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Research and Development of an Instructional System

Teaching Security Supervisors in the Canadian Forces

Wayne Bennett

A Thesis Equivalent

in

The Department

of

Education

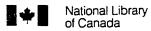
Presented in Partial Fulfillment of the Requirements for

the Degree of Masters of Arts in Educational Technology at

Concordia University

Montreal, Quebec, Canada

April 1993



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By: Wayne Roland Bennett

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Entitled: Research and Development of an Instructional System

**Teaching Security Supervisors in the Canadian Forces** 

and submitted in partial fulfilment of the requirements for the degree of

# Masters of Arts in Educational Technology

complies with the regulations of this University and meets the accepted standards with respect to originality and quality.

Signed by the final examining committee:	
Fores Sm	Chair
	External Examiner
<i></i>	External to Program
- 5 /4 / T. For () )	Examiner, Dr. Gary Boyd
	Examiner, Dr. Dennis Dicks
J. 6.	Supervisor, Dr. Richard Schmid
Approved	Dow
Chair of Department or C	Graduate Programme Director

Dean of Faculty

Gail Valaska

#### **ABSTRACT**

Research and Development of an Instructional System

Teaching Security Supervisors in the Canadian Forces

# Wayne Bennett

Constraints on government spending prevent Unit Security Supervisors from attending the Unit Security Supervisor Course. To overcome this difficulty, a highly structured remote training package was developed by following a three phase Research and Development model. A needs assessment surveyed 80 course graduates to determine training objectives based on their actual duties. A systems approach to course design was used to produce an Instructor's Manual for optimizing performance oriented training. The package was formatively evaluated by content experts and instructional design experts. A field trial investigated the accuracy of content, the adequacy of instructional design decisions, and learner attitudes toward the courseware and the implementation of the course. Generally, this Research and Development Model was deemed to be a useful tool for course development but rather inflexible when it came to adjusting to unexpected events.

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# Chapter 1

# Introduction

# Background

Training is just one aspect of the total Canadian Forces (CF) manpower acquisition and management process. Therefore it is necessary to establish the broader context within which training operates and to elaborate on the principles inherent in its objectives and design.

Since Canada's defence policy is formulated through the political process, the Federal Government defines all Department of National Defence (DND) activities based upon a review of foreign policy, collective defence agreements, and current national political aims thereby deciding the overall direction, level of effort, and objectives for the defence of Canada known as national aims. From these aims, the Government develops a Statement of National Security Policy and Defence Objectives and presents these in the form of a White Paper on Defence which provides DND with the government guidelines for the development of policies and programs.

On receipt of the White Paper, the Associate Deputy Minister (Policy) conducts an analysis to define specific DND roles, objectives, and tasks. Each task is further studied by National Defence Headquarters (NDHQ) group principals and commanders of commands to quantify the resource requirements and to determine the total equipment and manpower needs of the CF. The equipment requirements, as quantified in proposals for capital acquisitions, and the manpower needs, as quantified in the unit establishments, are approved annually by Parliament.

The Assistant Deputy Minister (Personnel) translates unit establishment data into personnel requirements for recruiting, training, and developing people to fill establishment positions. The ultimate aim is to ensure that identified manpower needs for operations are satisfied. Therefore, the Assistant Deputy Minister (Personnel) is responsible for individual training.

The actual conduct of the training is decentralized to Training Establishments, usually schools, operating under the functional control of NDHQ principals or commanders of commands.

This structure permitting decentralized conduct of training under centralized authority is achieved through a management system which controls the quality and quantity of, as well as the resources dedicated to, individual training and is titled the Canadian Forces Individual Training System (CFITS).

Simply stated, the aim of the CFITS is to produce for the CF, from the types of training under its control, the right number of people, with the right qualifications, at the right time, and at minimum cost (National Defence, 1989).

The CFITS is characterized by three key principles: performance orientation, systems approach, and maximum efficiency (National Defence, 1989).

CF personnel management policy and practices require personnel to be evaluated on the basis of performance criteria. Inherent in this concept is the principle that tasks to be achieved in training must match job performance. The performance must be accurately identified and clearly specified in terms of occupation specifications. Therefore, if training is to be effective, it must be oriented to performance.

Like applications in economics, aerospace engineering, education, and training in the private sector, the systems approach applied by the CFITS is essentially a way of thinking about problems in systems terms. The systems approach provides a methodology for analyzing the need for training, determining the most appropriate training strategy, developing the training and implementing it under controlled conditions, and evaluating its effectiveness and feeding back the results to initiate improvement. However, it is recognized that training is one of many possible solutions to a performance deficiency and it is usually the most costly. Training demands an extensive outlay of resources for both development and implementation. The principle of maximum efficiency demands that performance objectives, training strategies, resource expenditures, and number of personnel requiring training be strictly controlled to provide training that satisfies the CF needs at the minimum acceptable cost.

It is within the context discussed thus far, the author was requested to convert the existing Unit Security Supervisor (USS) Course to a structured remote training package suitable for teaching by Base Security Officers at Canadian Forces Bases. The aim of the USS course is to train selected personnel from all occupations in the CF to provide countermeasures against the threat to security of their individual units. At present, the USS Course is conducted at the CF School of Intelligence and Security, CF Base Borden, Ontario.

# <u>Problem</u>

The school identified a number of problems created by the centralized training approach as follows:

- 1. Prohibitive travel costs during a time of government budget cuts have significantly reduced the number of trainees and training sessions causing a shortfall of qualified personnel.
- 2. Bases have different security procedures and the USS Course can not tailor the content to meet the needs of all trainees reducing the credibility of the total security services offered by Base Security Officers to their Base Commanders.
- 3. The school has new courses coming on line for which new training space and additional development time are required but not available with the existing course load.
- 4. Bases assign personnel to the USS Course on an 'as space available' instead of 'as required' basis. This does not permit Base Security Officers to maintain and control adequate numbers of trained personnel to meet their requirements.

Additional to the problems related to centralized training, the CF is searching for means to improve efficiency (time and cost) of training without jeopardizing effectiveness of training. For example, conducting a two week course in one week would result in tying up resources (human and physical plant) for a shorter period thereby saving many dollars only if the quality of the graduate is not degradated.

A preliminary analysis of the project discovered various factors that would later bring to bear decisions regarding instructional design. These factors include:

(a) the course is to be conducted by Base Security Officers (B Secur Os) who do not work in a school environment, (b) B Secur Os are not likely trained instructors (probably have never taught), (c) employers are less willing to allow course candidates the time

from work for training. (d) minimal expenditure of resources is permitted for research and development of the course. (e) the course has never been evaluated but informal feedback indicates that graduates are doing their jobs well. (f) the Unit Security Supervisor's tasking is a secondary duty to the primary duties of the individual's occupation, and (g) the majority of graduates of the USS course work for supervisors who are not military police and these supervisors cannot provide informed comments on the performance of Unit Security Supervisors in their charge.

#### Importance of the Work

The design of instructional products, particularly training programs, has evolved into big business for government and private enterprise. There is an abundance of models outlining methods of conducting front-end analysis, instructional systems design (ISD), and formative evaluation. In most cases each of these processes are treated in isolation or at best formative evaluation is discussed in conjunction with ISD. It appears that none of the authors link all three processes into one detailed model. Many of the models appear to be based on sound research but there is no apparent proof that they work in practice. It is the author's opinion that a practical and complete generic model does not exist for courseware development practitioners. Borg and Gall (1983) state that research and development's contribution is to provide the way to bridge the gap between research and practice. Although different situations may demand different design strategies, validated methodologies for developing new instructional products are needed.

