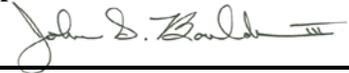


	<p align="center"><i>Office of Security Evaluations (HS-61) Force-on-Force Evaluator Physical Requirements</i></p>	<p>Approved</p> 
		<p>John S. Boulden III Acting Director, Office of Independent Oversight</p> <p>Date: August 31, 2010</p>
<p>Office of Independent Oversight</p>		<p>HS-61 SOP-04, Rev 1</p>

1.0 PURPOSE

Establish roles, responsibilities, and processes regarding how and when personnel should obtain annual physicals and complete self-assessment health questionnaires if participating as protective force (PF) role players during Composite Adversary Team (CAT) training, or as moderate-activity or mobile evaluators during inspections conducted by the Office of Health, Safety and Security (HSS), Office of Security Evaluations (HS-61). This standard operating procedure (SOP) is in support of HS-61 inspections, CAT training, and other sanctioned activities.

2.0 APPLICABILITY

This SOP applies only to personnel involved as either PF role players during CAT training or evaluators during HS-61 inspections. In general, the following groups of employees require an annual medical examination:

- CAT training PF role players
- Moderate activity HS-61 inspection evaluators
- Mobile HS-61 inspection evaluators

NOTE: This SOP does not apply to personnel functioning as fixed/area evaluators during HS-61 inspections because their work activities are principally associated with the observation of personnel performing work from an interior stationary over watch position and therefore are not anticipated to exceed conditions and physical requirements expected in a typical office environment.

3.0 REQUIREMENTS

- 3.1 The CAT training process requires individuals to role play as PF members. This activity can at times, require physical exertion exceeding that experienced during normal work day activities. It is the Office of Independent Oversight's intention to have all personnel functioning as PF role players to have an annual medical examination prior to participation.
- 3.2 The HS-61 Inspection process requires evaluators to remain in close contact with either PF personnel or adversaries during force-on-force (FOF) performance tests. This activity can, at times, require physical exertion exceeding that experienced during normal work day activities. It is the Office of Independent Oversight's intention to have personnel functioning as moderate activity or mobile evaluators during HS-61 inspections to have an annual physical prior to participation.



- 3.3 The most current version of this procedure will be maintained in the Office of Security Evaluations at the Department of Energy (DOE) Headquarters in Germantown, MD and will be made known and available to all personnel anticipated to be either PF role players during CAT training or Evaluators during HS-61 inspections.
- 3.4 At a minimum, this procedure will be reviewed on an annual basis to ensure it accurately reflects current DOE, HSS policies and processes. Additionally, this procedure will be revised as needed in response to changes in requirements; changes in DOE or HSS management or organizational structure; and/or its failure to achieve its stated purpose.

Physical and Health Questionnaire

- 3.5 Each person who functions as a PF role player during CAT training shall have an annual medical examination. The completed medical release form found in appendix A of this SOP must be submitted annually.
- 3.6 Each person who functions as either a moderate activity or mobile evaluator during HS-61 inspections shall have an annual medical examination. The completed medical release form found in appendix B of this SOP must be submitted annually.

<u>IF cleared as:</u>	<u>THEN can also function as:</u>
Mobile Response PF	Fixed Response PF and all Evaluator positions
Fixed Response PF	Fixed/Area or Moderate Activity Evaluator
Mobile Evaluator	Fixed/Area or Moderate Activity Evaluator
Moderate Activity	Fixed/Area Evaluator

NOTE 1: Personnel who function as both PF role players and moderate-activity or mobile evaluators need only complete the PF role player medical release form (appendix A).

- 3.7 Prior to any CAT training and/or HS-61 inspection, personnel will be queried by either the CAT Coordinator (CAT training) or the Performance Test Coordinator (HS-61 inspections) regarding any changes in their health that would preclude them from participating (Appendix C, Self-Assessment Health Questionnaire and Appendix D, Performance Testing Operations Staff Assignment Form). If the person states that a change in their health has occurred since the annual medical examination, then the employee, depending on the type of health change, will utilize the self-assessment health questionnaire found in appendix C.

