

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, 175 CURTNER AVE., SAN JOSE, CALIFORNIA 95125

July 21, 1980

Office of the Director
Office of Nuclear Material Safety
and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. G. W. McCorkle

Subject: Notification of Escort Training
Program Completion

Gentlemen:

Six members of California Plant Protection (CPP) security force contracted by General Electric Co. at Vallecitos Nuclear Center, have recently completed the additional escort training requirements per 10 CFR Part 73.37, "The Physical Protection of Irradiated Fuel in Transit".

Eight CPP individuals, including the instructor, have previously received 120 hours of specialized nuclear training in accordance with 10 CFR Part 73.50, "The Physical Protection of Plants and Materials". Five of these individuals have received additional training in Firemanship and Alarm Response Tactics.

CPP has provided plant security at Vallecitos since 1974 and has an outstanding service record. I have enclosed for your information and comments, copies of lesson plans and a list of those individuals who have completed the escort training requirements per 10 CFR Part 73.37, as amended July 3, 1980.

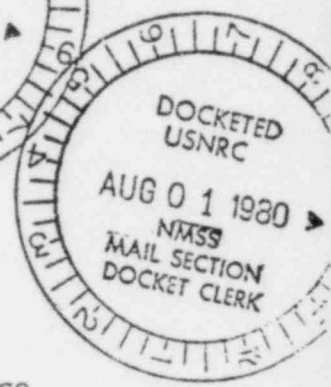
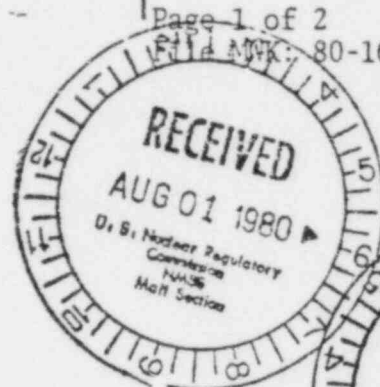
We anticipate using CPP escorts on August 26, 1980 for a shipment of irradiated fuel from Sweden to Vallecitos. CPP escorts will be stationed at the Port of Oakland when the vessel docks and will escort the shipment to Vallecitos over the approved route. The CPP escorts will be uniformed, and armed with 38 caliber revolvers at all times during the shipment. The escorts will have hand-held single channel FM 2-way radios, and one escort will be located near a designated telephone at all times while at the dock. While in transit, CPP escorts will use the 2-way FM radios to maintain communications with the shipment vehicle and each other. The shipment vehicle will have the specialized communications equipment, radio-telephone, CB radio and FM communicator used by escorts.

RDR

70-2786

NUCLEAR ENERGY
BUSINESS GROUP

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If you have any questions or require additional information, please call.

M. W. Kirkland

M. W. Kirkland, Specialist
Hazardous Materials Transportation
(408) 925-5703
Mail Code 512

Attachments
MWK:sh

cc: Wayne Mortensen,
NRC Office of Inspection
and Enforcement,
Region IV

7550

VALLECITOS NUCLEAR CENTER
Pleasanton, California

Re: SG-80-130

cc: J. L. Nixon
J. O'Neill

July 16, 1980

To: Mike Kirkling
GE-San Jose

Subject: Physical Protection of Irradiated Reactor Fuel In Transit

On May 29, 1980, in accordance with 10 CFR 73, Appendix D, the following listed personnel received 150 minutes of class room instruction, subject same as above:

C. Bayles	E. Long
E. Chesko	C. Moen
P. Drummond	W. Moorehead
K. Herrmann	

On June 23, 1980, in accordance with 10 CFR 73, Appendix B, IV, the following listed personnel qualified on the National Police Combat Course:

E. Chesko	E. Long
P. Drummond	W. Moorehead
K. Herrmann	

On June 30, 1980 and July 1, 1980, in accordance with 10 CFR 73, Appendix B, IV, the following listed personnel completed a night familiarization fire course with the handgun:

E. Chesko	E. Long
P. Drummond	W. Moorehead
K. Herrmann	

Clyde E. Hardin Sr.