Goldstein (1974) explains that both training and education are instructional processes designed to modify human behaviour. Each can profit from research that

reduces the gap between basic psychology of learning and the understanding of how learning variables affect performance in instructional settings, and each can benefit from an exchange of research rather than an emphasis on uniqueness. In this thesis equivalent, the author attempts to incorporate the ideas and research of educators and trainers in a Research and Development Model to be used by both professions as a guide for courseware development.

Research and development has the potential of translating basic and applied research findings into usable instructional products. Validating selected models can contribute to improvement and growth of educational technology (i.e. the software such as needs assessment, instructional design and formative evaluation). The remainder of this paper proposes a Research and Development Model for courseware development and attempts to demonstrate its usefulness by demonstrating its application in an ISD project. The Unit Security Supervisor Course was selected for the project because constraints on government spending prevented trainees from attending the course causing a shortage of qualified personnel at the bases across Canada. There was a need to examine what was being taught and there was also a need to look at how the course was being delivered. The Research and Development Model provided a three phase approach to the problem. First, a needs assessment was conducted to determine the necessary training objectives based on the actual duties of the Unit Security Supervisor. Next, a systems approach to course design resulted in an Instructor's Manual which optimized the principle of performance oriented training. Finally, a field trial investigated the accuracy of content,

the adequacy of instructional design decisions, and learner attitudes toward the courseware and implementation of the course.

# Chapter 2

#### Related Research

#### Research and Development

Borg and Gall (1989) define research and development as a process to develop and validate educational products. The process involves studying research findings pertinent to the product to be developed, developing the product based on these findings, field testing it in the setting where it will be used eventually, and revising it to correct the deficiencies found in the field-testing stage (Borg & Gall, 1989).

Research and development is an instance of project management. Silverman (1988) discusses project management as a generic set of project disciplines including: (a) plan what to do and when to do it, (b) recruit a team. (c) quote the job, (d) design it, (e) make it, (f) deliver it, and (g) dissolve the organization. A project is an organization designed to accomplish a specific achievement; it is created from within a functioning parent organization and dissolved upon completion of the achievement (Silverman, 1988). According to Silverman (1988) project management is the direction and supervision of a project typified by the use of specialized control techniques. Silverman (1988) says:

Recently, the tendency to allow less time for a design, development, and production cycle, in addition to a lessened tolerance for product error and repair, have led to the use of the project management concept in progressively smaller and less complex systems. (p. 7)

Silverman applies project management to an industrial setting but Rinderer (1991). in her performance technology model, provides an example of a project management application to non-training interventions and, more relevant to the discussion, training interventions. Rinderer's training intervention uses instructional systems development (ISD) to resolve performance problems with training solutions. Typically, ISD in Rinderer's Performance Technology Model involves four phases: (a) problem definition and analysis, (b) intervention design and development, (c) intervention implementation, and (d) intervention evaluation.

Kearsley (1984) refers to ISD as a set of procedures based on the performance-oriented philosophy for developing instructional programs in a consistent and reliable manner. Instructional content is derived from task analysis of the job. The nature of the training materials and program are shaped by repeated tryouts (Kearsley, 1984). ISD attempts to define optimal strategies, media and sequencing for each training activity (Kearsley, 1984).

The Association for Educational Communications and Technology (AECT) Task Force on Definition and Terminology (1977) refers to instructional development as the systematic approach to the design, production, evaluation, and utilization of complete systems of instructions, including all appropriate components and a management pattern for using them. This concept will be discussed later in this chapter in the section Instructional Design.

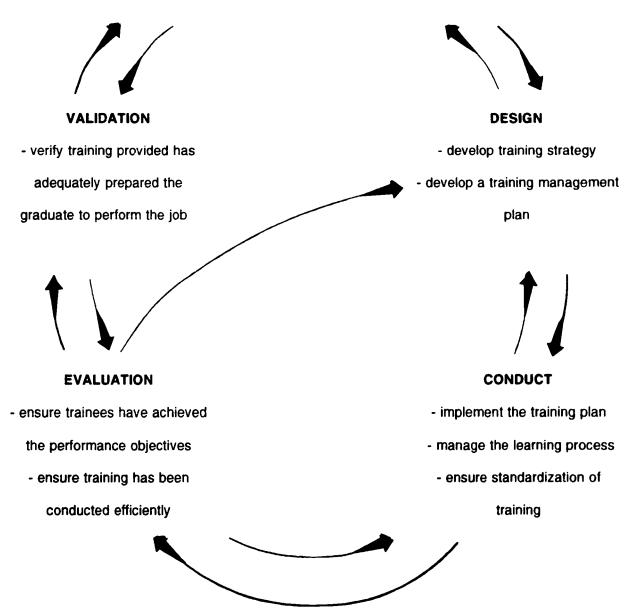
The CFITS employs a five phase systems approach model of ISD. As depicted and described in Figure 1, the five phases are analysis, design, conduct, evaluation, and

validation. Each phase interacts and is dependent on each other with feedback provided to all phases from sources external to, and internal to, the system. It is worthy of note that Figure 1 illustrates only the quality control aspect of the CFITS described in the section entitled Background.

Quality control is concerned with the following factors: (a) accuracy in identifying the tasks that must be performed on the job, in describing the conditions under which the tasks are performed, and in setting performance standards for the tasks; (b) accuracy in determining how the existing performance capabilities of the prospective trainee population differ from those required; (c) effectiveness of job analysts, training developers, instructors, etc. involved in identifying job tasks, determining training needs, developing and delivering training, and assessing the results; (d) timeliness and frequency of opportunity for the trainee to practice tasks during training and the graduate to perform tasks following training; (e) timeliness, frequency, and accuracy of feedback during training and on the job; (f) effectiveness of the feedback information reporting system; and (g) effectiveness in determining how available time, personnel, facilities, and financial resources can best be applied to optimize quality (National Defence, 1989).

#### **ANALYSIS**

- describe the job requirement (job analysis)
- define training requirements for the job (task analysis/performance objectives)
  - provide direction to satisfy the requirement (training standards)



<u>Figure 1</u>. The CFITS Quality Control Model with a description of the purpose of each phase (National Defence, 1989).

The first three phases of the CFITS quality control model are analogous to the first three phases of Rinderer's ISD model. The CFITS model distinguishes between internal and external evaluation by identifying evaluation as the former case and validation as the latter. Whereas evaluation is conducted by the training establishment (school), validation is the responsibility of the command (user of graduates). The purposes of evaluation and validation and thus their distinction can be surmised from the brief descriptions provided in Figure 1.

Based on the literature reviewed, a three phase Research and Development Model was developed for the design of the USS Course. The model is depicted at Figure 2. The three phases are Needs Assessment, Instructional Design, and Formative Evaluation which, if followed in a linear fashion, have outputs that provide input into the subsequent phase except the Formative Evaluation Phase output which is redirected back to the Instructional Design Phase. Further literature review was conducted on each of the phases of the model and is the subject of discussion for the remainder of Chapter 2.

