UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 4, 1980 SECY-80-530

CONSENT CALENDAR ITEM

For: The Commissioners

From: William J. Dircks, Executive Director for Operations

Subject: FINAL RULE ON THE PROTECTION OF TRANSIENT SHIPMENTS

Purpose: To obtain the Commission's approval of amendments to 10 CFR Parts 70 and 73 for publication in final form.

Category: This paper covers a minor issue requiring Commission action.

Discussion: Background

On January 8, 1980, the Commission issued for public comment proposed amendments to 10 CFR Part 70 [45 FR 1625] to withdraw the existing exemption from licensing requirements for carriers who possess formula quantities of strategic special nuclear material in the course of a transient shipment and require them to be responsible for assuring that the strategic special nuclear material is protected against theft and radiological sabotage. Interested persons were given sixty days (until March 10, 1980) to comment on the proposed amendments.

Among the comments received was one from the U.S. Department of State which suggested that the proposed amendments be extended in scope to require protection of types of material other than formula quantities (e.g., Category II and III material, spent fuel) in anticipation of the ratification of the Convention on the Physical Protection of Nuclear Material, of which the U.S. is a signatory. Such an extension of the scope of the proposed rule would appear to be premature in view of the fact that the Convention has not yet been ratified. Also, an additional public comment period would be required if such a major change were made in the proposed amendments. Therefore, this suggestion will be addressed in a separate action.

None of the comments received have resulted in the staff's recommending substantial changes to the amendments. The comments and the staff's responses to them are discussed in the enclosed Federal Register notice (Enclosure "A").

CONTACT:
C. K. Nulsen, SGRI
42-74181

Value/Impact

A value/impact analysis on the proposed transient shipment rule was prepared and placed in the Public Document Room at the time of publication of the proposed rule for public comment. This value/impact analysis remains valid in view of the minor changes between the proposed amendments and the final amendments, and continues to be available in the Public Document Room.

NRC Resources

There are no significant differences in demand for NRC resources between the proposed amendments published for public comment and the final amendments.

Recommendation: That the Commission:

1. Approve the amendments set forth in Enclosure "A" for publication in final form in the Federal Register.

2. Note that the amendments will become effective 240 days after publication in the Federal Register and that within this period draft guidance (Enclosure "B") will be published for public comment, revised as necessary in response to comments received, and published in final form as a regulatory guide.

3. Note that the appropriate Congressional Committees will be notified of this Commission action.

4. Note that a value/impact assessment was prepared for the proposed amendments. This assessment has been and continues to be available in the Public Document Room, and remains valid for the amendments in the final rule.

5. Note that neither an Environmental Impact Statement nor a Negative Declaration is required in accordance with 10 CFR 51.5(d)(3) because the proposed amendments are not significant from the standpoint of environmental impact.

6. Note that a public announcement will be issued when the amendments are filed with the Office of the Federal Register.

7. Note that necessary arrangements have been made with the Department of Transportation for them to inform transient shipment carriers that they must comply with NRC regulations and to specify that NRC is responsible for inspection and enforcement of compliance with such regulations.

Scheduling: For affirmation at an open meeting.

William J. Dircks
Executive Director of Operations

Enclosures:
"A"-Federal Register Notice
"B"-Draft guidance, "Physical Protection of Transient Shipments of Formula Quantities of Strategic Special Nuclear Material"
"C"-Public Announcement (To be provided)

Commissioners' comments or consent should be provided directly to the Office of the Secretary by c.o.b. Monday, December 22, 1980.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT December 15, 1980, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

This paper is tentatively scheduled for affirmation at an Open Meeting during the Week of January 5, 1980. Please refer to the appropriate Weekly Commission Schedule, when published, for a specific date and time.

DISTRIBUTION
Commissioners
Commission Staff Offices
Exec Dir for Operations
ACRS
ASLBP
Secretariat

ENCL SURE A

NUCLEAR REGULATORY COMMISSION

10 CFR PARTS 70 AND 73

DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL;
PHYSICAL PROTECTION OF PLANTS AND MATERIALS

Transient Shipments of Strategic Special Nuclear Material

AGENCY: U.S. Nuclear Regulatory Commission

ACTION: Final rule

SUMMARY: The Nuclear Regulatory Commission is amending its regulations to withdraw the exemption from licensing requirements for carriers who possess formula quantities of strategic special nuclear material in the course of a transient shipment, and require them to be responsible for assuring that the strategic special nuclear material is protected against theft and radiological sabotage. Such carriers will be required to provide, during stopovers at United States ports, physical protection implemented in accordance with a security plan. This amendment will bring such carriers (who possess formula quantities of strategic special nuclear material in the course of a transient shipment) directly under NRC physical protection regulations. A transient shipment is defined as a shipment of special nuclear material originating and terminating in foreign countries, on a vessel or aircraft which stops at a United States port.

EFFECTIVE DATE: [Insert date 240 days after FR publication]

FOR FURTHER INFORMATION CONTACT: Mr. C. K. Nulsen, Regulatory Improvements Branch, Division of Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 (301-427-4181).

SUPPLEMENTARY INFORMATION: In accordance with the Commission's position that shipments of formula quantities of strategic special nuclear material (SSNM) should be protected in the interest of the common defense and security and public health and safety, the Commission published proposed amendments on January 8, 1980 [45 FR 1625] to 10 CFR Parts 70 and 73 of its regulations that would require carriers possessing formula quantities of strategic special nuclear material in the course of a transient shipment to provide physical protection for such material during stopovers at United States ports. Interested persons were given until March 10, 1980, to comment on the proposed amendments.

The proposed amendments have been adopted in effective form without significant changes, and will become effective 240 days after publication of this notice. In the interim period, the NRC will publish a regulatory guide in draft form entitled, "Physical Protection of Transient Shipments of Formula Quantities of Strategic Special Nuclear Material." This document has been prepared to provide guidance to persons covered by the general license issued by these amendments and will be published for a public comment period of sixty days. It is expected that the final regulatory guide will be published prior to the time the final rule becomes effective.

With respect to the proposed amendments, the resolution of the comments received is as follows:

(1) A comment received from the Department of State noted that §70.20(d)(7) of the proposed amendments would require the use of armed personnel to protect transient shipments at United States ports, and questioned the legal standing of foreign nationals to act as guards or escorts for such shipments.

A number of different avenues are available to licensees for obtaining the services of armed personnel to serve as escorts for transient shipments at a United States port. These are outlined in the draft guidance referred to above. The regulation neither requires nor prohibits the use of foreign nationals to provide the required escort services at the United States port. However, there are, in particular, several factors which should be taken into consideration in determining the feasibility of foreign nationals contributing effectively to the protection of a transient shipment. Language difficulties and lack of familiarity with local communications systems could possibly detract from the ability of foreign nationals to rapidly and effectively communicate with local law enforcement agencies or with those elements of the guard force who may be of local origin, for purposes of requesting assistance when needed or for coordinating response activities. Local jurisdictions in the United States generally exercise control over the use and possession of hand guns or other firearms. If required permits for carrying such weapons are not obtained in advance of the shipment, where such permits are required, foreign nationals could not legally carry weapons off the shipment vessel or aircraft. Licensees intending to include foreign nationals in the guard force they provide to meet the requirements for physical protection of a transient shipment would be expected, just as would any other licensee, to be able to demonstrate that the physical protecton system provided meets the requirements of 10 CFR Part 73 (specifically §§73.20 and 73.25, and the portions of the guard qualifications and training requirements of Appendix B corresponding to the guard duties required for transient shipments).

The draft guidance document referred to above has been revised to specifically reflect the foregoing considerations.