NOTE: **IF** when completing the self-assessment health questionnaire a “yes” answer is circled indicating the need to seek medical attention, **THEN** the employee must have another medical examination and obtain another medical release form indicating what level of participation they are cleared for.



4.0 RESPONSIBILITIES

4.1 Director, Office of Security Evaluations or Designee

- a. Review and approve this procedure.

4.2 CAT Program Manager

- a. Review this procedure on an annual basis and update as necessary.
- b. Coordinate with the Contractor Safety Officer and Performance Test Coordinator to ensure that personnel participating as FOF evaluators, who are not included in the scope of this procedure, are informed of the health and safety requirements for participation, including the HS-61 Inspection Evaluator Medical Release Form. Typically, this would include personnel, such as those from other DOE Headquarters' offices or uniformed PF professionals from other DOE facilities, who may periodically be invited/requested to participate in FOF testing/training activities.
Note: Formal evidence of similar established medical examination safety procedures may be an acceptable substitution for the HS-61 Inspection Evaluator Medical Release Form on a case-by-case basis.
- c. Coordinate with the Contractor Safety Officer and CAT Coordinator to ensure that personnel participating in CAT training, who are not included in the scope of this procedure, are informed of the health and safety requirements for participation included in the *Composite Adversary Team Training Health and Safety Standard Operating Procedure*, HS-61 SOP-02, Rev 2. Typically, this would include personnel, such as those from other DOE Headquarters' offices or uniformed PF professionals from law enforcement, military, or other non-DOE facilities, who may periodically be invited/requested to participate in CAT training activities.
- d. Collect completed medical release forms from personnel and forward copies to the Unwin Albuquerque Support Operations Administrative Office:

Unwin Company
4848 Tramway Ridge Drive, NE
Suite 220
Albuquerque, NM 87111
Phone: 505-323-7000
Fax: 505-323-7007

4.3 Contractor Administrative Staff

- a. Maintain signed copies of the medical release forms at Unwin's Albuquerque Support Operations Office for a period of at least two years.
- b. Complete and maintain a Performance Testing Operations Staff Assignment Form on Unwin letterhead (appendix D) with date/time stamp that identifies personnel medically released/cleared to perform duties associated with the following job classifications: Core CAT, PF role players, and evaluators with corresponding assignments.



- c. Provide an updated copy of the Performance Testing Operations Staff Assignment Form to the Contractor CAT Coordinator and Contractor Safety Officer, as requested, to help facilitate CAT training.
- d. Provide an updated copy of the Performance Testing Operations Staff Assignment Form to the Contractor Performance Test Coordinator and Contractor Safety Officer, as requested, to help facilitate HS-61 FOF testing/training operations or FOF, limited-scope performance tests (LSPTs).
- e. Ensure that signed copies of the Performance Testing Operations Staff Assignment Forms (see appendix D) for each activity are maintained at Unwin’s Albuquerque Support Operations Office for a period of at least two years.

4.4 Performance Test Coordinator

- a. Request and obtain an updated Performance Testing Operations Staff Assignment Form from the appropriate Contractor administrative staff approximately one month prior to HS-61 inspection FOF or LSPT activities.
- b. Coordinate with the Contractor Safety Officer to review the Performance Testing Operations Staff Assignment Form, and ensure that all personnel participating in physically exertive aspects of the FOF training/testing or LSPT are assigned to positions/duties that are consistent with their respective “medical release classification” as indicated on the form.
- c. Prior to any FOF testing, training, or LSPT activity, evaluators will be queried, verbally and in writing, by the Performance Test Coordinator regarding any changes to their health that would preclude them from participating (Appendix D, Performance Testing Operations Staff Assignment Form).
- d. Submit signed copies of the Performance Testing Operations Staff Assignment Form to the appropriate Contractor administrative staff at the conclusion of each FOF training/testing or LSPT activity.
- e. Coordinate with the Contractor Safety Officer and Federal CAT Program Manager to ensure that personnel participating as FOF evaluators, who are not included in the scope of this procedure, are informed of the health and safety requirements for participation, including the HS-61 Inspection Evaluator Medical Release Form. Typically, this would include personnel, such as those from other DOE Headquarters’ offices or uniformed PF professionals from other DOE facilities, who may periodically be invited/requested to participate in FOF testing/training activities.