# **Needs Assessment**

Determining which objectives should be pursued appears to be the starting point of many instructional systems design projects (Dick & Carey, 1977). Dick and Carey (1977) suggest that instructional designers have varying roles in the goal identification process. Some designers are expected to design and conduct needs assessment studies themselves, others are expected to survey available data from already completed

# RESEARCH AND DEVELOPMENT MODEL (Project Management)

	Needs -> Assessment	Instructional $\longleftrightarrow$ Design	Formative Evaluation
Decision Focus	<ul> <li>training requirements based on job?</li> <li>training requirements satisfied?</li> <li>recommendations</li> </ul>	- provide direction for the implementation of training	- evaluate course for improvements
Approach	validation study (telephone survey)	<ul> <li>develop training strategy</li> <li>develop training management plan</li> <li>integrate training plan</li> </ul>	pilot course
Data Sources	<ul><li>occupation specs</li><li>course documentation</li><li>instructors (SMEs)</li><li>graduates</li></ul>	<ul><li>course documentation</li><li>instructors (SMEs)</li><li>design experts</li><li>self</li></ul>	- trainees - instruc- tional staff
Data Types	quantitative qualitative	quantitative qualitative	quantitative qualitative
Instruments	questionnaire	n/a	- interview questionnaire - anecdotal notes - attitude questionnaire - tables/checklists
Analysis	descriptive	Decision-	descriptive
Technique	(manual)	making	(manual)
Output	recommendations for course design	Instructor's  Manual including the training plan	revised course

Figure 2. The Research and Development Model: Three Phase Design.

needs assessment studies, some are given a summary of instructional needs and asked to identify those with the most impact potential, and, in some cases, designers are given a completed list of goals for which they are to design and develop instruction (Dick & Carey, 1977).

The literature on needs assessment is blurred by a variety of models but most appear to serve the purpose of clarifying goals for educational curriculum (Popham, 1975; Kaufman, 1972 and 1977; Guba & Lincoln, 1981).

In criticism of needs assessment, Guba and Lincoln (1981) suggest that, for summative evaluations conducted to certify the adapted curriculum for permanent local use, needs assessments lack validity, rigor, and generalizability. In addition, needs cannot be objectively assessed, so needs assessments will to a large extent determine what the evaluator looks at, what he sees, and what conclusions he will come to (Guba & Lincoln, 1981).

Popham (1975) states that most popular needs assessment models emphasize the accumulation of a considerable amount of preference data, typically from a variety of different educational clienteles such as pupils, teachers, and parents. Also, information regarding the current status of learners is assembled so that a comparison can be made between what is and what should be, to identify the needs toward which curriculum will be directed.

Needs assessment in the training milieu appears to serve a similar purpose to educational needs assessment. Identifying discrepancies before launching solutions is generic to problem resolution regardless of setting. Rossett (1987) like Kaufman (1972,

1977) compares desired outcomes (performance or knowledge) with actual outcomes to determine the discrepancies (needs). According to Rossett's model, opinions about the problem or competence related to it, reasons for the problem, and suggestions for most viable solutions are sought during the data gathering phase and considered with needs.

Goldstein (1974) claims that needs assessment consisting of organization analysis, task analysis, and person analysis provides the information necessary to design the entire training program. His front-end analysis, although scanty in description, appears cybernetic in the sense that organizational training needs affected by social, economic, and political factors, as well as the policies of internal units must be identified in order to align performance standards and personal attributes.

Kearsley (1984) depicts needs assessment as the first process in the analysis phase of the instructional systems development (ISD) model. Like Goldstein, Kearsley believes that needs assessment identifies the available resources and time and money constraints associated with the prospective training program. However Kearsley (1984) notes that needs assessment serves another important function by determining whether training is the appropriate solution to the problem, rather than a personal, organizational, procedural, or job aid solution. Task analysis and target population analysis complete the analysis phase of Kearsley's model.

The first three events of Nadler's Critical Events Model (CEM) repeat the front-end analysis process of Goldstein and Kearsley. However evaluation and feedback are integral to each event in the model. The objectives and action steps of the evaluation process of each event provide the data for analysis, feedback, and decisions.

Abella (1986) suggests a similar type of front-end analysis but calls it needs analysis and she defines it as the process of finding out about the people to be trained and the type of training they need. The information gathered includes data on the program's content, the instructional method or methods used, and other questions of implementation (Abella, 1986). The questions asked in Abella's model do not differ from previous mentioned authors. For example, during needs analysis, Abella (1986) asks:

How does the employees' work or performance differ from the job they were expected to do (or are envisioned as doing in the future)? In other words, what is the gap between what is required and what is actually being done? (p. 7)

For the purpose of the USS Course, it was deemed necessary that the needs assessment answer whether or not the existing training adequately prepared the graduates to perform the job. If not, the discrepancies would be identified and resolved by addressing them in the design of the new course. As well, the needs assessment would attempt to base the new course, if required, on the job (Figure 2).

#### Instructional Design

Instructional design is one phase of instructional development. It is analogous to the design function of instructional development (AECT, 1977). According to the AECT Task Force on Definitions and Terminology (1977), instructional design involves the generation of specifications for learning resources (message, people, material, device, technique, and setting). The message is the information to be transmitted (ideas, facts, data, etc.); people are the persons who are acting to store and/or transmit messages;

materials are the items which store messages for transmission (media or software); devices are items which transmit messages stored on materials (hardware); techniques are routine procedures for using materials, devices, settings, and people to transmit messages; and setting is the environment in which the messages are received.

The AECT Task Force on Definition and Terminology (1977) provides a comprehensive definition of an instructional system. An instructional system is any combination of technique (lecture, discussion, self-instruction, programmed instruction, computer-assisted instruction, etc) and learning resources and a specified management pattern which is pre-structured in design or selection, and in utilization, to bring about purposive and controlled learning, and which: (a) is designed to achieve specified competencies or terminal behaviours for a total course of instruction; (b) includes the instructional methodology, format, and sequence called for in the design; (c) manages the contingencies of behaviour; (d) includes a complete set of management procedures for using the system; (e) is replicable and reproducible; (f) has been developed through the complete instructional development process; and (g) has been empirically validated (AECT, 1977).

Most authors on the topics of instructional development and instructional design agree that a systems approach must be utilized to obtain valid, predictable, and useful results in a reliable and consistent manner (Kaufman, 1972; Goldstein, 1974; Romiszowski, 1981; Nadler, 1982; Dick & Carey, 1985).

Goldstein (1974) describes a systematic approach to training as the systematic development of instruction emphasizing the specification of instructional objectives,

precisely controlled learning experiences to achieve these objectives, criteria for performance, and evaluative information.

Dick & Carey (1985) view the instructional process as a system to bring about learning and the components of the system, that is the learners, the instructor, the instructional materials, and the learning environment, all interact to achieve the system's goal. In addition, there must be both an assessment of the effectiveness of the system in bringing about learning and a mechanism to make changes if learning fails to occur (Dick & Carey, 1985). Dick and Carey (1985) say that the person with the systems view sees the preparation, implementation, evaluation, and revision of instruction as one integrated process. Their model starts at one or more identified instructional goals.

Nadler (1982) presents an open model he claims is essentially useful for training (it would require modification for education) called the critical events model (CEM) which permits the design process to halt when something other than a learning response is more appropriate. CEM is unique in that it permits the user to stop at each event and purposely evaluate in terms of the previous events in the model. Nadler (1982) suggests that CEM is of no real value for non-job-oriented learning.