(2) Another State Department comment raised the question of classification of written security plans and proper access to the resultant classified information and urged the NRC to take steps to assure that plans are properly protected. Since the publication of the proposed amendments, new regulations in 10 CFR Part 95 have been promulgated under which the NRC has determined that certain information contained in physical protection plans and advance shipment notifications is classified Confidential National Security Informaton (CNSI) and must be protected accordingly.

Since some of the information contained in physical protection plans and advance shipment notifications generated by potential general licensees under the proposed amendments would be of a safeguards sensitive nature, it is expected that potential general licensees would seek to protect such information from unauthorized disclosure on their own initiative since it is in their own best interest to do so. Such information in the hands of the U.S Government or a person in the United States would be considered classified as CNSI and thus subject to the provisions of 10 CFR Part 95.

Plans generated by a foreign firm for the protection of its nuclear material while in the United States, even though classified by NRC when it is under U.S. control, would probably be protected in the interest of the owners of the SSNM while under foreign control. The U.S. Government has no jurisdictional basis to classify information originated by and in the custody of a foreign firm until it reaches the United States. At that point, although classifiable, it would be declassified as necessary for the carrier to carry out the plan. Appropriate language has been included in the draft guidance referred to above regarding approaches for protection of classified information.

(3) A third comment questioned the Commission's finding that neither an environmental impact statement nor an environmental appraisal to support a negative declaration was required for the proposed amendments. The commenter cited a number of possible economic impacts and environmental hazards which he foresaw resulting from the proposed amendments (e.g., lost opportunities for commerce due to cargo ships avoiding U.S. ports, increase in freight charges to receivers of nonnuclear merchandise, environmental risk of at-sea transfers attempted in order to avoid increased docking costs). The Commission has examined these stated impacts and hazards and determined that it is unrealistic to expect any of them to materialize as a result of the amendments, especially in consideration of the very low number of transient shipments known to have taken place in the past or projected to take place in the future. The Commission, therefore, finds no basis for changing its position on the need for environmental impact statements or environmental appraisals.

(4) The State Department also suggested that the proposed amendments be extended in scope to require protection of categories of material other than formula quantities of strategic special nuclear material (e.g., special nuclear material of moderate and low strategic significance, irradiated reactor fuel, etc.). This action was suggested in anticipation of the ratification of the Convention on the Physical Protection of Nuclear Material, of which the U.S. is a signatory. This suggestion will be addressed as a separate action.

Minor changes have been made in the amendments which follow, for purposes of clarification and to maintain consistency with other NRC regulations. Some of the more significant changes are:

(1) The definition of "transient shipment" has been changed and a new section added to 10 CFR Part 70 to clarify the nature of the exemption extended to persons carrying transient shipments of special nuclear material in foreign military aircraft. The previous definition was intended to indirectly exempt from the proposed regulations those persons carrying transient shipments of formula quantities of special nuclear material intended for military use. It was determined that it would be difficult for NRC inspectors to ascertain the intended future use of the material being shipped. Also, it was determined that the exemption intended to be given should more properly appear in a separate section of Part 70 grouped with other exemptions. The revised amendment exempts persons carrying transient shipments who are subject to provisions of 49 USC 1508(a) (which requires State Department authorization to navigate aircraft of the armed forces of a foreign nation within the United States). This exemption, however does not apply to plutonium since Public Law 94-79 restricts the NRC's authority to license, or exempt from licensing requirements, the air transport of plutonium in any form (except for certain medical applications and when in a container that has been certified as crash proof). Since transient shipments are the only circumstances contemplated under which foreign military aircraft would enter the United States carrying special nuclear material, and since such shipments would be infrequent, of short duration, and under the direct control of the Department of State, the Commission has found that this exemption is not inimical to the common defense and security and does not constitute an unreasonable risk to the health and safety of the public.

(2) The wording of revised §70.20a(a) and new §70.20b has been changed to reflect recent changes made in §70.20a by another rulemaking action.

(3) The notification procedures included in §70.20b(d) have been changed to more closely conform to the corresponding requirements presently imposed on domestic shippers of similar types and quantities of material. Appropriate corresponding changes have also been made in the draft guidance.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and sections 552 and 553 of Title 5 of the United States Code, the following amendments to Title 10, Chapter 1, Code of Federal Regulations, Parts 70 and 73, are published as a document subject to codification.

1. A new paragraph (v) is added to §70.4 of 10 CFR Part 70 to read as follows:

§70.4 Definitions

As used in this part:

* * * * *

(v) "Transient shipment" means a shipment of [~~strategic special~~]* nuclear material, [~~(other than a shipment for military use)~~] originating and terminating in foreign countries, on a vessel or aircraft which stops at a United States port.

2. Section 70.12 of 10 CFR Part 70 is revised to read as follows:

*The comparative text shows differences between the proposed and effective rules. Underlined text shows additions; dashed through and bracketed text shows deletions.

§70.12 Carriers.

Common and contract carriers, freight forwarders, warehousemen, and the U.S. Postal Service are exempt from the regulations in this part to the extent that they transport or store special nuclear material, [~~in less than a formula quantity of strategic special nuclear material as described in §73.2(bb) ofthis chapter;~~] in the regular course of carriage for another or storage incident thereto. This exemption does not apply to the storage in transit or transport of material by persons covered by the general licenses issued under §70.20a and §70.20b.

3. A new §70.13a is added to 10 CFR Part 70 to read as follows:

§70.13a Foreign military aircraft

The regulations in this part do not apply to persons who carry special nuclear material (other than plutonium) in aircraft of the armed forces of foreign nations subject to 49 USC 1508(a).

4. Paragraph 70.20a(a) of 10 CFR Part 70 is revised to read as follows:

§70.20a General license to possess special nuclear material for transport

(a) A general license is hereby issued to any person to possess formula quantities of strategic special nuclear material of the types and quantities subject to the requirements of [~~§§73.30 through 73.36; 73.70(g) and 73.71(b)~~] §§73.20, 73.25, 73.26 and 73.27 of this chapter, in the regular course of carriage for another or storage incident thereto. Carriers generally licensed

under §70.20b are exempt from the requirements of this section. The general license is subject to the applicable provisions of §§70.32(a) and (b), 70.42, 70.52, 70.55, 70.61, 70.62, and 70.71.

* * * * *

5. A new §70.20b is added to 10 CFR Part 70 to read as follows:

§70.20b General license for carriers of transient shipments of formula quantities of strategic special nuclear material.

(a) A general license is hereby issued to any person [~~common or contract carriers~~] to possess transient shipments of formula quantities of special nuclear material of the types and quantities subject to the requirements of §§73.20, 73.25, [~~73.70g and 73.71(b)~~] 73.26 and 73.27 of this chapter from the time the shipment enters a United States port until it exits that port.

(b) Persons generally licensed under this section are exempt from the requirements of Parts 19 and 20 of this chapter and the requirements of this part, except §§70.32(a) and (b), 70.52, 70.55, 70.61, 70.62, and 70.71.

(c) Persons generally licensed under this section shall provide physical protection for transient shipments of strategic special nuclear material as defined in §73.2(aa) of this chapter in accordance with or equivalent to §§73.20(a), 73.20(b), and 73.25 of this chapter and comply with the requirements of §§73.70(g) and 73.71(b) of this chapter.

(d) Persons generally licensed under this section, who plan to carry transient shipments with scheduled stops at United States ports, shall notify the Director of the appropriate Nuclear Regulatory Commission Inspection and

Enforcement Regional Office listed in Appendix A of Part 73 by U.S. Mail postmarked at least seven (7) [~~five (5)~~] calendar days before the first scheduled stop in the United States. The notification shall [~~be given to the NRC Headquarters in Washington, D.C., Office of Inspection and Enforcement, and shall~~] include the following information:

(1) Location of all scheduled stops in United States territory.

