



Who Should Attend

Physical Protection Systems Training Course

CH2M HILL's Physical Protection Systems Training Course* presents a comprehensive approach to physical security for fixed sites such as banks, industrial plants, embassies, and corporate offices. Now in its 18th year, the course provides training on the methodology developed for the U.S. Department of Energy (DOE) to protect the sites, materials, and components that make up the DOE weapons complex.

*Formerly provided by Security Analysis Corporation (SAC)

This course is designed for a wide variety of personnel. The course provides valuable training for those involved in managing, operating, maintaining, designing, analyzing, or testing security systems. Past attendees have included corporate security directors, security system managers, design engineers, guard force members, and maintenance and procurement personnel. All have credited the course with improving their job skills.

Satisfaction

A sample of the wide variety of organizations that have sent participants through our training:

- Westinghouse Savannah River Company
- U.S. Strategic Command
- Ontario Hydro
- Arizona Public Service Company
- Minnesota Department of Corrections
- Texas Department of Criminal Justice
- The Bureau of Engraving and Printing
- Sandia National Laboratories
- New York Power Authority
- Consolidated Edison of New York
- United States Marshals Service
- Defense Advanced Research Projects Agency
- Eastman Kodak Company
- Underwriters Laboratories
- Department of Energy

Why You Should Attend

This course takes a comprehensive approach to the proper design of a physical protection system. The approach involves three major steps: determining system objectives, designing the system, and analyzing system design. Structured with sessions of illustrative lectures, the course is accompanied by hands-on exercises that allow each participant to apply the knowledge gained in the preceding lectures. The course covers all major aspects of a physical protection system. Each student will receive copies of the EASI and SAVI computer programs.

We will also present a demonstration of AT-MAP, a program recently developed by the U.S. government that provides a way of capturing relevant data about important facilities using hand-held PDAs. AT-MAP analyzes the data against a set of user-defined standards such as standoff distances and other security features, then graphically creates a color-coded map indicating whether facilities meet those standards. The database can be updated as changes occur in the facilities and the standards can be amended when changes occur in regulations or the perceived threat capability. In each case, the graphical display will be immediately updated to indicate whether facilities are in compliance.

Unsolicited Comments from Previous Participants

- "The best course in the industry, and I have attended them all."
Manager, Security Inspection Teams, DOE Headquarters
 - "The Physical Protection Systems course was the best course that I have had the opportunity to attend. I see a lot of potential for your course to expand into the Criminal Justice industry. What I have experienced is that our Agency, like most others, is at the mercy of every security equipment vendor who claims to have the end all answer to their security problems. Your class provided a lot of basic insight into physical protection systems and their applications. If anything, I can tell which vendor is honest and who's blowing smoke."
Security Director, Texas Department of Criminal Justice
 - "The methodology I learned in the course has already proven invaluable in analyzing and upgrading security systems for my clients in the banking industry."
Banking Security Consultant, Money Minders
 - "Your course is a well-designed, expertly presented combination of very relevant information to anyone, anywhere in the world of security services."
Nuclear Security Operations Coordinator, Rochester Gas & Electric
 - "Mike Chritton is an acknowledged expert in the 'design and evaluation of physical protection systems'. More than this, he is able to teach the same to both laymen and experienced security professionals with clarity and credibility. His belief in his subject matter and his commitment to the security industry have helped make him a leader in his field."
Captain, U.S. Marines, Port Security Officer
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Course Content

Comments from Student Evaluations

- "This is the best course I've attended anywhere on any subject."
- "The instructors were extremely knowledgeable and professional."
- "The session on CCTV alarm assessment saved me two million dollars on the upgrades we're about to begin."
- "The opportunity to compare experiences with others during the subgroups was invaluable."

