Office of Commercial Space Transportation must determine whether the launch of these payloads would jeopardize public health and safety, safety of property, and U.S. national security and foreign policy interests.[13]

The Lund Remote Sensing Commercialization Act ***of 1984***[14] provides that licensed entities must dispose of any satellites in space when the license terminates, and disposal must be made "... in a manner satisfactory to the President."[15] Presumably this would mean that a defunct spacecraft would not be left where it would contribute to the creation of more space debris.

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[10] Ibid.

[11] 49 U.S.C. app. 2601-2623, Public Law 96-575, 100-657, (1984 and Supp. 1988).

[12] 14 CFR, Ch. III.

[13] Ibid. (14 CFR 415.27).

[14] Public Law 96-366, 98 Stat. 451, July 17, 1984.

[15] National Securit, Council, op. cit., footnote 6.