(2) Arrival and departure times for all scheduled stops in United States territory.

(3) The type of transport vehicle.

(4) The special nuclear material in the shipment (elements, isotopes, enrichments, etc.).

(5) The number and types of containers.

(6) The name and telephone number of the carrier's representative at each stopover location in United States territory.

(7) A description of the physical security system which will be implemented in accordance with a written security plan which shall include the use of armed personnel to protect the shipment during [~~stops at U.S. ports~~] the time the shipment is in a United States port.

The Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office shall also be notified by telephone 7 days in advance of the shipping date that an advance shipping notice has been sent by mail, and of any changes to the shipment itinery prior to the shipment date.

(e) Persons generally licensed under this section making unscheduled stops at United States ports shall, immediately after the decision to stop:

(1) Provide to the Commission the information required under paragraph (d) of this section; and

(2) Arrange for local law enforcement authorities or trained and qualified private guards to protect the shipment during the stop.

(3) Implement these arrangements within a reasonable time after the arrival of the shipment at a United States port to remain in effect until the shipment exits the port.

6. Paragraph 73.71(b) of 10 CFR Part 73 is amended to read as follows:

§73.71 Reports of unaccounted for shipments, suspected theft, unlawful diversion, or radiological sabotage.

* * * * *

(b) Each licensee shall report immediately to the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A, by telephone any incident in which an attempt has been

made, or is believed to have been made, to commit a theft or unlawful diversion of special nuclear material which he is licensed to possess, or to commit an act of industrial sabotage against his plant or transportation system.

The initial report shall be followed within a period of fifteen (15) days by a written report submitted to the appropriate NRC Regional Office shown in Appendix A of this Part setting forth the details of the incident. Copies of such written report shall be sent to the Director of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

Subsequent to the submission of the written report required by this paragraph, a licensee shall immediately inform the Director of the appropriate Inspection and Enforcement Regional Office by means of a written report of any substantive additional information, which becomes available to the licensee, concerning the incident.

(Secs. 53, 161i., 161o., Pub. L. 83-703, 68 Stat. 930, 949, 950, Sec.5, Pub. L. 88489, 72 Stat. 602 (42 U.S.C. 2073, 2201(i),(o).)

Dated at Washington, D.C. this _____ day of _____.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

_____
Samuel J. Chilk
Secretary of the Commission

ENCLOSURE B

REGULATORY GUIDE 5.XX

PHYSICAL PROTECTION FOR TRANSIENT SHIPMENTS

Part A. INTRODUCTION

Section 70.20b of 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," provides for general licensing of any person to possess transient shipments of formula quantities of strategic special nuclear material (SSNM).* A transient shipment is a shipment of nuclear material, with origin and destination in foreign countries, which enters United States territory and stops at a U.S. port. Persons carrying transient shipments are required under the general license to provide physical protection, including the use of armed guards, for transient shipments while the shipment remains in a U.S. port. The physical protection system provided must be equivalent to, or in accordance with, that required for U.S. domestic shipments of formula quantities of SSNM under the applicable provisions of §§73.20(a), 73.20(b) and 73.25 of 10 CFR Part 73.

A general licensee for a transient shipment (e.g., a carrier) is not required to submit applications, nor is he required to submit security plans for prior approval by the Nuclear Regulatory Commission (NRC), as is required for domestic shipments of formula quantities of SSNM. However, the licensee is required to prepare such plans and implement them during stops at U.S. ports.

It is the carrier's responsibility to determine whether amounts of SSNM he is carrying consist of a formula quantity, and if so, to notify the NRC headquarters in Washington, D.C., Office of Inspection and Enforcement, seven (7) calendar days before the shipment arrives in a U.S. port.

For unscheduled transient shipments, those which result from exigent circumstances or route schedule changes which require stops at U.S. ports that were not originally on the shipment's itinerary at the time the SSNM was loaded onto the transport, the licensee may not have the same opportunity for advance planning as for scheduled shipments. However, the licensee is required to notify the NRC and begin making physical protection arrangements immediately after the decision is made to stop at the U.S. port. Although carriers may not intend at the time SSNM is loaded aboard their aircraft or vessel to make an unscheduled stop at a U.S. port, the knowledge that they are carrying SSNM in formula quantity, and that their itinerary brings them through or in proximity to U.S. territory (i.e., territorial waters or air space), should prompt them to do the necessary preplanning and prearrangement to meet the NRC's physical protection requirements should a stop at a U.S. port become necessary.

Upon notice or discovery of an impending transient shipment of a formula quantity, NRC officials will be prepared to inspect the carrier's physical protection

*"Formula quantity" means strategic special nuclear material in any quantity of 5,000 grams or more computed by the formula: grams = (grams contained U-235) + 2.5 (grams U-233 + grams plutonium). "Strategic special nuclear material (SSNM)" means uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), uranium-233, or plutonium.

system for the shipment while it is in port to assure its adequacy or to take emergency measures, if the required level of protection is not provided. The authority to make such inspections is provided for in Part 70.

The remainder of this guide describes the measures which can be taken by the licensee to provide physical protection for scheduled and unscheduled transient shipments in accordance with the requ' ements of §10 CFR Part 70.

Part B. DISCUSSION

1.0 Background

General licensees nder §70.20b are required to provide physical protection for transient shipments of formula quantities of SSNM either equivalent to, or in accordance with, the physical protection requirements for similar types and quantities of material in domestic shipments. hese requirements are stated in 10 CFR Part 73 in terms of (1) general performance objective and requirements [§73.20(a) and §73.20(b)], and (2) performance capabilities [§73.25]. The general performance objective and requirements indicate the level of protection to be provided by the licensee's physical protection system relative to the design basis threat (defined in §73.1). The performance capabilities define in a systematic way the capabilities which the physical protection system must have in order to meet the general performance requirements. In addition, §73.26 of Part 73 describes a "reference system" containing brief descriptions of systems, subsystems and procedures which the NRC believes would generally be part of a physical protection system which achieves the objective and meets the requirements of §§73.20 and 73.25. However, the reference system does not necessarily describe a complete system which would meet all the physical protection requirements for U.S. domestic or transient shipments. Additional or alternative measures may be needed depending upon the particular circumstances under which protection is to be provided.

The level of protection to be provided would be equivalent to that afforded formula quantities of SSNM in domestic shipments, but may differ in detail depending upon the unique circumstances peculiar to a given transient shipment. That is, the physical protection afforded to a transient shipment would have to satisfy the general performance objective and requirements of §73.20(a) and (b), and the performance capabil y requirements of §73.25, but may be less complex in consideration of the short stopover times for transient shipments, the fact that the shipment would not be expected to be offloaded, and the limited numbers of persons, if any, required to have access to the shipment.

1.1 Alternative Approaches for Meeting Requirements

General licensees for transient shipments of formula quantities of strategic special nuclear material may meet the physical protection requirements for such shipments in one of two ways:

1. The licensee may contract for physical protection services from a person (or organization) already authorized by the NRC to protect formula quantities of SNM in transit;

2. The licensee may undertake to directly provide the required physical protection in accordance with the provisions of the general performance requirements and performance capabilities of §73.20 and §73.25.

1.2 Physical Security Plan

A physical security plan in written form is required to be followed in providing physical protection for the transient shipment. Although this plan is not required to be submitted to the NRC, or approved in advance of the shipment by the NRC, it should be available to the NRC staff at the time the shipment arrives in a U.S. port facility. In the case of unscheduled transient shipments, a written plan may be required, depending upon the length of stay in the port.