The Physical Protection Systems Training Course is a 40-hour course. Designed for a wide variety of participants, the five-day course provides interactive training on a proven methodology for **determining system objectives, and designing integrated security systems** incorporating the latest in security system technologies. Hands-on computer use is also included to train participants in the **analysis of existing or proposed security systems** using proven computer models, which are valuable tools for selecting the most cost-effective solution for your specific security needs. **Subgroup sessions** allow participants a hands-on opportunity to apply the material covered in the preceding lecture and interact with fellow students from diverse backgrounds. **We neither endorse nor represent any vendor**, but instead offer an unbiased, systematic approach to determining security system objectives, understanding the principles of operation of the various equipment available and selecting the correct device for your application, and analyzing with proven computer models the relative effectiveness of proposed systems before you spend money on new equipment.

The manual used as the basis for the course is "The Design and Evaluation of Physical Protection Systems" by Mary Lynn Garcia, who attended our course in 1995.

Course Schedule

The course generally is conducted from 8:00 a.m. to 5:00 p.m. over five days. Listed here is a typical schedule.

| | Monday | Tuesday | Wednesday | Thursday | Friday | |
|-------------|--------------------------------------|-------------------------------------|-------------------------------------|---------------------------------|------------------------------------|-------------------------------|
| 8:00 | Introduction | Exterior Intrusion Systems | Alarm Assessment Subgroup | Response Subgroup | Risk Analysis | |
| 8:30 | | | | | | |
| 9:00 | System Design and Analysis | | Exterior Intrusion Systems Subgroup | Alarm Communication and Display | Analysis and Evaluation Techniques | Final Design Upgrade Exercise |
| 9:30 | | | | | | |
| 10:00 | Hypothetical Facility | | | AC&D Subgroup | EASI Model | |
| 10:30 | | | | | | |
| 11:00 | Threat Definition | Lunch | Entry Control Systems | EASI Model Subgroup | | |
| 11:30 | | | | | | |
| 12:00 | Lunch | Interior Intrusion Systems | Lunch | Lunch | Lunch | |
| 12:30 | | | | | | |
| 1:00 | Threat Definition Subgroup | Interior Intrusion Systems Subgroup | Entry Control Subgroup | ASD Subgroup | Final Design Upgrade Exercise | |
| 1:30 | | | | | | |
| 2:00 | Target Identification | Interior Intrusion Systems Subgroup | Access Delay | SAVI Model | Subgroup Presentations | |
| 2:30 | | | | | Course Summary | |
| 3:00 | Target Identification Subgroup | Alarm Assessment | Access Delay Subgroup | SAVI Subgroup | | |
| 3:30 | | | | | | Physical Protection Systems |
| 4:00 | | | | | | |
| 4:30 | Physical Protection Systems Subgroup | | | | | |
| 5:00 | | | | | | |
| 6:00 - 8:00 | | | | Banquet and AT-Map Demo | | |



**Mike Chritton, CPP; B.S.,
U.S. Military Academy**

About the Presenters

Mr. Chritton is CH2M HILL's Director of Security Programs. His security experience ranges from staff intelligence officer to lead designer and a field design liaison engineer on a \$400-million security upgrade. He co-authored the Nuclear Regulatory Commission's NUREG/CR-5723, "Security System Signal Supervision." Mr. Chritton has instructed for the International Training Course for Physical Protection of Nuclear Materials and Facilities, which is presented by Sandia for the International Atomic Energy Agency. He was an instructor for the Risk Assessment Methodology for Water Utilities (RAM-WSM) Train-the-Trainer course presented by Sandia. Mr. Chritton has coordinated vulnerability assessments for numerous water, wastewater, chemical and federal facilities. He was lead instructor for the EPA-funded free vulnerability assessment and emergency response plan workshops being conducted for medium water systems, and was the EPA's lead reviewer for all water system VAs submitted to them per the requirements of the Bioterrorism Act of 2002.