Note: Formal evidence of similar established medical examination safety procedures may be an acceptable substitution for the HS-61 Inspection Evaluator Medical Release Form on a case-by-case basis.

- f. Read, understand, and adhere to this procedure.

4.5 CAT Coordinator



- a. Request and obtain an updated Performance Testing Operations Staff Assignment Form from the appropriate Contractor administrative staff approximately one month prior to scheduled CAT training activities.
- b. Coordinate with the Contractor Safety Officer to review the Performance Testing Operations Staff Assignment Form, and ensure that all personnel participating in physically exertive aspects of the CAT training are assigned to positions/duties that are consistent with their respective “medical release classification” as indicated on the form.
- c. Prior to any CAT training, PF role players will be queried, verbally and in writing, by the CAT Coordinator regarding any changes to their health that would preclude them from participating (see Appendix D, Performance Testing Operations Staff Assignment Form).
- d. Submit signed copies of the Performance Testing Operations Staff Assignment Form to the appropriate Contractor administrative staff at the conclusion of each CAT training activity.
- e. Coordinate with the Contractor Safety Officer and Federal CAT Program Manager to ensure that personnel participating in CAT training, who are not included in the scope of this procedure, are informed of the health and safety requirements for participation included in the *Composite Adversary Team Training Health and Safety Standard Operating Procedure*, HS-61 SOP-02, Rev 1. Typically, this would include personnel, such as those from other DOE headquarters offices or uniformed PF professionals from law enforcement, military, or other non-DOE facilities, who may periodically be invited/requested to participate in CAT training activities.
- f. Read, understand, and adhere to this procedure.

4.6 Protective Force Role Players (CAT training)

- a. Medical Examination:
 - Obtain annual medical examination from licensed personal physician.
 - Assist personal physician in understanding the type and extent of anticipated physical activity. Activities may include, but are not limited to, running short distances, crawling, and climbing ladders/stairs. Activities may be performed in adverse environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet).
 - Have physician complete medical release form (appendix A).
 - Submit completed medical release form to the CAT Program Manager annually.



- b. Self-Assessment Health Questionnaire:
 - Complete prior to participating as a PF role player if there has been any change to health status since last medical examination (appendix C).
 - Obtain another medical examination if necessary.
 - Submit new medical release form to CAT Program Manager.
- c. Read, understand, and adhere to this procedure.

4.7 Moderate Activity and Mobile Evaluators (HS-61 inspections)

- a. Medical Examination:
 - Obtain annual medical examination from licensed personal physician.
 - Assist personal physician in understanding the type and extent of anticipated physical activity. Activities may include, but are not limited to, running short distances, crawling, and climbing ladders/stairs. Activities may be performed in adverse environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet).
 - Have physician complete medical release form (appendix B).
 - Submit completed medical release form to CAT Program Manager annually.
- b. Self-Assessment Health Questionnaire:
 - Complete prior to participating as an evaluator if there has been any change to health status since last medical examination (appendix C).
 - Obtain another medical examination if necessary.
 - Submit new medical release form to CAT Program Manager.
- c. Read, understand, and adhere to this procedure.

4.8 Contractor Safety Officer

- a. Coordinate with the Contractor CAT Coordinator and Performance Test Coordinator to review updated Performance Testing Operations Staff Assignment Forms, and ensure that all personnel participating in physically exertive aspects of the CAT training or FOF testing/training are assigned to positions/duties that are consistent with their respective “medical release classification” indicated on the form.

NOTE: The Contractor Safety Officer has the authority to prohibit any individual from participating if there is no evidence of a signed medical release form.

- b. Coordinate with the Contractor Performance Test Coordinator and Federal CAT Program Manager to ensure that personnel participating as FOF evaluators, who are not included in the scope of this procedure, are informed of the health and safety requirements for participation, including the HS-61 Inspection Evaluator Medical Release Form.