Part C of this guide discusses the measures which may be employed in meeting the physical protection requirements for transient shipments. This discussion applies equally to scheduled and unscheduled transient shipments except as noted otherwise in Part D. The outline of Part C may also be used by the licensee as a suggested outline for a plan which would be acceptable to the NRC for meeting these requirements although no particular format for such plans is required to be used.

Part D of this guide discusses special considerations applicable to meeting the physical protection requirements for unscheduled transient shipments, and notes exceptions and alternative procedures for meeting the physical protection requirements for unscheduled transient shipments.

In the following discussion, the bracketed references following section headings denote the portions of the regulation applicable to the physical protection measures discussed in that section.

1.3 Public Disclosure and Classification of Plans and Notices

The NRC has determined that the details of physical protection plans and programs submitted to the Commission should be withheld from public disclosure by the NRC, pursuant to Section 147 of the Atomic Energy Act of 1954 as amended. In addition, certain elements of such plans and programs, and of notices given the NRC in accordance with §70.20b(d) of 10 CFR Part 70 may be considered classified as Confidential National Security Information (CNSI), pursuant to 10 CFR Part 95 [originally published in the Federal Register on March 5, 1980 (45 FR 14483)]. Any physical protection plans or programs prepared and maintained by carriers, or their agents, operating in the United States, to satisfy the physical protection requirements of the NRC for transient shipments, or notifications given by such persons to the NRC in accordance with §70.20b(d) are considered classified and should be appropriately marked and handled accordingly (see §95.39, 45 FR 14488). However, similar types of information generated by persons outside the United States are not considered to be NSI if such information is not under the control of the United States Government. It is expected that the persons who generate such information will in their own self-interest protect it from unauthorized access and public disclosure to the extent practicable. Detailed guidance regarding the elements of plans which are considered classified can be found in Appendix A of Part 95. This guide also contains information on the proper handling and transmittal of classified information.

Arrangements can be made on a case-by-case basis to coordinate the protection of safeguards sensitive information regarding a transient shipment by contacting the Division of Safeguards, Office of Nuclear Material Safety and Safeguards, at the NRC headquarters in Washington, D.C. This contact can be made through

the appropriate NRC Inspection and Enforcement Regional Office listed in Fig. 1 (below).

Appendix A-United States Nuclear Regulatory Commission Inspection and Enforcement Regional Offices

	Address	Telephone	
		Daytime	Nights and holidays
Region I: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont	Region 1, USNRC, Office of Inspection and Enforcement 631 Park Ave., King of Prussia, PA 19406	(215)337-5000	(215)337-5000
Region II: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, Virginia, and West Virginia	Region II, USNRC, Office of Inspection and Enforcement 101 Marietta Street Suite 3100 Atlanta, GA 30303	(404)221-4503	(404)221-4503
Region III: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, and Wisconsin	Region III, USNRC, Office of Inspection and Enforcement 799 Roosevelt Rd. Glen Ellyn, IL 60137	(312)932-2500	(312)932-2500
Region V: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming	Region V, USNRC, Office of Inspection and Enforcement 1990 N. California Blvd. Suite 202 Walnut Creek, CA 94596	(415)943-3700	(415)943-3700

Figure 1. Reprint of Appendix A of 10 CFR Part 73.

Specifically, the following elements of the information required to be provided the NRC in the notification of a transient shipment are considered classified as CNSI:

(1) Location of scheduled stops in U.S. territory.
(2) Arrival and departure times for scheduled stops.
(3) Details as to the type and quantity of special nuclear material contained in the shipment.
(4) The numbers of guards who will protect the shipment.
(5) Contingency plans for response of security forces.

Most of this information is considered declassified when it becomes operational. More details on the conditions under which this information may be declassified may be found in Appendix A of Part 95, referenced above.

Part C. PHYSICAL PROTECTION FOR TRANSIENT SHIPMENTS

1.0 General Considerations

1.1 Purpose and scope

The purpose of the licensee physical protection plan is to assure that the licensee has done the requisite preplanning to physically protect transient shipments of formula quantities of strategic special nuclear material (SSNM) according to the requirements of the applicable regulations (i.e., §§70.20b, 73.20(a), 73.20(b) and 73.25 of 10 CFR Parts 70 and 73). The plan should be available to the licensee's personnel for reference purposes when implementation becomes necessary.

A transient shipment, as defined in §§70.4(v), means "a shipment of nuclear material originating and terminating in foreign countries, on a vessel or aircraft which stops at a U.S. port." The term "U.S. port" is intended to include all ports of entry which carriers would normally use in making such shipments, but in unusual circumstances would also include the first landfall in U.S. jurisdiction, U.S. territories included, regardless of the transport mode or location.

The general license for transient shipments of formula quantities of SSNM is effective from the time the shipment enters the U.S. port until the time the shipment exits the United States. The planning and notification requirements obviously must be accomplished prior to the time the physical protection requirements of the general license becomes effective. Specific considerations related to meeting the physical protection requirements for unscheduled transient shipments of formula quantities of SSNM are discussed separately in Part D of this guide.

1.2 Contingency Plans [§§73.25(d)(1)(ii), (d)(1)(iii)]

Safeguards contingency plans are not required to be submitted for approval in advance of shipments as they are for domestic shipments of formula quantities of SSNM. In the case of transient shipments, contingency plans should be an integral part of the physical protection plan provided by the licensee. A typical transient shipment is likely to remain in port for a limited time, from several hours to several days, considerably reducing the complexity of the contingency plans needed to satisfy the requirements of the regulation (when compared with plans required for domestic road or multi-mode shipments which could involve several different local law enforcement jurisdictions and changing environments as the shipments move from one location to another along the planned

routes. Contingency plans for domestic shipments are discussed in detail in Regulatory Guide 5.56, "Standard Format and Content of Safeguards Contingency Plans for Transportation.")

Contingency plans for transient shipments are expected to include the following basic features and items of information:

1. Scope - A determination and identification of the types of safeguards related incidents covered and not covered in the contingency plan. (For example, the plan may be designed to respond to armed attacks by small groups, but not to armed insurrections.)

2. Trigger Events - Identification of those events that will be used for signalling the beginning or aggravation of a safeguards contingency according to how they are perceived initially by licensee personnel (e.g., discovery of a damaged SSNM container or broken seal, receipt of a written or telephoned threat against the shipment, discovery of attempted sabotage of the shipment, etc.).

3. Responses and Objectives - Description of the actions which will be taken by licensee personnel in response to each of the trigger events, and the objectives to be accomplished by each of the proposed actions. The persons within licensee management or the licensee security organization who will perform the response actions would also be specified.

4. Law Enforcement Assistance - A listing of the available local law enforcement agencies (LLEA) and the methods arranged to communicate with them in the event their assistance is needed.

5. Other Considerations - This may include constraints imposed upon security organization members (i.e., guards) by local and State laws, company policies and practices, and other factors relating to the use of deadly force.

1.3 Security Organization Training, Equipment and Qualifications [§§.25(d)(1)(i), (d)(1)(iv), (d)(1)(v)]

Normally, seven armed personnel should be provided to protect a transient shipment stopped at a U.S. airport, while at least two armed individuals should be provided to protect a transient shipment by sea (not off loaded). This is consistent with the provisions of §§73.26(j)(3) and 73.26(l)(4).