Needs assessment and task analysis (and other types of front-end analysis discussed earlier) are pre-requisite to all the instructional design models utilizing a systems approach.

Although task analysis would not be conducted during the needs assessment for the USS Course, it had been done for the existing course and it was assumed to have been done accurately. In fact, questions regarding tasks performed on the job would be based on the performance objectives that resulted from the original task analysis.

Responses to such questions once analyzed and resulting recommendations would become input into the Instructional Design Phase (Figure 2).

#### **Evaluation**

Scriven first distinguished between the roles served by evaluators who formatively try to improve a still-under-development instructional sequence and those who summatively assess the merits of already-completed instructional sequences (Scriven, 1967).

The type of evaluation that serves the purpose of this project and the type discussed here is formative evaluation. Its purpose is the improvement of instructional materials, including the instructor's manual, during their development stage before their final dissemination.

When designing or redesigning an instructional system, the instructional developer is prudent to consider the evaluation strategies to be used and to do so early in the instructional design process (Romiszowski, 1981). Romiszowski (1981) states that learning outcomes (the knowledge and skills that students gain from courses) are more capable of immediate assessment and therefore, the emphasis in course evaluation has concentrated on testing the mastery of course content.

Less is done about formally evaluating the affective outcomes of a course (teacher and student attitudes) because it is more difficult to define precisely the indicators and only very little can be done during or immediately after a course to evaluate attitude changes (Romiszowski, 1981).

Guba & Lincoln (1981) propose a model for evaluation that deals with the concerns of the stakeholding audiences and produces information that generates useful knowledge. Evolving from the naturalistic approach that appears to serve the study of behavioural phenomena, Guba and Lincoln's responsive evaluation model depends on the human being as an assessment instrument (Guba & Lincoln, 1981). Guba and Lincoln (cited in Borg & Gall, 1989) describe responsive evaluation as a four phase process as follows:

- 1. The first phase involves initiating and organizing the evaluation and identifying the stakeholders. For formative evaluation, the stakeholders are the students who will be using the instructional materials being evaluated and the content and design experts.
- 2. In the second phase, the evaluator identifies the concerns, issues, and values of the stakeholders.
- 3. The third phase involves data collection pertaining to the concerns, issues, and values identified by the stakeholders. The evaluator also collects descriptive data about the entity being evaluated and about standards that will be used in making judgements concerning the entity.
- 4. During the final phase, the evaluator prepares reports of results and recommendations. In formative evaluation, recommendations are the revisions required to improve the instructional materials.

Responsive evaluation requires skills associated with qualitative inquiry (Guba & Lincoln, 1981). Qualitative inquiry permits the examination of affective outcomes.

Responses on participant reaction forms may not necessarily be a good indicator of whether trainees learned on a course (Dixon, 1990).

In a study attempting to establish the relationship of trainees' reactions to a course and the learning achieved, Dixon (1990) found that there is no significant relationship between how much trainees said they learned and how well they actually did on the performance measure. Similar results were found for the relationship between how much trainees said they enjoyed the course and how much they learned and between the trainees' opinions of the instructor and how much they learned. There was no attempt by the evaluator of the USS Pilot Course to address these issues (see Limitations, p. 49).

Dick and Carey (1985) define formative evaluation as the collection of data and information from members of the target population during the development of instruction which can be used to improve the effectiveness of the instruction. While the focus of formative evaluation, according to Dick and Carey (1985), is on the acquisition of data from learners, it is also important to have the instruction reviewed by specialists who can comment on the accuracy and currency of the instruction.

Montague et al. (cited in Weston, 1986) propose that a series of experts review prototype materials during development and suggest improvements. Weston (1986) describes the expert review stage of formative evaluation as involving a subject matter expert, a curriculum expert, an instructional designer and/or a technical expert who review the materials to judge the factors falling within their area of expertise. It is cautioned that expert reviews should be considered jointly with student data (Weston, 1986).

A legitimate source of data for instructional materials development identified by Thiagarajan (cited in Weston, 1986) is self-evaluation which involves developers revising their own work. Again, Weston (1986) cautions that, in addition to self-critique, evaluation should be sought from others and used.

Lesson specifications and course materials for the USS Course were reviewed by content experts before being tried by the target audience in a one-on-one trial. Also the completed package was sent to a higher authority for review and approval by content and instructional design experts before a field trial was scheduled. The main source of data providing input for revision to the instructional materials was derived from the field trial or pilot course. The Guba and Lincoln approach was favoured because of the nature of the course, that is the course would provide knowledge and skills deemed important but not of a serious enough consequence if performed inaccurately to warrant failure of the course. It was believed by the content experts that attendance by USSs would be more important than adhering to strict performance measures.

# Chapter 3

#### **Needs Assessment**

This chapter and the next two chapters are entitled according to the phase of the Research and Development Model being reviewed in order of Needs Assessment. Instructional Systems Design, and Formative Evaluation. Each chapter describes the method, results, and implications of the phase of course development being reviewed. The final chapter of the thesis provides an overview of the outcomes and recommendations for both content and process changes resulting from the application of the Research and Development Model during this project.

#### Method

The decision focus of the needs assessment in respect to the overall research and development function was to: (a) determine if the training requirements were defined based on the actual duties of the USS; (b) determine if the training requirements had been satisfied; and (c) make recommendations on the training requirements and the training conducted to be incorporated into the design of the new course.

Approach. A validation study was conducted to determine whether overtraining, undertraining, or incorrect training occurred on the course. Validation was carried out in accordance with CFITS procedures with the following deviations:

1. The project directive from National Defence Headquarters necessitated that validation be conducted in considerably less time than the norm (four months was

allocated to the entire course development of which validation or needs assessment was one phase).

- Supervisors' questionnaires were not administered because, as a secondary duty, most or all supervisors have never performed USS duties and are not familiar with the levels of knowledge and skill required.
- 3. Data gathered during the needs assessment provided information to make decisions regarding course design. Therefore, questions addressed this specific requirement.

Tasks and Task Elements. The Task Statement Booklet (Appendix A) includes enabling objectives (tasks) and lesson topics (task elements) that the graduate is expected to perform at his/her unit. Reference was made to the following documents in the development of the Task Statement Booklet: (a) the terms of reference for Unit Security Supervisor (CF Security Orders Manual), (b) occupation specialty specifications for USS, (c) USS Course Training Standard, and (d) USS Course Training Plan.

Data Collection. Data were collected by telephone survey conducted by two Personnel Awaiting Training (PATs) trained in telephone survey techniques. Questionnaire items included employment data, an inventory of enabling objectives (tasks), topics from lesson specifications (task elements), and open-ended questions. Responses to items posed to course graduates were recorded by PATs on the questionnaire (Appendix B).

Administration. The questionnaires were tried using two subject matter experts and one graduate. PATs underwent a one day training session to practice telephone survey technique and to familiarize themselves with the survey instrument.

<u>Data Analysis</u>. Data were analyzed manually to: (a) determine distribution of responses for employment and task/task element data; (b) determine those tasks that are not performed by a significant proportion of graduates; and (c) determine those tasks elements in which training is required, training is not required, training is better done on the job, there is no employment provided after training, there are excesses in training, and there is deficiencies in training.