Clyde E. Hardin Sr.
Lieutenant, Lead Supervisor
GE-VNC Security Force

ap

LESSON PLAN

TITLE: PHYSICAL PROTECTION OF IRRADIATED REACTOR FUEL IN TRANSIT

TIME: 150 MINUTES

1.0 GENERAL

This instruction is presented to those security officers who have received 120 hours of specialized nuclear training in accordance with 10 CFR 73, Physical Protection of Plants and Materials. This instruction will incorporate the provisions of 10 CFR 73, Appendix D, Physical Protection of Irradiated Fuel in Transit, in support of the carrier (Tri-State Motor Transit or Home Transportation Company, Inc.).

2.0 SECURITY ENROUTE

2.1 Route Planning and Selection: (Review General Electric route plan)
Approved by the NRC.

2.1.1 Plan should include:

- a. Cargo Description
 1. Quantity and type of fuel.
 2. Cask identification.
 3. Loaded weight of trailer.

- b. Anticipated Schedule
 1. Number of shipments.
 2. Approximate duration of complete transfer.
 3. Proposed beginning and ending dates.

- c. Route
 1. Origin and destination.
 2. Proposed routing.
 3. Mileage information for each district segment.
 4. Estimated elapsed time per shipment.
 5. Location of planned stopovers, food and fuel stops.
 6. Alternate routes.

- d. Route Overview
 - 1. Route identification
 - 2. Mileage chart.
 - 3. LEA identification, jurisdiction and response center.
 - 4. LEA telephone numbers.
 - 5. Monitored CB radio channels. --
 - 6. Effectiveness of radio-telephone along the route.

- e. Safe Havens For:
 - 1. Temporary refuge.
 - 2. Emergency assistance.

2.2 Vehicle Operation

- 2.2.1 Transport Vehicle; occupied by at least two individuals, one of whom serves as escort.
 - a. Transport vehicle equipped with radio-telephone, CB and mobile radio to contact escort vehicles.
 - b. Equipped with features that permit immobilization of the cab or the cargo carrying portion of the vehicle.
 - c. Escort vehicles; two armed security officers in separate vehicles, one in front of and one trailing the transport vehicle, each equipped with compatible mobile radios to communicate with transport vehicle and each other.
 - d. Escort vehicles while enroute; shall maintain constant surveillance over the transport vehicle.
 - e. Route plans must be adhered to by all vehicles.

2.3 Procedures At Stops

- 2.3.1 Shipment is scheduled where practicable without any intermediate stops except for refueling and obtaining provisions. At all stops at least two individuals will maintain surveillance of the transport vehicle.

- 2.3.2 If at all possible, the vehicles must be kept moving which reduces transit times.
- 2.3.3 Rest stops and safe havens approved by the NRC should be used unless there are overriding considerations to do otherwise (explain).
- 2.3.4 If a stop has to be made overnight, the locations should consist of a large clear area with good lighting and frequent traffic.
- 2.3.5 During stops or layovers, one individual remains in the cab of the transport vehicle to:
- a. Maintain surveillance over the cargo.
 - b. Maintain radio-telephone communications.

2.4 Detours and Use of Alternate Routes

(Review and discuss General Electric Route Plan.)

3.0 COMMUNICATIONS

3.1 Equipment Operation

As per Vallecitos S.O.P.

3.2 Status Reporting

Review and discuss General Electric Route Plan.

3.3 Contacts With Law Enforcement Units

Review and discuss General Electric Route Plan.

3.4 Communications Discipline

As per Vallecitos S.O.P.

3.5 Procedures For Reporting Incidents

Review and discuss General Electric Route Plan.

4.0 RADIOLOGICAL CONSIDERATIONS

4.1 Description of The Radioactive Cargo

Spent nuclear fuel (irradiated reactor fuel), is a fuel assembly removed from the reactor after the useful life of the fuel. Spent fuel is essentially unchanged in physical appearance from its original configuration as a new fuel assembly. Spent fuel is highly radioactive and can inflict a lethal dose; however, it cannot be used to create a nuclear explosion. Spent fuel is shipped in casks.