- c. Coordinate with the Contractor CAT Coordinator and Federal CAT Program Manager to ensure that personnel participating in CAT training, who are not included in the scope of this procedure, are informed of the health and safety requirements for participation included in the *Composite Adversary Team Training Health and Safety Standard Operating Procedure*, HS-61 SOP-02, Rev 1.
- d. Read, understand, and adhere to this procedure.
- e. Review and, if necessary, update this SOP on an annual basis.



5.0 DEFINITIONS

CAT Coordinator: Contractor employee responsible for the overall organization and direction of all personnel during CAT training.

Safety Officer: Contractor employee responsible for reviewing with either Contractor CAT Coordinator or Contractor Performance Test Coordinator the approved lists of evaluators and/or PF role players with corresponding assignments.

ESS: Engagement Simulations Systems.

Evaluators: Personnel responsible for evaluating various aspects of a DOE site's PF actions during a FOF performance test or LSPT.

Performance Test Coordinator: Contractor employee responsible for making evaluator assignments for HS-61 inspection FOF and LSPT(s) activities.

Protective Force Role Players: Employees who act or portray the part of protective force personnel during CAT training.

Administrative Staff Person: Contractor employee responsible for maintaining approved lists of evaluators and PF role players.

6.0 REFERENCES

- 6.1 10 CFR 851, *Worker Safety and Health*
- 6.2 29 CFR 1910, *General Industry Standards*
- 6.3 29 CFR 1926, *Construction Industry Standards*
- 6.4 DOE Order 470.4A, *Safeguards and Security Program*
- 6.5 DOE Manual 470.4-1, Chg 1, *Safeguards and Security Program Planning and Management*
- 6.6 DOE Manual 470.4-2a, *Physical Protection*
- 6.7 DOE Manual 470.4-3a, *Contractor Protective Force*
- 6.8 DOE Manual 470.4-8, *Federal Protective Force*
- 6.9 Protective Force Protocols for ESS Supported Performance Tests and Exercises (March 2007)
- 6.10 Rules of Engagement for Exercise Players (March 2007)
- 6.11 CAT Handbook 2009
- 6.12 *Composite Adversary Team Standard Operating Procedure*, HS-61 SOP-01, Rev 1



- 6.13 *Composite Adversary Team Training Health and Safety Standard Operating Procedure, HS-61 SOP-02, Rev 1.*

APPENDICES

- A. Protective Force Role Player Medical Release Form
- B. HS-61 Inspection Evaluator Medical Release Form
- C. Self-Assessment Health Questionnaire
- D. Performance Testing Operations Staff Assignment Form

Office of Security Evaluations (HS-61) Protective Force Role Player Medical Release Form

Instructions

- Obtain annual medical examination from licensed personal physician.
- Assist personal physician in understanding the type and extent of anticipated physical activity. Activities may include, but are not limited to, running short distances, crawling, and climbing ladders/stairs. Activities may be performed in adverse environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet).
- Have physician complete medical release form (Appendix A).
- Submit completed medical release form to CAT Program Manager by April 1 each year.

Name of Protective Force Role Player: _____

I hereby attest that _____ is physically capable of participating in U.S. DOE CAT training in the following function:

- Fixed Response Protective Force Role Player
- Mobile Response Protective Force Role Player

Additionally, the individual identified above is not currently taking any prescription medications and/or over-the-counter medications that may pose any risk to his/her health or well being while participating in the training activity in conditions such as those described below.

Date of Medical Examination: _____

Licensed Physician: _____

Background:

The U.S. Department of Energy's (DOE) Office of Independent Oversight's Office of Security Evaluations is principally responsible for conducting independent evaluations on behalf of the Secretary of Energy. The purpose of these evaluations is to verify that the Department can effectively respond to emergencies and to provide assurance that tactical response forces at various field sites are adequately protecting the critical nuclear assets within their custody.