Open-ended Responses. Open-ended responses were tabulated and compared to the task and task element response data to determine the reliability of responses and, in some cases, to clarify responses (eg. if a response to a task element question indicated that training was received on a prior course, open-ended question number 2 provided opportunity to state where).

Analysis. Subject matter experts in validation techniques at Combat Training Centre, CFB Gagetown and CF School of Intelligence and Security staff were consulted to arrive at benchmarks for analysis of data. Tasks not performed by 50% or more of the graduates were investigated to determine whether to retain or delete them from the course training plan. To investigate the possibility of deleting a task element (topic) from training, fewer than 20% of the graduates must have responded that they perform the task element. To investigate the possibility of increasing training for a task element, a 50% proportion of supporting responses were required.

Only difficulty and frequency of task performance were considered important since there were no tasks deemed to be critical. Therefore it was not necessary to investigate tasks seldom performed. In the CF environment, only tasks poorly performed with the consequence of jeopardy to personal safety or life, costly damage to equipment, or a threat to sovereignty are deemed critical. None of these consequences were considered to likely occur as a result of performance of tasks covered on the USS Course.

Sample. An attempt was made to contact the 136 graduates of the course conducted from January 1989 to January 1990 (inclusive). Ten graduates were released from the CF since they took the course. Forty six graduates were unavailable because they were in transit between postings or on leave (vacation) during the survey. All available graduates (80) were interviewed by telephone survey.

Seventy three of the 80 graduates contacted were tasked as the USS of their unit. Six of the remaining 7 graduates not tasked to carry out the duty of the USS performed one or more of the tasks listed in the Task Statement Booklet. In other words, although 7 graduates contacted were not USSs, six of them performed at least one of the responsibilities normally expected to be performed by the USS. Therefore, the responses of the 7 graduates not tasked as USSs were taken into account during the analysis.

#### <u>Limitations</u>. Limitations of the study include:

1. The validation was conducted during the peak leave period and annual posting season. Forty-six graduates were not available during the survey.

- Since the USS is a secondary duty and many or most graduates' supervisors
  were not able to contribute information on the graduates' performance, supervisors were
  not surveyed.
- 3. It was necessary to assume that performance objectives are both useful and correct (i.e. task analysis produced valid performance objectives and, in turn, valid enabling objectives).

## Results

Course Control Documents. The Occupational Specialty Specification, the Course Training Standard (CTS), and the Course Training Plan (CTP) were aligned except that the CTS did not include specification task numbers 1 (e): "must have a basic knowledge of threat to security from hostile intelligence service" and 5 (c): "must be skilled in producing security routine order entries". Also, the CTP wording of the performance objective statements for performance objectives 401, 402, and 405 were different than the CTS (i.e. "apply" vice "maintain" in all three cases).

Performance objectives were compared to the criteria for good performance objectives as outlined CF publication 9000 Series (Volume 6, Writing of Performance Objectives) and they were considered by the evaluator to be well written. The one exception was the standard for Performance Objective 404. Standard 3 (c) was ambiguous because it did not stand alone as a standard criterion and it was not obvious whether it applied to the criteria specified in 3 (a) and/or 3 (b). The performance objectives from the USS CTS are presented in Appendix C.

Graduates Tasked as USSs. Ninety-one percent of the graduates contacted were tasked with the duty of USS. Eighty- one percent had been tasked USS duties for more than one year. Sixty-two percent were employed in operational units.

<u>Tasks to be Retained and Eliminated</u>. Frequencies of response to whether graduates had performed the tasks since the course were calculated and converted to percentages (Table 1).

Table 1
Response Frequencies by Graduates:

Had Performed the Task Since the Course

N = 80		YES	<del></del>
	Task	Number	Percent
		<u>,                                      </u>	
	1	62	77.5
	2	54	67.5
	3	69	86
	4	64	80
	5	33	41

Tasks 1 to 4 exceeded the benchmark of 50 percent; any task not performed by 50 percent or more of the graduates was investigated to determine whether to retain or delete it from training. Only Task 5 (apply Automated Data Processing and Automated Office Equipment security countermeasures) fell below the benchmark; fifty-nine percent of the graduates responded that they did not perform this task. Further investigation revealed that, in many units, a different individual was responsible for performing this task.

Tasks Elements to be Retained for Training. Response frequencies for the questions regarding whether graduates performed the task elements for each task were calculated and converted to percentages (Table 2). All task elements except one were performed by at least 20 % of the graduates. Task Element 1.12 - NATO/Atomal Information was performed by 13 of the graduates or 16 percent. Further investigation revealed that this topic is relevant to only Communication Squadrons which are a very small proportion of the types of units in the CF.

Duplication of Training. The frequencies of response to each of the questions regarding where graduates had received training for the task elements of Tasks 1 to 4 were calculated. Task 5 was not analyzed because the majority of graduates did not perform that task. Each graduate was asked if she or he performed each of the task elements for the tasks in Appendix B and where training was received for task elements performed. The number of graduates who said they performed the task element was compared to the number who reported they received training for the task element on the

Table 2

Response Frequencies by Graduates:

Had Performed the Task Element

Task	Ta	sk 1	Task	2		Ta	sk 3	Т	ask 4
Item	No	Yes	No	Yes		No	Yes	No	Yes
.01	22	58	56	24		12	68	16	64
.02	20	60	49	31		37	43	22	58
.03	19	61	48	32		16	64	55	25
.04	30	50	56	24		41	39	N/A	N/A
.05	28	52	55	25		N/A	N/A	N/A	N/A
.06	32	48	58	22		N/A	N/A	N/A	N/A
.07	27	53	55	25		N/A	N/A	N/A	N/A
.08	49	31	56	24		N/A	N/A	N/A	N/A
.09	28	52	40	40		N/A	N/A	N/A	N/A
.10	24	56	N/A	N/A		N/A	N/A	N/A	N/A
.11	37	43	N/A	N/A		N/A	N/A	N/A	N/A
.12	<u>67</u>	13	N/A	N/A		N/A	N/A	N/A	N/A
	(N = 80)		(N = 80)		(1	N = 80)	)	(N =	80)

Note to Table 2: Task 5 is not represented because it fell below the benchmark and is separately investigated.

USS course. This comparison revealed a high correlation between the two sets of data; all graduates who reported they had performed the task element should have received training on the course for each task element. Therefore a high response frequency was expected. As well, it was expected that many of the graduates would learn at least some of the task elements on the job if they were employed as USSs prior to training.

The task elements of Task 1 (apply security of information countermeasures) appear to be learned more frequently during prior employment and covered more often on other courses, especially career courses and specialized career courses. The topics within Tasks 2 to 4 appear to be learned during prior employment and covered on other courses, especially career courses, to a much lesser degree (The related data appearing in Appendix B are summarized in Table 3).

Table 3
High and Low Response Frequencies by Graduates:
Where Training Was Received for Task Elements

Task	ON THIS Task COURSE		PRIOR EMPLOYMENT		PRIOR COURSE		PRESENT EMPLOYMENT	
	Н	L	Н	L	Н	L	Н	L
1	60	11	15	3	24	4	21	3
2	34	19	3	0	6	1	12	5
3	65	38	6	5	8	6	19	11
4	60	23	5	2	7	4	5	4

Notes to Table 3: "H" represents the highest response frequencies for one or more task elements within the task. "L" represents the lowest response frequencies for one or more task elements within the task.