4.2 Function and Characteristics of The Shipping Casks

Same as those casks at Vallecitos.

4.3 Radiation Hazards

Wear film badges, Radiological Safety Instruction applies.

4.4 Federal, State and Local Ordinances

Relative to The Shipment of Radioactive Materials

4.4.1 NRC Regulations.

4.4.2 Ordinances are taken into consideration when route plan is approved.

4.4.3 Responsible Agencies: (Review and discuss General Electric Route Plan.)

5.0 RESPONSE TO CONTINGENCIES

5.1 Accidents

5.1.1 If involved in an accident, administer first aid if required, position yourselves between cargo and extraneous personnel; observe cargo at all times.

5.1.2 Assist driver with any reports required.

5.2 Severe Weather Conditions

If movement of transport and escort vehicle become impeded by severe weather, comply with 2.3, Procedures At Stops.

5.3 Vehicle Breakdown

5.3.1 Carrier S.O.P. for vehicle breakdowns.

5.3.2 Comply with 2.3, Procedures At Stops.

5.4 Communication Problems

5.4.1 Transport vehicle is required to have radio-telephone and mobile radio.

5.4.2 Radio-telephone may be marginal in some areas, these areas are determined and indicated on the route overview.

5.4.3 If necessary, a commercial phone may be used.

5.5 Radioactive Spills (Accidents)

5.5.1 Render any first aid that is necessary.

5.5.2 Follow State Radiological Emergency Procedure.

5.5.3 Isolate the area around the cargo location.

5.5.4 Call for local monitors.

5.5.5 Call appropriate NRC office.

5.6 Use of Special Equipment

5.6.1 Flares are to be utilized as per Vallecitos S.O.P.

6.0 RESPONSE TO THREATS

6.1 Reporting

Contact NRC immediately of any attempt that has been made or is believed to have been made to sabotage, commit a theft or unlawfully divert a spent fuel shipment. (Review and discuss General Electric Route Plan.)

6.2 Calling For Assistance

(Review and discuss General Electric Route Plan.)

6.3 Use of Immobilization Features

(Tri-State S.O.P.)

6.4 Hostage Situations

As previously instructed in Basic Nuclear Security classes.

6.5 Avoiding Suspicious Situations

6.5.1 Observation and perception.

6.5.2 Transport vulnerability.

6.5.3 Police ruse.

6.5.4 Ambush situations.

LESSON PLAN

TITLE: NATIONAL POLICE COMBAT COURSE

TIME: 200 MINUTES

I. INTRODUCTION

- A. OBJECTIVE: To familiarize students with the principles, techniques and positions utilized in combat firing; to qualify students on the National Police Combat course.
- B. REASON: To properly train GE-VNC security personnel with duties as escorts for irradiated reactor fuel shipments.
- C. DESIRED LEARNING OUTCOME: Each student should:
1. Be proficient with the handgun and functions of the combat positions appropriate to combat firing.
 2. Requalify or qualify with a score of not less than 70% (210 minimum of 300 possible).
- D. INSTRUCTIONAL AIDS: Individual weapons; ammunition (130 rounds per student); firing range; B-16, B-27 and B-34 targets; cleaning materials; first aid kit; stop watch; whistle; stapler; staples; target pasters; bullhorn; speedloaders; chalk. Note: Minimum .354 caliber revolver.