Personnel selected to be members of the licensee's security organization, entrusted with the physical protection of a transient shipment, are required to be appropriately trained and qualified to perform all the tasks to which they are assigned. This would include their being qualified and appropriately licensed by the local jurisdiction to use the weapons assigned them, as well as their being fluent in English to assure rapid and clear communications with the LLEA for purposes of requesting assistance from and coordinating, with the LLEA response forces. Such personnel are also required to possess NRC, or equivalent, access authorizations permitting them access to classified national security information included in physical protection plans and arrangements, pursuant to 10 CFR Part 95. Firearms, communications devices, and other equipment must

be in good operating condition. To assure that all security organization personnel and armed response personnel are properly trained and qualified, the licensee may arrange for the employment of such personnel in one of three ways:

1. Use of local law enforcement agency personnel. Such personnel may be presumed to be properly qualified with the weapons assigned to them while on official duty, and to have the skills necessary to perform guard duties. LLEA personnel may be used while functioning in their official capacity, or they may be privately employed while off duty, depending upon local regulations governing such employment, and the willingness of the LLEA to provide temporary guard services.

2. Use of private guards provided by an organization licensed or approved by the NRC to provide physical protection of SSNM (such as, for another NRC licensee).

3. Use of private guards trained and qualified by the licensee, his U.S. agent, or other organization, who have been determined by the licensee to have been prepared to perform the tasks assigned them according to the licensee's written physical protection plan.

Foreign nationals who accompany a transient shipment into port as escorts for physical protection purposes may be considered to comprise a portion of the guard force required for protection of the shipment while in the U.S. port. However, several considerations apply particularly in this case to assure such personnel are not unduly limited in the extent to which they are able to contribute effectively to the protection of the shipment. It should be assured that language difficulties and lack of familiarity with local communications systems do not prevent their communicating rapidly and effectively with local law enforcement agencies or with other members of the guard force recruited locally. Efforts should be made to secure weapons permits in advance allowing them to legally carry weapons in the jurisdiction in which the port is located. In most local jurisdictions these individuals may not legally carry their firearms off the plane or vessel without such permits. Inclusion of foreign nationals under a common command with other guards of local origin may hinder effective command and control of the guard force unless appropriate measures are taken to properly integrate the foreign nationals into the guard force.

Whether foreign nationals are utilized or not, the licensee should be prepared to demonstrate that persons employed to protect the shipment meet training and qualification requirements equivalent to the portions of Appendix B of 10 CFR Part 73 relevant to their assigned duties, and that they can function effectively together to satisfy the general performance requirements and performance capabilities of §§73.20 and 73.25. Although there is no requirement under the general license to obtain advance approval from the NRC regarding the adequacy of the training and qualifications of guard force members, the licensee should be prepared to demonstrate such adequacy through appropriate documentation upon request by the NRC inspector assigned to the shipment.

1.4 Security Management [§73.25(d)(1)(i)]

The plan should indicate the personnel (either by name or by position title) responsible for the physical protection of the transient shipment while the general license is in effect, including the chain of command, if applicable.

1.5 Testing and Maintenance Program [§73.20(b)(3)]

This provision of the regulations requires testing and maintenance of the physical protection system's components and procedures. This requirement covers all activities and devices on which the licensee's physical protection system depends to maintain shipment security. Its purpose is to assure the continued availability of each component of the physical protection system. Since the physical protection system for transient shipments will normally be personnel oriented, the testing and maintenance activity for such systems will consist mainly of assuring that procedures are understandable and workable by the personnel involved in implementing them. The licensee should assure that all equipment, including communications devices and weapons, is in good working order. If equipment and armed personnel are provided the carrier by another organization, the licensee should obtain assurances from that organization that such equipment is in proper operating condition at the time these services are provided and the personnel provided are trained and qualified. The licensee should also make certain from time to time that the arrangements made and the procedures provided for in the plan are current and remain practical and applicable to the conditons anticipated in future transient shipments.

1.6 Security Records [§73.70(g)]

Certain types of records are required to be kept. These are identified in §73.70(g). Records must be kept of names and addresses of persons authorized access to the SSNM while it is in port; documentation of security tours and inspections of the area containing the SSNM; and any other information obtained relating to the security of the shipment during the period of time the general license is in effect.

1.7 Reports to NRC [§73.71]

This section requires that the NRC be made aware of any security-related incidents that occur during the period of the general license. The plan may specify procedures for reporting security incidents to the NRC when such inspectors are or are not present on the scene. When NRC inspectors are present, this requirement is easily satisfied by communicating such incidents directly to them.

1.8 Redundancy and Diversity [§§73.20(b)(2), 73.25(d)(4)]

The physical protection system is required to be designed with redundant and diverse measures. Redundancy means providing two or more measures which perform the same function. This would prevent failure of the entire system, should there be a failure of one or more key system elements. Diversity means providing several types of measures that contribute to the performance of a particular security function. If these measures have differing performance characteristics (e.g, sensitivities, failure modes, strengths, weaknesses, etc.), the system may be able to continue functioning adequately despite adverse operational conditions, or adversary exploitation of a particular component's weakness.

Since the physical protection system for a transient shipment is generally expected to be less hardware oriented than for a U.S. domestic shipment, the means of assuring redundancy in the system will be less involved. Licensees

may focus their efforts at assuring redundancy and diversity in the system by primarily addressing the communications functions and firearms capabilities. This may be done in several different ways.

Alternative communications capabilities should be provided so that more than one person can contact the LLEA to request assistance, and the communications equipment should be of different types in case one type becomes inoperable due to equipment failure, adverse broadcast conditions or jamming, or injury to one of the guards. Also, the means provided for alternative communications should be physically separated so that an adversary force would likely not be able to destroy both capabilities for contacting the LLEA in a single attack. Whenever a single guard is isolated from other guards, he should be equipped with a personal duress alarm which annunciates at a location occupied by the other guard(s).

Guards should have available for use shotguns and rifles, as well as individual handguns, to assure that they will be able to respond effectively to adversaries attacking from either short or long range.

1.9 Notification [§70.20b(d)]

Carriers of transient shipments planning to make scheduled stops at U.S. ports are required to notify the NRC of their plans to do so prior to the shipment. The notification should be sent by U.S. mail postmarked at least seven (7) calendar days before the first scheduled stop in the United States, and should be addressed to the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of Part 73 (reprinted in Fig. 1 on page 4). The Director of the Office of Inspection and Enforcement at the Commission's headquarters in Washington, DC is also to be notified by telephone seven (7) calendar days in advance of the first scheduled stop at a U.S. port. This telephoned notification is to inform the NRC headquarters personnel that a shipping notice has been sent by mail and whether any changes have been made in the shipment's U.S. itinerary relative to the information contained in the mailed notification.

The licensee should take steps to assure the confidentiality of the itinerary information and other information contained in the written notification since such information could be used to assist in planning a theft or diversion attempt. In the case of domestic licensees or others who produce such information under the jurisdiction of the United States Government, the notification may come under the requirements of 10 CFR Part 95 which require that it be handled according to specific procedures designed to protect it as Confidential National Security Information (CNSI).

The notification should include the following information:

1. Location of all scheduled stops in U.S. territory.

2. Arrival and departure times for all scheduled stops in U.S. territory.

3. A description of the transport vehicle (ship or aircraft) used for the transient shipment. This would include additional transport vehicles to

be used if transshipment (transfer of the SSNM to another transport vehicle) is contemplated. The description should be given in sufficient detail to allow the NRC to unambiguously identify the transport vehicle for purposes of inspection when the shipment arrives in port.