As a key element of these evaluations, the Office of Security Evaluations conducts FOF performance tests using a "red cell" aggressor force known as the DOE Composite Adversary Team (CAT). During these performance tests, DOE tactical response forces must defend against simulated terrorist attacks planned and executed by the CAT. In order to enhance the realism of these complex tactical exercises and to maintain the proficiency of the CAT, the Office of Security Evaluations conducts semi-annual CAT training utilizing selected inspection team staff members to role play as PF officers. Such training generally manifests itself in a series of exercises in which the CAT and protective

force role-players participate in FOF war games utilizing blank-fire assault rifles that have been specially modified with laser engagement transmitters. Participants are also equipped with individually worn sensor harnesses that record the accuracy of opposing team members' weapons fire. As such, the Office of Security Evaluations and its principal support services contractor, Unwin Company, require inspection team staff members who have been selected to perform duties as PF role-players during CAT training to undergo an annual medical examination. The scope and focus of the examination should be such that it examines the individual's physical readiness to participate in one of two role-player functions: fixed response PF role player and mobile response PF role player.

Fixed Response Protective Force Role Player:

A fixed response PF role player operates from a static defensive position or from a mobile security patrol vehicle under both day and lowlight conditions as well as varying environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet). Anticipated significant physical activities include, but are not limited to: operating semi-automatic and fully automatic blank-fire weapons from a stationary position; rapid motor functions such as reloading firearms in a simulated combat environment; wearing and/or carrying approximately 15 lbs. of tactical weapons and equipment; and quickly maneuvering distances less than 25 yards with assigned equipment. Sustained activity at these levels will typically range from approximately 15 to 20 minutes. Of significant note, no hand-to-hand contact is permitted among participants and all participants are required to wear appropriate personal protective equipment (e.g., eye and hearing protection, pro-tech helmets, and knee and elbow pads) during the training. Additionally, FOF training activities are reviewed by a certified exercise physiologist, observed by a certified safety professional and rapid access to emergency medical services is available at all times.

Mobile Response Protective Force Role Player:

A mobile response PF role player operates as a foot patrol or from mobile security patrol vehicle under both day and lowlight conditions as well as varying environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet). Anticipated significant physical activities include, but are not limited to, performing all functions of a fixed response PF role player as enumerated above. Additionally, mobile response PF role players typically participate in more intense simulated gun battles, carry heavier equipment (approximately 35 lbs. or less), and are required to quickly maneuver greater distances (approximately one-half [½] mile or less). Sustained activity at these levels will typically range from approximately 15 to 20 minutes. Of significant note, no hand-to-hand contact is permitted among participants and all participants are required to wear appropriate personal protective equipment (e.g., eye and hearing protection, pro-tech helmets, and knee and elbow pads) during the training. Additionally, FOF training activities are reviewed by a certified exercise physiologist, observed by a certified safety professional and rapid access to emergency medical services is available at all times.

**Office of Security Evaluations (HS-61)
Inspection Evaluator
Medical Release Form**

Instructions

- Obtain annual medical examination from licensed personal physician.
- Assist personal physician in understanding the type and extent of anticipated physical activity. Activities may include, but are not limited to, running short distances, crawling, and climbing ladders/stairs. Activities may be performed in adverse environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet).
- Have physician complete medical release form (Appendix B).
- Submit completed medical release form to CAT Program Manager by April 1 each year.

Name of Evaluator: _____

I hereby attest that _____ is physically capable of participating in U.S. DOE Performance Testing in the following function:

- Moderate Activity Evaluator
- Mobile Evaluator

Additionally, the individual identified above is not currently taking any prescription medications and/or over-the-counter medications that may pose any risk to his/her health or well being while participating in the training activity in conditions such as those described below.

Date of Medical Examination: _____

Licensed Physician: _____

Background:

The U.S. Department of Energy's (DOE) Office of Independent Oversight's Office of Security Evaluations is principally responsible for conducting independent evaluations on behalf of the Secretary of Energy. The purpose of these evaluations is to verify that the Department can effectively respond to emergencies and to provide assurance that tactical response forces at various field sites are adequately protecting the critical nuclear assets within their custody.