II. PRESENTATION

- A. SILHOUETTE FIRE: Review:
1. Sight alinement
 2. Sight picture
 3. Trigger control.
- B. ZEROING: Review:
1. Shot groups
 2. Elevation
 3. Windage
 4. Holdoff

C. COMBAT POSITIONS: Review

1. Crouch
2. Standing (no support)
3. Sitting
4. Prone
5. Barricade (right and left)
6. Kneeling.

D. LOADING AND COCKING OF WEAPONS:

1. Loading of weapons (loose rounds)
2. Loading of weapons (speed loaders)
3. Single action (SA)
4. Double action (DA).

E. SCORING:

1. Hits on target
2. Chalk
3. Score card.

F. RANGE SAFETY: ACCIDENTS ARE CAUSED! When on the range, you must be alert at all times. Listen closely to the instructions from the rangemaster. To help insure safe shooting, follow these rules at all times:

1. "Clamshell" or "cross-draw" holsters are not permitted.
2. Do not carry a loaded weapon onto the range and do not load any weapon until specifically instructed to do so.
3. Regard any weapon as loaded and handle it accordingly.
4. Do not point a weapon at anything or anyone you are not willing to shoot or kill.
5. Never leave a weapon unattended.
6. Do not give a revolver to another person, or accept one from another person, unless the cylinder is open.

7. Accept no one's word that a weapon is unloaded -- CHECK IT YOURSELF.
 8. Leave a holstered weapon in the holster until instructed otherwise.
 9. Handle no weapon on the range until instructed to do so.
 10. When on the firing line, always face the target. Do not turn around for any reason. If spoken to by a range official, give your reply by turning your head but not your body.
 11. If you need assistance while on the firing line, keep the weapon pointed toward the targets (downrange) and raise your arm.
 12. In the event of a misfire, follow the instruction in No. 11 above. Do not attempt to clear the weapon yourself and do not fire another shot, as the barrel may be blocked.
 13. When not shooting, remain away from the firing line and never try to converse with someone on the firing line.
 14. Horseplay will not be tolerated.
 15. Insure that your weapon is pointed downrange when loading.
 16. Never leave the firing line or proceed to the targets without command of the rangemaster.
 17. No smoking on the firing line.
 18. No conversation between shooters on the firing line.
- G. COMBAT FIRE: (Practice and qualification/requalification)
1. Course will be fired from 7 and 25 yards (see III. PRACTICAL APPLICATION).
 2. Firing will consist of both single action (SA) and double action (DA).
 3. All firing will be timed.
 4. Course will be fired completely both for practice and record, rounds fired will be:
 - a. 10 Rounds Zero (practice only)
 - b. 60 Rounds Practice
 - c. 60 Rounds Record
 - d. Total of 130 rounds per student.

5. Combat positions used will be:

- a. Crouch
- b. Standing (no support)
- c. Sitting
- d. Prone
- e. Barricade (right)
- f. kneeling.

III. PRACTICAL APPLICATION

A. Both practice and record firing will be conducted from the following table:

<u>STAGE</u>	<u>RANGE</u>	<u># RDS.</u>	<u>TIME</u>	<u>POSITION</u>	<u>TARGET</u>
Zero	25 Yds.	10	5 Mins.	Standing (SA)	B-16
1	7 Yds.	12	25 Secs.	Crouching(DA)	B-27
2	25 Yds.	6	12 Secs.	Standing (DA)	B-27
3	25 Yds.	6	2 Mins.	Sitting (SA)	B-34
	25 Yds	6	and 45 Secs.	Prone (SA)	B-34
	25 Yds.	6		Bar. R (SA)	B-34
	25 Yds.	6		Bar. L (SA)	B-34
	25 Yds.	6		Kneeling (DA)	B-27
4	25 Yds.	6	90 Secs.	Kneeling (DA)	B-27
	25 Yds.	6		Bar. R (DA)	B-27
	25 Yds.	6		Bar. L (DA)	B-27

SA - Single Action

DA - Double Action

B. STAGE THREE: Time will start from standing position, weapons loaded and holstered; 6 rounds fired from sitting, weapon is re-loaded, holstered; firer assumes prone position (on own) fires 6 rounds; reloads, holsters weapon; firer assumes barricade right position (on own), fires 6 rounds; reloads, holsters weapon; firer assumes barricade left position (on own) fires 6 rounds, unloads and holsters empty weapon (timed exercise: 2 minutes and 45 seconds).