4. A description of the nuclear materials in the shipment (elements, isotopes, enrichments, etc.).

5. The number and types of containers of SSNM.

6. The name and telephone number of the carrier's representative in the U.S. at each location in U.S. territory at which a scheduled stop will be made. If the carrier does not have a regular U.S. representative at a given U.S. port facility, he may name such a representative after making temporary arrangements with the representative for another carrier, or he may indicate that no U.S. representative exists.

7. A description of the physical security which will be implemented in accordance with a written security plan. The plan is required to include the use of armed personnel to protect the shipment during stops made at U.S. ports. This description may be provided in a number of different ways.

   a. The plan may be included in writing with other information required to be included in the 7-day notification,

   b. The plan may be in the possession of the carrier's U.S. representative, and referenced as such in the notification, providing that the plan is made available by the representative for inspection by the NRC at the time of the notification, or

   c. The carrier may refer the NRC to a physical security plan already submitted to the NRC by another licensee, which the carrier will use, or arrange for another organization to use the plan to protect the transient shipment. When a previously submitted plan is used, the carrier should assure that the plan is specific to the U.S. port at which the stop is to be made, or he should submit additional information to indicate how the plan is to be adapted to the specific port at which the stop is to be made.

If U.S. Mail facilities are not directly available to the licensee, the licensee should assure that the written notification will enter the U.S. Mail system, or be received by the NRC at least seven (7) days prior to the first scheduled stop of the transient shipment within the United States. The licensee should place a follow-up call to the NRC headquarters to confirm that the required notification information has been received by the NRC a reasonable time before arrival of the shipment at the first U.S. port on its itinerary. This is considered an acceptable substitute procedure for meeting the requirement for postmarking by U.S. Mail.

2.0 SHIPMENT PLANNING AND CONTROL

2.1 Preplanning of Shipment Itineraries [§73.25(b)(1)(i)]

It is recognized that in the case of transient shipments, physical security objectives may not be the determining factor in the planning of the itinerary

of the transport carrying the shipment. Also, the time may often be too short for carriers to make changes to accommodate such objectives and still meet their contractural commitments to customers. However, sufficient planning could be done in advance to assure that all NRC physical protection requirements can be met when a transient shipment becomes necessary.

Carrier's agents at U.S. ports should be informed of the NRC requirements so that they can make the necessary advance generic arrangements for the LLEA and private guard organizations to be available as needed. These arrangements, and the plan for physical protection could be used by more than one carrier in case an agent represents numerous carriers.

Physical protection plans should be made as uncomplicated as possible to accommodate the necessity for utilizing guard personnel who may have little familiarity with special procedures for protecting SSNM. This can be done by limiting off-loading of the SSNM from the transport unless absolutely necessary, arranging to isolate the transport or shipment as much as possible from other transports, vehicles and personnel (e.g., parking an aircraft at an isolated location on the airfield, away from the passenger and freight terminals), and taking steps to facilitate the timely performance of any functions (e.g., repairs) which necessitated the stopover (to minimize the time spent in port).

An important part of the planning process is the arrangement made with the LLEA. Policies differ with regard to the degree of involvement the LLEA are willing to commit themselves to in the event a transient shipment materializes. The extent of potential LLEA involvement should be determined in advance, and the physical protection system designed to assure that an adequate level of protection is provided. Arrangements with the LLEA should be confirmed just prior to a planned shipment's arrival, where standing arrangements are in effect, to take account of any intervening changes in circumstances at a given port facility.

As part of the preplanning for transient shipments, a diagram of the important features of particular port facilities may be provided in the physical protection plan to facilitate implementation of the plan by the carrier's personnel or others.

3.0 DETECTION AND DELAY OF UNAUTHORIZED ACCESS OR MATERIALS INTRODUCTION BY STEALTH OR FORCE*

3.1 Establishment of Controlled Access Areas** [§73.25(b)(2)]

The referenced provision of the regulations requires that controlled access areas be established surrounding the SSNM or its transport to isolate the SSNM

---

*"Stealth" means methods used to attempt to gain unauthorized access, introduce unauthorized materials or remove SSNM where the fact of such attempt is concealed or an attempt is made to conceal it. "Force" means violent methods used by an adversary to attempt to steal SSNM or sabotage a nuclear facility, or violent methods used by response personnel to protect against such adversary actions.

**"Controlled access area" means any temporarily or permanently established clearly demarcated area, access to which is controlled, and which affords isolation of the material, equipment or persons within it.

and decrease the number of persons, materials, equipment and vehicles allowed to come in contact with the transport or SSNM.

Controlled access areas must have some means of demarcating the restricted area's boundaries which is clear to both authorized and unauthorized personnel. There must be some way of controlling access to the area, at all times, to assure that unauthorized persons are not admitted. Aircraft and seagoing vessels which enter U.S. port facilities need not be protected while they are in motion if it is determined that the SSNM on board is not accessible to unauthorized personnel during such motion. Thus, in most instances, armed response personnel will be required to protect the SSNM only from the moment the transport comes to rest within the port, until it starts on its way out of the port. (See Part D regarding unscheduled transient shipments). This greatly simplifies the physical protection system for transient shipments which utilize U.S. ports, in comparison with the protection for domestic shipments (i.e., those which originate or terminate within United States territory). The plan should recognize, however, that the cargo compartment containing the SSNM, or the SSNM itself, should be placed under immediate surveillance as soon as the transport comes to rest, to assure the SSNM remains inaccessible to unauthorized personnel. Airport ground crews, warehousemen, dockworkers and other personnel should not be permitted to approach the transport or its cargo compartment unless surveillance is provided in accordance with the above referenced regulation.

This plan should describe the approximate dimensions of the controlled access area which would be established relative to the transport or SSNM.

Detections of authorized attempts at penetration of the controlled access area are required to be made, assessed and communicated to assure an adequate response that will protect against the theft or sabotage of the SSNM. Procedures should be described in the plan for accomplishing these tasks, relating to the response functions and communications capabilities described elsewhere in the plan. The plan should also detail the procedures which will be used to establish a controlled access area. Specific suggestions regarding measures to establish a controlled access area may be found in the reference system for U.S. domestic shipments [§§73.26(f)(2), (i)(7), (j)(3), (k)(1) and (l)(3)].

3.2 Transport Features to Delay Access [§73.25(c)(2)(i)]

This section requires a transport to have features which delay access to the SSNM by virtue of a physical barrier, or other access delay features. If a transport is not specifically designed to provide for such delays, the designer of the physical protection system may take credit for the delay causing features which the transport may coincidentally have. To the extent that the transport lacks the delay causing features which could be expected to be found on SSNM transports designed specifically for that purpose, the other parts of the physical protection system must have compensating features to assure that the general performance requirements of §73.20 are satisfied. The plan should describe any procedures relating to the implementation of delay features upon which the physical protection system depends.

3.3 Access Detection for Transports [§§73.25(c)(2)(ii), (c)(2)(iii)]

This section requires a capability for detection of attempted penetrations of the transport containing the SSNM. This requirement was intended to provide

SSNM shipments with defense in depth - an added level of protection beyond that provided for by the controlled access area - which becomes especially important when many personnel must be allowed access into the controlled access area for servicing vehicles, handling other cargo, etc. In the case of a transient shipment, there would generally be very few persons authorized to have access to the SSNM, or the cargo compartment in which it is contained. The same guards who administer the controlled access area procedures could be used to keep the SSNM or the transport under surveillance to detect unauthorized attempts to gain access, provided these two requirements did not impose conflicting duties on a guard (e.g., having to focus attention on two different areas at one time).