**Curtis F. Robbins, P.E.
B.S., University of Virginia**

Mr. Robbins is a Senior Project Manager in CH2M HILL's Northeast Region. Mr. Robbins serves as a member of the ASIS International Physical Security Council and has 28 years of diversified engineering and management experience; with over 21 years specializing in physical and electronic security, providing consulting and engineering services for critical infrastructure – nuclear, national laboratories, military, federal courthouses, education, healthcare, chemical, pharmaceutical, telecommunications, water/wastewater treatment - from vulnerability analysis, requirements definition, conceptual and final design, through construction phase services.



**Paul Ebel, M.B.A., Tulane
B.S., Rice University**

Mr. Ebel has been a Course Coordinator and a Lead Instructor for Sandia National Laboratories' International Training Course on Physical Protection since 1977. Other courses which he has been instrumental in developing and teaching are Design Basis Threat Workshops, Risk Analysis and Vulnerability Assessment for Critical Infrastructures, NEST Key Leader Training, NRC Inspector Training Courses, and IAEA Safeguard's Inspector Training. Mr. Ebel is vice president of BE Inc.



Forrest Gist, P.E.
Oregon State University

Mr. Gist is a Principal Security Project Manager for CH2M HILL and coauthor of *Water Supply Systems Security* (McGraw Hill, 2004). His areas of expertise include security, surveillance, closed-circuit television (CCTV), access control, fire alarm, toxic and flammable gas detection, and control systems. Having participated in more than 200 worldwide security design projects and vulnerability assessments, Mr. Gist has more than 17 years of experience in the planning, design, and integration of security systems, access control systems, network/telecommunication systems, and CCTV systems for a wide variety of military, governmental industrial, and commercial clients.

Register Now! Attendance Is Limited

To ensure the course has a true training environment instead of a seminar setting, course enrollment is very limited. Reservations should be made early, but are confirmed only on receipt of payment. Please make check payable to CH2M HILL. Sign up now to guarantee your reservation!

Registration:

Print the form included in this document and email, fax, or mail it to us.

When:

Course generally runs Monday through Friday, 8 a.m. to 5 p.m. daily.

2010 courses to be announced

Tuition: \$1,995

Tuition includes registration, course manuals, system performance testing checklists, calculator, EASI & SAVI computer programs, one luncheon, one dinner banquet, and continental breakfast each day during the course.

Early Registration Discount Price: \$1,795

Pay your tuition in full 60 days prior and save \$200.

Travel:

Please arrange your own travel and accommodations.

Cancellation Policy:

Cancellations made more than 30 days before the course begins will be refunded. After that time, another attendee may be substituted or enrollment can be rescheduled for the next course.

For further information:

Physical Protection Systems Training Course

Email to: sally.brocksen@ch2m.com

Attn: Sally Brocksen

CH2M HILL

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**To: CH2M HILL Physical Protection Systems
Training Course**
Attention: Sally Brocksen

Project Number: 385084.01.01
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Company: CH2M HILL

Date:

Fax No.: 720.286.9065

Total Pages: 1

Voice No.: 720.286.3104

RE: Registration for Physical Protection Systems Training Course

Please e-mail, mail or fax this form. Reservations are confirmed only on receipt of payment. Please make your check payable to "CH2M HILL."

CH2M HILL
Attn: Sally Brocksen
9191 South Jamaica Street
Englewood, CO 80112 USA

Phone: 720.286.3104
Fax: 720.286.9065
E-mail: securitytraining@ch2m.com

Name:

Payment Method

Title:

Check # and amount:

Company:

Visa Mastercard (check one)

Address:

Credit Card Number:

Credit Card Security Code (3-digit code on reverse side of card)

City/State/Zip:

Expiration Date: Amount:

Telephone:

Credit Card Holder Name:

Fax:

Credit Card Statement Mailing Address (including Zip code):

E-mail:

Citizenship: (Proof of citizenship—driver's license and Social Security card or passport—required on first day of course.)

Foreign National: Indicate Country of Citizenship