- C. STAGE FOUR: Time will start from standing position, weapons loaded and holstered; firer assumes kneeling position, fires 6 rounds, from the kneeling position, weapon is reloaded and holstered; firer assumes barricade right position (on own), fires 6 rounds, reloads and holsters weapon; firer assumes barricade left position (on own) fires 6 rounds, unloads and holsters empty weapon (timed exercise: 90 seconds).

NOTE: All hits on target will be verified by rangemaster, prior to scoring on all exercises.

- D. Upon completion of each stage, all brass will be policed and placed in cans.

IV. REVIEW AND CRITIQUE

- A. Ask for and clarify any student questions.
- B. Review:
1. Correct sight picture
 2. Trigger control
 3. Combat positions.
- C. Total scores and sign score sheets.
- D. Re-schedule personnel not qualifying.

NATIONAL POLICE COMBAT COURSE

HANDGUN QUALIFICATION/REQUALIFICATION (10 CFR 73, APP. IV)

STAGE	RANGE	# RDS	TIME	POSITION	TGT.	SCORE							
						PRACTICE				RECORD			
ZERO	25 YDS.	10	5 MIN.	STAND (SA)	B-16								
						5	4	3	TOTAL	5	4	3	TOTAL
1	7 YDS.	12	25 SEC.	CROUCH (DA)	B-27								
2	25 YDS.	6	12 SEC.	STAND (DA)	B-27								
3	25 YDS.	6		SIT (SA)	B-34								
	25 YDS.	6	2 MIN.	PRONE (SA)	B-34								
	25 YDS.	6	AND	BAR. R (SA)	B-34	5	4	3	TOTAL	5	4	3	TOTAL
	25 YDS.	6	45 SEC.	BAR. L (SA)	B-34								
4	25 YDS.	6	90 SEC.	KNEEL (DA)	B-27								
	25 YDS.	6		BAR. R (DA)	B-27	5	4	3	TOTAL	5	4	3	TOTAL
	25 YDS.	6		BAR. L (DA)	B-27								
GRAND TOTAL SCORE													

NAME: _____
 DATE: _____
 WEAPON: CPP PERSONAL
 SERIAL NO. _____

RECORDED SCORES ARE CORRECT:

 CLYDE E. HARDIN SR.
 LIEUTENANT, LEAD SUPERVISOR
 GE-VNC SECURITY FORCE
 NRA INSTRUCTOR #R94536HARSC919M

SCORE: MAXIMUM POSSIBLE - 300
 MINIMUM QUALIFYING - 210

NIGHT FIRE FAMILIARIZATION: YES/NO
 DATE: _____

LESSON PLAN

TITLE: NIGHT PRACTICE FIRING - HANDGUN

TIME: 200 MINUTES

I. INTRODUCTION

- A. OBJECTIVE: To familiarize students with the principles, techniques and positions utilized in night fire techniques.
- B. REASON: To properly train GE-VNC Security personnel with duties as escorts for irradiated reactor fuel shipments.
- C. DESIRED LEARNING OUTCOME: Each student should:
1. Be able to handle the handgun and function in the combat positions appropriate to night firing skillfully and safely.
 2. Be able to handle a flashlight in an effective manner for target illumination and be able to make use of available light.
- D. INSTRUCTIONAL AIDS: Individual weapons; ammunition (90 rounds per student); firing range; B-27 targets; cleaning materials; first aid kit; stop watch; whistle; one flashlight per individual, (light should have slide control and button control); stapler; staples; target pasters and bullhorn. Illumination for range police to be provided by P.O.Vs.

II. PRESENTATION

- A. NIGHT FIRE (Practice - Handgun, Minimum .354 Caliber)
1. Course is fired from 7, 15 and 25 yards.
 2. All shooting will be double action, course consists of 90 rounds:
 - a. Day Practice: 10 rounds practice, 35 rounds for familiarization.
 - b. Night Practice: 10 rounds practice, 35 rounds for familiarization.
 - c. 25 rounds will be fired while lighting the target with a flashlight.
 - d. 15 rounds will be fired in subdued lighting.
 - e. 10 rounds will be fired in total darkness.