Task 2 results appear unusual until the response rates are compared to the number of graduates who reported they performed the task element. For example, 34 graduates reported they learned the task element (Task Element 2.09 from Appendix B) on the USS Course. At first glance, this appears low compared to the responses to the other tasks in Table 3. When considered in conjunction with the 40 graduates who perform the task element, the results are much less drastic. Similarly, the low response of 19 for Task 2 when compared to the 22 graduates who actually performed the task element (Task Element 2.06 from Appendix B) does not appear unusual. What does appear unusual about Task 2 is the fact that so few graduates reported that they did not perform the task elements since they graduated from the USS Course.

The low of 23 for task element 4.03 (Appendix B) of Task 4 appears low until compared to the number of graduates who actually perform the task element (twenty-five graduates reported that they perform the task element).

Efficiency of Training. Graduates indicated that training on the USS Course was adequate for Tasks 1 to 4. About 50 % of those who performed Task 5 indicated that training for this task was too little or less than adequate.

Effectiveness of Training. Graduates reported that they performed the job satisfactorily or with ease for Tasks 1 to 4. About 35 % of the graduates who reported they performed Task 5, performed the task elements with difficulty or less than satisfactorily.

Requirement for the Course. The intent was to determine if the course was required based on whether graduates thought each task element performed on the job should be originally taught on the USS Course, during on-job training at the unit, or not taught at all. However, during the survey, the PATs often recorded more than one response for the question (in some cases, the same graduates responded that training for the task elements should be taught both on the course and at the unit). Some graduates who did not perform the task responded to the question. The evaluator deemed that the question was misunderstood by the PATs and many of the respondents who may have thought that the course was necessary but that it should be conducted at the unit. The intent of the question was whether the training should occur during a course or on the job. However, it was possible to determine that all graduates believed that training was required for all task elements although it could not be determined where training should occur (Column 5 of Appendix B).

Open-ended Response Analysis. Seventy-one percent of the graduates reported that no additional tasks require training on the USS Course. There was no consensus on which additional tasks require training by the other 29 percent who reported that additional tasks required training on the USS Course. Sixty-eight percent of the graduates did not identify other courses they have taken which essentially covered the same content. Sixty-two and one half percent of the graduates did not respond when asked if they had performed the tasks taught on the course often enough on the job to maintain proficiency for the secondary duty. Forty-six percent of the graduates reported that the training could

be improved. The responses to the open-ended questions and a list of the graduates' suggested improvements for training are found at Appendix D.

#### Discussion

The needs assessment revealed several problem areas with the training requirement and the existing training which needed to be addressed before proceeding to the ISD phase of the project. Revisions and recommendations were based on the following problem areas:

- 1. The training requirements are correctly defined based on the actual duties of the USS performed on the job except for Task 5 (ADP/AOE security countermeasures) and Task Element 1.12 (NATO/Atomal information).
- 2. Some duplication of training cannot be avoided since security countermeasures are practised to some degree by all CF personnel and it is introduced in their career courses to the extent that it concerns their particular occupations. USS responsibilities are delegated to personnel from all occupations.
- 3. Except for Task 5, training is adequate, effective, and required for all tasks. The course could be improved by providing opportunities for more trainee participation by way of discussions, hands on experience, practice and more time spent on developing unit security orders.
- 4. No clear evidence exists that, after completion of career courses, employment provides graduates enough practice for them to maintain proficiency required for the job.

- 5. The CTS containing the course performance objectives is written in accordance with CFITS principles and practices except for the Standard of Performance Objective 404 (Appendix C). The lesson specifications in the CTP are not written in accordance with CFITS principles and practices. Incomplete lesson plans with supporting visuals are available in both English and French.
- 6. For each performance objective in the CTS, there is only one enabling objective in the CTP with a performance statement worded exactly or with the same intent as the performance statement of the corresponding performance objective.

Since the CTS is the training document derived from the job requirement and on which the course training plan would be based, it was important that the CTS be corrected. Therefore, it was recommended that, prior to the instructional design phase, the CTS be modified as follows: (a) delete Performance Objective 405, (b) change the wording of the performance statements of Performance Objectives 401 and 402 to read "apply" vice "maintain", and (c) revise or delete the standard of Performance Objective 404 (paragraph 3c.) to eliminate ambiguity.

Based on CTS revisions, it was recommended that the CTP be revised by: (a) deleting Enabling Objective 405.01, (b) deleting the topic concerning NATO/Atomal information from Enabling Objective 401.01, (c) rewriting the lesson specifications for all Enabling Objectives including rewriting the standard for each objective and designing a format which provides maximum guidance to the instructors, and (d) writing course management details and assessment guidelines to provide maximum instructor guidance and assistance. Also it was recommended that an Instructors' Manual be designed keeping

in mind that most instructors of the USS Course would not be trained instructors and that the course normally would be conducted without the facilities available at a school.

According to CFITS principles and based on open-ended question responses by graduates, it was recommended that the training be designed to be performance oriented with more opportunities for trainee interaction during the learning activities.

Finally, it was recommended that the course be shortened from nine days to five days. This recommendation was based on the elimination of Performance Objective 405 and the fact that supervisors are more likely to free their personnel from the workplace to attend a one week course than a longer course. Shortening the course would involve more evening work for the trainees and possibly some precourse reading and preparation. Making the USS Course shorter would be one of the challenges facing the instructional systems design team.

## Chapter 4

# Instructional Systems Design

#### Method, Results, and Discussion

The process of developing a course in accordance with the design phase of the CFITS Quality Control Model is completed in three essential stages: (a) develop a training strategy, (b) develop a training management plan, and (c) integrate the training plan into operations. The latter stage is not applicable to this project and is therefore not discussed. A design team consisting of two instructors and the author was convened to conduct the instructional system design.

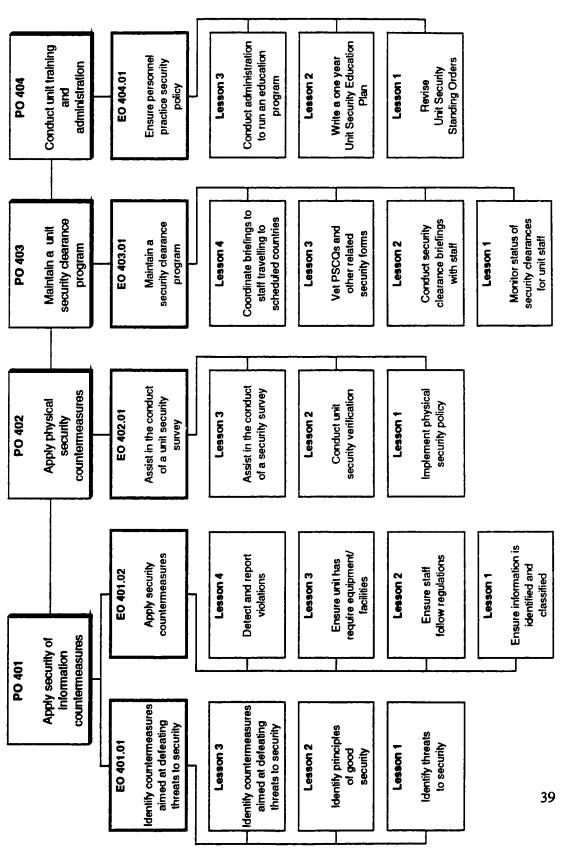
Training Strategy Decisions. Developing the training strategy included the following activities in the order listed: (a) development of an assessment plan, (b) analysis of the target population, (c) instructional analysis, (d) development of the enabling objectives, (e) development of the evaluation instruments, (f) identification of the teaching points, (g) selection of the methods of instruction, (i) procurement of and/or development of the courseware, (j) formative evaluation and revision of the courseware, and (k) the writing of the lesson specifications.