As a key element of these evaluations, the Office of Security Evaluations conducts FOF performance tests using a "red cell" aggressor force known as the DOE Composite Adversary Team (CAT). During these performance tests, DOE tactical response forces must defend against simulated terrorist attacks planned and executed by the CAT. In order to determine the efficiency of both the tactical response forces and the CAT, evaluators accompany elements of both sides and observe their actions. Performance tests are a series of exercises in which the CAT and PF role-players participate in FOF war games utilizing blank-fire assault rifles that have been specially modified with laser engagement transmitters. Participants are also equipped with special individually worn sensor harnesses that record the accuracy of opposing team members' weapons fire. As such, the Office of Security Evaluations and its principal support services

Appendix B

contractor, Unwin Company, require inspection team staff members who have been selected to perform duties as evaluators of performance tests to undergo an annual medical examination. The scope and focus of the examination should be such that it examines the individual's physical readiness to participate in one of two evaluator functions: moderate activity evaluator and mobile evaluator as described below.

Moderate Activity Evaluator:

Moderate activity evaluators' duties do not normally require the individuals to over exert themselves. They may perform their duties under both day and lowlight conditions as well as varying environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet). Anticipated physical activities include, but are not limited to: standing, sitting, walking, and jogging short distances. Sustained activity at these levels can continue for several hours. Between exercises personnel can get out of inclement weather if necessary. Of significant note, personnel can become startled by unexpected sudden actions of players and/or loud noises that may occur during the course of a performance test. Evaluators dress appropriately for the weather conditions and are required to wear appropriate personal protective equipment (e.g., eye and hearing protection). Additionally, FOF performance tests are observed by multiple health and safety professionals and rapid access to emergency medical services is available at all times.

Mobile Evaluator:

Mobile evaluators' duties may require the individuals to engage in moderate to heavy activity for brief periods of time. They may perform their duties under both day and lowlight conditions as well as varying environmental conditions (e.g., high/low ambient air temperatures, high/low levels of humidity, and in locations with altitudes up to 7,000 feet). Anticipated physical activities include, but are not limited to: standing, sitting, walking, jogging up to one-quarter (1/4) mile, and sprinting up to 100 yards. Sustained activity at these levels can continue for several hours. Between exercises personnel can get out of inclement weather if necessary. Of significant note, personnel can become startled by unexpected sudden actions of players and/or loud noises that may occur during the course of a performance test. Evaluators dress appropriately for the weather conditions and are required to wear appropriate personal protective equipment (e.g., eye and hearing protection) and may wear elbow/knee pads and protective helmets. Additionally, FOF performance tests are observed by multiple health and safety professionals and rapid access to emergency medical services is available at all times.

Self-Assessment Health Questionnaire

This questionnaire is a simple screening tool used to self identify and document either that there have been no significant changes in your health since your last annual physical screening exam or that there has been a change in your health and you need to seek medical attention before further participation as a PF role player or evaluator.

These questions are from a modified pre-participation screening questionnaire developed by the American Heart Association and American College of Sports Medicine.

Please read carefully and answer each question honestly.

Since your last annual physical screening exam:

Have you had

- Yes / No **A heart attack**
- Yes / No **Heart surgery**
- Yes / No **Cardiac catheterization**
- Yes / No **Coronary angioplasty (PTCA)**
- Yes / No **Pacemaker/implantable cardiac defibrillator/rhythm disturbance**
- Yes / No **Heart valve disease**
- Yes / No **Heart failure**
- Yes / No **Heart transplantation**
- Yes / No **Other diagnosed heart disease**

Have you experienced

- Yes / No **Chest discomfort with exertion**
- Yes / No **Unreasonable breathlessness**
- Yes / No **Dizziness, fainting, or blackouts**
- Yes / No **Have you started taking heart medications(s)**

Other Health Issues

- Yes / No **Developed diabetes**
- Yes / No **Developed asthma or other lung disease**
- Yes / No **Have burning or cramping sensation in your lower legs when walking short distances**
- Yes / No **Have musculoskeletal problems that limit your physical activity**
- Yes / No **Started taking prescription medications(s)**
- Yes / No **Do you believe that you cannot safely participate as an evaluator or PF role player**

If you answered “yes” to one or more of the above statements, you should consult your personal physician before further participation as a PF role player or evaluator. Obtain another physical screening exam before further participation. Use appropriate medical release form (Appendix A or B).