Physical protection requirements for shipments of formula quantities of SSNM other than transient shipments include requirements for the emplacement and periodic inspection of tamper-indicating devices on transports and cargo containers. For transient shipments, carriers are not responsible for the emplacement of seals or other devices, but are responsible for assuring that the seals or other tamper-indicating devices put in place by the shipper continue to function during the period of effectiveness of the general license. Seals are not specifically required by the NRC to be put in place in the case of transient shipments but may have been employed by the shipper according to requirements of the International Atomic Energy Agency (IAEA) for shipments subject to IAEA safeguards. Appropriate records are required to be kept of seal inspections during the time the transient shipment is in port in accordance with the requirements of §73.70(g).

4.0 Detection of Unauthorized Access or Materials Introduction by Deceit*

4.1 Access Authorizations [§§73.25(b)(3)(i), (c)(1)(i)]

Access authorizations are required to determine the time and conditions of access for persons who are authorized to be admitted to a controlled access area, or for introduction of materials, vehicles or equipment into such areas. Access authorizations are also required for entry into the transport. In the case of a transient shipment, there are expected to be few authorizations necessary. The number of individuals authorized access to the SSNM should be miminized. By keeping the number of authorized persons low, the authorization subsystem may be kept relatively unsophisticated, yet effective.

Access authorizations would normally be provided in written form, naming the individual to be granted access or the item to be introduced. It would also detail the criteria for entry (e.g., time, place, circumstances, etc.) and specify the reasons for which access is granted (e.g., to perform service on the transport, to unload or load other cargo, etc.). Written authorizations may be dispensed with entirely by implementing an escort procedure. Under this procedure, all persons requiring temporary access would be escorted by an armed guard while having such access, to assure that only authorized activities are being performed. Written records would be required to be kept in accordance with §73.70 documenting each occasion of such access.

*"Deceit" means methods used to attempt to gain unauthorized access, introduce unauthorized materials, or remove SSNM, where the attempt involves falsification to present the appearance of authorized access.

The physical protection plan may detail the procedures to be used by guards to determine which persons or materials are authorized access to (1) a controlled access area, or (2) the transport or the SSNM.

4.2 Access Control at Entry Control Points [§§73.25(b)(3)(ii), (c)(1)(ii)]

Access control procedures are required to be implemented to assure that only authorized individuals are admitted to controlled access areas or given access to the transport or the SSNM. These procedures involve three distinct subfunctions: (1) identification, (2) verification of identification, and (3) assessment against authorizations. Where few persons or materials are expected to be allowed access, as in the case of most transient shipments, these subfunctions can be performed quite simply, without resort to some of the more sophisticated access control systems used at fixed site facilities or for domestic road shipments.

The main problem arising in providing physical protection for a transient shipment will be to allow positive identification of the LLEA or other guard personnel who are actively involved in the implementation of the carrier's physical protection plan. The carrier's agent may also have to be identified. The plan should detail the means which will be used to identify these persons prior to the carrier allowing them access to the transport or the SSNM. The carrier should be capable of immediately communicating to the LLEA information concerning persons presenting themselves as contract guards, LLEA personnel, or other members of the security organization who are discovered to be imposters.

Once the composition of the security organization is confirmed, these persons will assume the responsibility for further implementation of the physical protection system according to the licensee's physical protection plan.

The means used to positively identify the members of the security organization who are to meet the shipment at the time it arrives in a U.S. port must be designed to limit the opportunity for successful use of false credentials or other deceitful actions. This would apply, as well, to other persons who may be authorized access to controlled access areas or to the SSNM.

5.0 Prevention of Unauthorized Removal of SSNM from Transport by Deceit

5.1 Authorization for Removal of SSNM from Transports [§73.25(c)(3)(i)]

Authorizations for removal of SSNM from a transport would follow the same pattern established for access authorizations. By definition, for transient shipments, authorizations for removal of SSNM while in U.S. ports will not be needed. In some cases, however, unscheduled removal of the SSNM from the transport may become necessary due to some unusual circumstance. For unscheduled removals due to unusual circumstances, removal authorizations are on a contingent basis and should be carried out under the direction of the carrier (or the person he designates to assume responsibility for shipment), and according to procedures detailed in the contingency plan. Removal procedures should be designed to assure no imminent or apparent threat exists to the safety of the shipment before the SSNM is removed into a more vulnerable situation outside of the transport. Additional guidance regarding acceptable procedures for removal of SSNM from the transport may be obtained from Regulatory Guide 5.57, "Shipping and Receiving Control of Special Nuclear Material."

5.2 SSNM Removal Controls [§§73.25(c)(3)(ii), (c)(3)(iii)]

Removal controls are procedures followed in removing SSNM from the transport in which it has been contained. They are required both for routine (planned) and emergency situations, and may include such activities as verification of identities of persons performing the removal operation and persons to whom custody of the SSNM is to be transferred. The identity of the SSNM being removed and integrity of the containers and any seals are also items to be verified. These procedures act as a filtering process to assure that the proper conditions exist and appropriate personnel have been positively identified prior to the removal. Response measures to assure that deceitful attempts at unauthorized removal of SSNM will be detected and communicated to responsible persons are intertwined with removal controls and may be described in the main body of the plan, or referred to a more detailed description in the contingency plan.

6.0 Detection of Unauthorized Removal of SSNM from Transports by Stealth or Force

6.1 Transport Features to Delay Removal [§73.25(c)(4)(i)]

Transport features to delay unauthorized removal of SSNM from the transport by stealth or force should be considered an integral part of the physical protection system. When such features are designed into the transport, the physical protection system may take credit for the amount of delay provided by them. To the extent that the transport has features which provide for only a slight delay capability, other components of the physical protection system must be strengthened to compensate for the lack of sufficient delay afforded by the transport. The balancing of these delay and other factors (e.g., response time, size of guard force) is a matter of judgment by the licensee, and ultimately, the NRC inspection staff. The general guidance is that these factors must be balanced in such a way that general performance requirements of §73.20 can be satisfied.

Some transport features which delay access may also delay removal. Those features which were not previously discussed as delaying access should be considered in this part of the plan, as well as descriptions of those aspects of previously described features which help to delay removal as well. Such features may include arrangements for securing the SSNM in the transport vehicle (e.g., requiring use of secured heavy equipment for removal), binding together the individual packages of SSNM so as to make a one step removal cumbersome, binding the SSNM containers to the structure of the transport, etc. These features may or may not be present on board the transport vehicle for a transient shipment. In some cases, these features may be present for safety or other purposes, rather than for physical protection purposes. To the extent that the physical protection system depends on such features to delay unauthorized removal, the licensee should describe which of these features are utilized on board the particular transport vehicle used for the subject transient shipment. If such features are not actually employed the licensee should take action to employ them or take compensatory action to assure satisfaction of the general performance requirements.

6.2 Detection of SSNM Removal Attempts [§73.25(c)(4)(ii)]

Detection of SSNM removal attempts, for transient shipments, could be performed in most cases by the same personnel assigned to detect unauthorized access to

the controlled access area or the transport or SSNM. The licensee should be careful to assure that these duties assigned particular guard personnel are not in conflict with other duties assigned them.

7.0 Transmission of Detection, Assessment and Other Security Related Information

Various requirements for communications capabilities are described in the regulations relating to detection and assessment functions and requests for assistance from response forces or the LLEA are described earlier in this guide. The communications capabilities described in this part of the plan would support the performance of these other physical protection functions.