The assessment plan detailed the strategy for arriving at a decision on the trainee's ability to meet the performance objectives. First, the global assessment strategy was determined by sequencing the tests and performance checks and combining tests and performance checks into various exercises. Next, enabling objectives were examined for criticality. Weighting was considered for each test and performance check. Retesting

procedures and guidelines were identified. Availability, requirement, and usage of resources was determined for the assessment plan. Test plans for each evaluation instrument were developed. Finally, the performance checks were designed.

Decisions about the instructional strategy, the structure of the course, and the pace of instruction were determined by assessing entry level skills and levels of motivation of the course candidates and identifying areas of required emphasis. An examination of related course documents was conducted to gather data on the target population. The review consisted of a perusal of existing course documents specifying course prerequisites, the specialty specifications, and the needs assessment report. Also, course instructional staff were interviewed to determine the interests, attitudes, motivation, education, aptitudes, and personal data (age, rank, etc.) of past trainees. The Target Population Description is found in Appendix E.

Instructional analysis was conducted by: (a) analyzing performance objectives to identify all supporting knowledge and skill components; (b) applying target population information to determine what specifically required training, what the target population was capable of doing prior to instruction, and what the population already knew; (c) sequencing knowledge and skill components with consideration for job performance order, inherent logic of the subject matter, and ease of learning and depicting the components on a diagram; and (d) writing enabling objectives based on the diagram. The result of instructional analysis is illustrated in Figure 3.



Elgure 3. Result of the Instructional Analysis for the USS Course. (PO = Performance Objective EO = Enabling Objective)

Enabling objectives direct the learning process towards achieving the performance objectives. The scope of the enabling objective reflects a group of learning activities or dictates when it is appropriate to check retention after a sizable amount of learning. Groups of related components to be learned were identified on the diagram. Depending on the complexity, difficulty, and relatedness of the components, one or more enabling objectives were written for each performance objective. The enabling objectives were written in three part format with each enabling objective containing a performance statement stating what the trainee must be able to do at the end of a unit of instruction, conditions statement describing what the trainee is given and/or denied, and a standard specifying the minimal acceptable level of performance (Appendix F).

Evaluation instruments called enabling checks, reflecting the requirements of the enabling objective, were developed to determine to what extent the trainees achieve the intended outcomes of the instruction. Enabling Checks 401.01 and 401.02 are grouped to be tested at one time. Suggested timings of objectives and checks are provided in Appendix L (Section A, Part 3).

Teaching points are defined as those concepts, definitions, etc. that the trainee must learn to meet the objectives of the lesson and ultimately accomplish the requirements of the enabling objectives and performance objectives. Subject matter experts were tasked to develop a list of teaching points for each enabling objective by brainstorming then by scanning relevant references and making a comparison.

The following factors were considered when selecting the method of instruction:

(a) the level and abilities of the target population, (b) the type of objective (i.e. knowledge or skill), (c) the level of learning required, (d) the need for transfer of learning, (e) the facilities available, (f) the ability of the instructors, (g) the resources available, and (h) the time available. The majority of people providing the instruction will not be qualified instructors and the course will not necessarily be conducted in a school environment with the resources available at most schools. These known facts together with the restriction on government spending were brought to bear on the decisions to select one method over another. A list of selected teaching methods for enabling objectives is presented in Appendix H.

The courseware and all supporting materials for learning for each enabling objective had to be identified, selected, assembled, and integrated into learning activities. Consideration was given to references, training aids, and learning aids. The main factor that guided the decisions on which aids and references to select was whether or not the material supported learning required by the enabling objective. Secondary factors included: (a) availability from Supply and Services Canada; (b) maturity, interest, and abilities of the trainees; (c) appropriateness of the aids to the training activity; (d) variety of aids; (e) availability of technical advice for evaluating content; and (f) timeliness of purchase (Appendix I).

All courseware and training aids, both acquired and produced, were tried in the following manner and order:

- 1. Self-evaluation materials were reviewed to ensure they developed the learning activity.
- 2. Subject Matter Expert Evaluation materials were reviewed for content and procedure accuracy.
- 3. One-on-one Trial materials were presented for practice with a representative of the target population.

Courseware was revised as necessary and action was initiated for the purchase or return of preview videotapes.

Details of the pilot course are presented in Chapter 5 entitled <u>Formative</u>

Evaluation.

Finally, lesson specifications for each enabling objective were written for the use of instructors to conduct training and to facilitate learning. Each lesson specification contained the three part enabling objective plus the following information: (a) teaching points; (b) time allotted including instruction, practice, and enabling check; (c) method of instruction; (d) substantiation for selection of method of instruction; (e) list of references; (f) list of training aids; (g) list of learning aids; (h) test details; and (i) remarks, when required. One lesson specifications is provided as an example in Appendix J. All the lesson specifications are available upon request.

Training Management Plan. The second phase of the instructional design process consisted of the development of an Instructor's Manual to provide the necessary direction for the conduct of the course. The development of the Instructor's Manual included the following activities: (a) providing direction in implementing the training strategy, (b)

planning the assignment and allocation of resources, (c) outlining administrative support and procedures, and (d) collating the Instructor's Manual containing all the administrative details and the training strategy including directions for implementing the strategy. Excerpts from the Instructor's Manual are included in Appendix K. The complete manual is available upon request. Guidance in implementing the training strategy involved providing direction regarding: (a) the specific responsibilities of the instructor (terms of reference); (b) the assessment procedures for exercises, progress checks (enabling checks), and performance checks and for the overall course grade; (c) trainee progress monitoring through recording results in the student record book; (d) the procedure for handling cases of unsatisfactory course progress; and (e) the types of remedial action provided weak trainees.

To provide guidance regarding the efficient use of resources, direction was given at appropriate points in the Instructor's Manual concerning: (a) lead-time for ordering course materials and training aids; (b) development time for lesson plans; (c) instructor training; (d) staffing including making arrangements for guest lecturers; (e) scheduling staff, equipment, and facilities; (f) optimum instructor to trainees ratio; and (g) ideal course timetable.

Course preparation included concerns like the coordination of resources, the dispatch of candidate joining instructions, the arrangement of clerical support, the arrangement of rations and quarters for candidates, and the preparation of student record books. The course requirements details provided to the instructor included a daily list of requirements specifying the lesson plans, visual support, and handouts needed and any

special equipment or facilities required. Also, details on the administration of course critiques was provided. Administrative details after the course included the handling of trainee files, the preparation of course reports, and the distribution of course reports.

Finally the Instructor's Manual was collated into three sections entitled <u>Pre-course</u>, <u>During the Course</u>, and <u>After the Course</u>. These sections were preceded by a <u>Preface</u> explaining how to use the manual and followed by reference materials for the instructor such as security education methods and procedures and an excerpt from the security education audio visual training manual. The Table of Contents is presented in Appendix K with other excerpts from the Instructor's Manual.