3. Shooters will load and holster, on command, in total darkness.
 4. Flashlights will be held in shooters weak hand, held away from body and slightly above shoulder level. In addition:
 - a. When firing, the flashlight will not be turned on for long periods or left in the "on" position. Light will be turned off and on by the button control.
 - b. If the flashlight should be dropped, the light will not lay on the ground illuminating the officer.
 - c. Light is only flicked on for a shot and flicked off again.
 5. Positions to be used:
 - a. Policeman's crouch.
 - b. Shoulder point.
 - c. Hip fire.
- B. RANGE SAFETY: ACCIDENTS ARE CAUSED! When on the range, you must be alert at all times. Listen closely to the instructions from the rangemaster. To help insure safe shooting, follow these rules at all times:
1. "Clamshell" or "cross-draw" holsters are not permitted.
 2. Do not carry a loaded weapon onto the range and do not load any weapon until specifically instructed to do so.
 3. Regard any weapon as loaded and handle it accordingly.
 4. Do not point a weapon at anything or anyone you are not willing to shoot or kill.
 5. Never leave a weapon unattended.
 6. Do not give a revolver to another person, or accept one from another person, unless the cylinder is open.
 7. Accept no one's word that a weapon is unloaded -- CHECK IT YOURSELF.
 8. Leave a holstered weapon in the holster until instructed otherwise.
 9. Handle no weapon on the range until instructed to do so.
 10. When on the firing line, always face the target. Do not turn around for any reason. If spoken to by a range official, give your reply by turning your head but not your body.

11. If you need assistance while on the firing line, keep the weapon pointed toward the targets (downrange) and raise your arm.
12. In the event of a misfire, follow the instruction in No. 11, above. Do not attempt to clear the weapon yourself and do not fire another shot, as the barrel may be blocked.
13. When not shooting, remain away from the firing line and never try to converse with someone on the firing line.
14. Horseplay will not be tolerated.
15. Insure that your weapon is pointed downrange when loading.
16. Never leave the firing line or proceed to the targets without command of the rangemaster.
17. No smoking on the firing line.
18. No conversation between shooters on the firing line.

III. PRACTICAL APPLICATION

- A. Both day and night practice for night firing will be conducted from the following table:

<u>ORDER</u>	<u>POSITION</u>	<u>NOTES</u>	<u>ROUNDS</u>	<u>TIME PER STRING</u>	<u>RANGE</u>
Zero	Standing (SA) Practice		10 (2 Five-Shot strings)	2 min.	25 yds.
1	Crouch (DA) Draw	1,4,5	10 (10 One-Shot strings)	60 sec.	25 yds.
2	Crouch (DA) Draw	2,4	10 (2 Five-Shot strings)	30 sec.	25 yds.
3	Hip (DA) Draw	1,4	5 (1 Five-Shot string)	10 sec.	7 yds.
4	Hip (DA) Draw Continuous Burst Firing, 2 or 3 shots per Burst	3,4	10 - Reload in darkness with- out command.	60 sec.	7 yds.

45 Rounds (include zero practice)

1. Flashlight will be used, held in weak hand, away from body when flicked on and off.
 2. Subdued lighting, preferably back lighting just outlining target.
 3. Total darkness.
 4. Holsters will be used, dry runs will be permitted in all positions. Time per string includes time to draw and fire as well as turn flashlight on and off.
 5. 60 sec. is total time. Weapon must be drawn, fired and holstered 10 times in 60 sec. A timing break will be allowed for reloading with second five rounds.
- B. Upon completion of each string, all brass will be policed and placed in cans.

IV. REVIEW AND CRITIQUE

- A. Ask for, and clarify any student questions.
- B. Review:
1. Any errors noted.
 2. Use of the flashlight.
 3. Use of the firing positions.