7.1 Communications Among Guard Force Personnel [§73.25(d)(2)(i)]

Continuous communications capability is required between members of the transient shipment's guard force. This capability is needed for routine purposes as well as for implementation of emergency procedures detailed in the contingency plan. Communications could be conducted utilizing citizens band hand held transceivers or other similar equipment, where face to face unassisted voice communications are not practical. On board ocean going vessels, the ship's hardwire communications system may be used, although both transceivers and hardwire systems could be depended upon to assure a redundancy. The communications function is an extremely important one with regard to the overall effectiveness of the physical protection system, so that its redundancy and diversity needs to be addressed. Transceivers capable of utilizing more than one channel should be utilized to assure that some form of communications with the LLEA is possible at all times in the event of a safeguards incident. Dividing the guard force into two or more different groups to assure their survivability in case of a single attack has been suggested as one procedure to assure the communications function will be performed. (See Section C.1.8 of this guide.)

7.2 Communications Between Guard Force Commander and Security Control Center [§72.25(d)(2)(ii)]

In the case of transient shipments, this requirement translates to the following: a continuous communications capability should be maintained between the guard force assigned to protect the transient shipment and a remotely located security control center manned by personnel employed by the licensee to monitor the status of the shipment while it is in port. This security control center could be located in the offices of the carrier's U.S. agent or at some other temporary location in the area of the port. The security control center need not maintain knowledge of the status of the shipment at times other than during the period of effectiveness of the general license. Also, it need not function while the transport is in motion within the port, provided the equivalent communications function with the LLEA is provided on board the transport (cf. Section 7.3 of this guide). This could be accomplished through on intermediary such as an airport control tower or the harbor master's office.

Communications between the guard force commander and the security control center need not be continuous, but the capability for immediate communications by either the security control center or the guard force should exist while the security control center is operating.

7.3 Liaison with and Notification of Local Law Enforcement Authorities (LLEA) [§§73.25(d)(2)(iii), (d)(3)]

Both the armed guards for the transient shipment and the security control center personnel are required to possess the capability for direct communications with the LLEA, to notify them of the need for assistance, if necessary. The need for such communications is underscored by the basic philosophy of the licensee physical protection system. The guard force for the transient shipment need not be designed to defeat potential attackers in an aggressive mode, but only to protect the shipment and guard personnel from attack. Its primary objective should be to delay the adversary from completing any act of theft of SSNM or sabotage, until the LLEA forces arrive. The system should be designed to interface closely with LLEA forces, whose responsibility it is to enforce local and State laws regarding thefts and other criminal acts. The capability of the guard force to call LLEA forces into action when such assistance is needed is of great significance to the success of the physical protection system and deserves to be protected with an appropriate level of redundancy and diversity. Liaisons with LLEA personnel should be consummated in advance of the shipment or as soon as possible following arrival in port.

Part D. PHYSICAL PROTECTION FOR UNSCHEDULED TRANSIENT SHIPMENTS

1.0 Introduction

Guidance for unscheduled transient shipments remains essentially that for scheduled shipments with the exception of the following special considerations discussed below.

2.0 Special Considerations for Unscheduled Shipments

2.1 Purpose and Scope

The purpose of the physical protection system for unscheduled transient shipments does not differ from that for scheduled transient shipments. However, the scope of protection may differ due to the unpredictability of the circumstances which would require the transport to make an unscheduled stop at a U.S. port facility. There are essentially two differences.

1. The randomness of stops made at U.S. ports would make them difficult for the adversary to predict, so that for a period of time following arrival in port, the shipment would have a degree of protection arising solely from the randomness of the event. As the time in port grows longer, the ability of the adversary to assemble or regroup his forces and transport them to the port from another location increases also. This will affect the timing of implementation of the physical protection system for the transient shipment.

2. Since the unpredictable factors of weather, equipment failures, or other unusual circumstances may result in the shipment arriving at a U.S. port at which the carrier neither has made previous arrangements for physical protection, nor has a U.S. agent or representative, the physical protection system may have to be implemented by the carrier with little specific

knowledge of the port. This will require a much greater dependence upon the port's LLEA for cooperation in the early period following arrival in port.

2.2 Notification Requirements [§70.20b(e)(1)]

For unscheduled transient shipments, it may be impossible for the licensee to notify the NRC seven (7) calendar days prior to the arrival of the transport in a U.S. port, as is required for scheduled transient shipments. However, notification of the carrier's intent to bring a formula quantity of SSNM into a U.S. port (transient shipment) is required to be made to the NRC as soon as the carrier has made a decision to enter a U.S. port. The notification would contain the same types of information included in the seven-day notification required for scheduled transient shipments [as described in §70.20b(d)], except that some information regarding the name and address of the carrier's U.S. based representative and the description of the physical protection plan may be unavailable. The carrier may, in fact, not have a U.S. based representative or agent at the port in question, and may have little choice of which port to use, especially if the stop is made because of adverse weather conditions or equipment failure. In such situations the carrier may choose to name a member of the crew who would assume immediate responsibility for the transient shipment's physical protection; and make other arrangements after landing.

2.3 Implementation of Physical Protection Plans for Unscheduled Transient Shipments [§70.20b(e)(2)]

Physical protection plans may not need to be implemented immediately upon arrival of a transient shipment at a U.S. port. However, the time which would be allowed to elapse before physical protection plans must be implemented would depend on a number of factors, such as: the amount of time during which the shipment is expected to remain in port, whether it will be necessary to transfer the SSNM to another transport, whether there has been any civil unrest (e.g., protest demonstrations, etc.) or recent natural disasters which may appear to pose a threat to the safety of the shipment (e.g., increased risk from looters). Another factor is the extent to which there is public knowledge of the transient shipment entering the port, and how much advance knowledge could have been obtained by potential adversaries. Generally, physical protection measures should be implemented at least two hours after arrival at the port. NRC inspectors or headquarters personnel would make the final determination based upon what is reasonable in the light of local conditions and other circumstances.

In the event of an unscheduled transient shipment, the licensee may be required to arrange for protection by armed personnel. These may be armed guards provided by a commercial guard service, or personnel provided by the LLEA. Whether LLEA personnel will be available will depend upon the operating policies of the LLEA at the particular port. In the case that the port has its own security force of armed personnel, it is likely that their services could be obtained either temporarily, until other arrangements can be made, or for the duration of the stop.

2.4 Description of Physical Protection Plans [§70.20b(d)(7), (e)(1)]

Despite the fact that a carrier may find it necessary to bring a transient shipment into a U.S. port with minimal preparation, carriers may be required to

have written plans available for physical protection of the SSNM they carry as they enter the U.S. port. These plans may be made available to NRC inspectors in a number of different ways:

1. Carriers may prepare and have on board their own plans in accordance with the regulations and the guidance contained herein. Carriers who knowingly carry SSNM of formula quantities, with itineraries bringing them within range of U.S. ports, such that they may anticipate use of these ports for emergency stops, may plan ahead to meet such contingencies.

2. Carriers may have on board or on file with their agents at a U.S. port, physical protection plans prepared by their U.S. agents which may be (a) adapted specifically to particular ports at which they may make emergency stops, or (b) may be generically designed to be adapted to any port as circumstances require. The latter alternative will leave the carrier with the necessity for making final arrangements for physical protection as the need arises for any given port situation.

3. Carriers who have done no advance planning for physical protection can still comply with the regulation by preparing ad hoc plans while approaching port, if time allows, or shortly after entering the port. They may prepare their own plans in response to the guidance contained in this guide, or they may attempt to obtain the services of a U.S. based agent, who may be more familiar with the NRC physical protection requirements for transient shipments.

NRC inspectors may require the licensee to take certain actions in order to protect the SSNM if they determine that the protection provided by the licensee is inadequate.

ENCLOSURE C

PUBLIC ANNOUNCEMENT (TO BE PROVIDED)