## Chapter 5

## Formative Evaluation

## Method

Field Trial. The field trial or pilot course was the first tryout of the course and the Instructor's Manual under operational conditions. The intent of evaluating the USS Pilot Course was to determine if: (a) there were any necessary changes to the management details provided in the package; (b) there were any discrepancies in course content; (c) there were any difficulties in course implementation (eg. timings and sequence of lessons); (d) the instructional strategy (including the training aids and methods) were suitable for the trainees, instructors, and course content; and (e) trainees achieved the training objectives as a result of participation in the course.

The aim of the field trial was to evaluate every aspect of the course in the environment for which it was intended and, based on the findings, to make a decision to:

(a) make major revisions and run another a pilot course, (b) implement the course after minor revisions are completed, or (c) implement the course without revisions.

The Base Security Officer at CFB Borden was tasked to conduct the pilot course. A letter requesting course candidates was sent to all units on the base. Units were directed to select and send on the course individuals who were holding the position of USS but not qualified or individuals who would be tasked with USS duties in the near future. The units were not informed that this course was to be conducted as a pilot course Units were told that graduates would receive the USS specialty qualification. The

procedure used by the Base Security Officer for selecting course candidates was the normal procedure followed in the CF for course candidate selection.

Target Audience. Course candidates included male, female, anglophone, francophone, Regular, and Reserve personnel from large and small units. The mixture and numbers represented on the pilot course were considered characteristic of what could be expected at any CF base. Personal Data Sheets were completed by the course candidates on the first morning of the course. Seventeen of the twenty-one candidates reported on their Personal Data Sheet that they needed the USS Course for their employment; four candidates reported they didn't need the course.

Instrumentation/Data Collection. The evaluator attended the course sessions except for lectures conducted the first afternoon on automated data processing (ADP) security. Methods of gathering qualitative and quantitaive data included unobtrusive observation, questionnare administration, and brief interviews (Appendix L).

Anecdotal notes were maintained in addition to the observations recorded on the tables, checklists and rating scales concerning information on the teaching method and training aids for each lesson, course implementation, testing, and instructional strategy.

Informal interviews (Appendix L, Section B) were conducted, as time and instructor availability permitted, by asking the course officer and instructors their views regarding the course content and the user friendliness of the Instructor's Manual.

Lesson critiques were administered to trainees after each lesson objective to determine trainees' opinions regarding: (a) whether they were interested in the instruction, (b) whether they thought the lesson objective was clear, (c) whether they learned to do

things they couldn't do before, (d) whether they were satisfied with the amount of information presented on the topic, (e) whether they thought the instruction and questions asked were clear, and (f) what they thought would improve the lesson. A sample lesson critique is provided in Appendix M.

A course critique (Appendix N) was administered after the course to determine whether trainees thought: (a) each topic was covered poorly, adequately, or well; (b) the course was well paced and sequenced; (c) the presentation methodology was suited for each topic; (d) the practice exercises were meaningful; (e) sufficient time was allocated to each objective; (f) the comments and criticism by staff were helpful and constructive; (g) the trainees felt confident to apply successfully what was learned; and (h) the course content was relevant to their USS role. As well, the critique solicited reactions and comments to each learning activity covered on the course.

Data Analysis. Descriptive statistics techniques were used to summarize qualitative and quantitative data to identify: (a) errors and/or omissions in course management details; (b) errors and/or omissions in course content; (c) discrepancies in timings and sequence of learning activities; (d) required changes to teaching methods, training aids, and course materials for each lesson objective; and (e) problem areas in testing.

Generalizability of Findings. The course was field tested under conditions which attempted to duplicate those conditions expected at most CF bases. The instructional abilities and experience of B Secur O staff were considered typical of Security staffs across the CF. The availability of facilities and supplementary training materials from

CFSIS was not considered characteristic of the accessability of resources at other CF bases. Borden is primarily a training base unlike many CF bases which serve operational functions. Therefore, it was expected that the course would be conducted in ideal conditions and not all problems of course implementation would surface. For example, classrooms, overhead projectors, and video playback equipment would be readily available to the pilot course but such facilities and equipment may not be so easily accessible in all locations.

<u>Limitations</u>. Limitations of the pilot course included:

- 1. The support provided by CFSIS may not be readily available at other bases (CFSIS provided a classroom, equiment, videotapes, and some reference materials).
- 2. The feedback to instructional staff provided by the Training Development Officer (evaluator) and the trainee questionnaires administered after each lesson will not be available for other serials. The evaluator was asked to provide feedback to instructors after each lesson on their instructional strengths and weaknesses. Also the evaluator tabulated the results of each lesson critique immediately after each lesson and discussed the results with the instructor who conducted the lesson. Normally a course critique is administered at the end of the course which is used for, among other things, instructor feedback on the lessons presented.
- 3. There is the tendency for people, both instructors and trainees, to act differently because they are part of an evaluation (Hawthorne effect). Although the trainees did not know when they arrived that the course was a pilot course, they realized the practice of administering individual lesson critiques was not normal. By the end of

the first day, many of the trainees were asking the evaluator why every lesson was being evaluated.

- 4. The B Secur O staff was extremely busy performing base security duties which could not be abandoned while conducting the course. Consequently, the staff's time and thoughts were split between their regular duties and their instructional duties. It was not determined what effect this had on the course or if this condition would be typical of future serials conducted at Borden and elsewhere.
- 5. No attempt was made during this evaluation to verify the relationship between how much trainees said they learned or how well they enjoyed the course and how well they actually did on the course. Likewise, there was no attempt to determine the significance between trainees' opinions of the instruction and instructors and how well they performed on the course. Despite a diversity of opinions from positive to negative about the course, instruction, and the instructors, all trainees graduated. According to Dixon (1990), responses on participant reaction forms (lesson and course critiques) may not necessarily be a good indicator of whether trainees learned on the course. Inadvertantly, the course could be altered for the worse based on participant reaction to the course.

## Results

Course Documentation. The Instructor's Manual was deemed useful and accurate by instructional staff except directions to the Course Officer regarding a request to Base Operations and Training (B Ops & Trg) to load the serial and a request to B Ops & Trg for the provision of facilities and equipment (Appendix L: Section B, Parts 1 and 2).

Section II of the Instructor's Manual contains the CTP with its own Table of Contents, different page numbering, and separate chapters and annexes. The fact that a separate document with its own format is contained within the Instructor's Manual appeared to diminish its user friendliness.

Course Content. All the teaching points in the lesson specifications from the CTP were covered except those under "conduct unit physical security verification" (Lesson 2 of EO 402.01). The B Secur O felt that conducting a physical security verification is so simple and obvious that it does not require training.

ADP security, computer viruses and duty lock up were topics covered on the pilot course in addition to the material covered in the lesson specifications. Otherwise, course content was complete and factually correct in accordance with the lesson specifications developed in the ISD phase (the evaluator followed each lesson to ensure that all teaching points were covered).

Course Implementation (Lesson Timings). Before the course was conducted the B Secur O staff adjusted timings for each lesson depending on whether they felt more or less emphasis was required on the topic. As a result, Performance Check (PC) 401/402 Exercise Mosaic was sacrificed. The B Secur O felt that the additional time was better spent on topics such as ADP security, computer viruses and duty lock up. Only Lessons 1 and 4 of Enabling Objective (EO) 401.02 were deemed by B Secur O to be the right amount of time allotted by the course designers. Special attention was paid to the lessons with adjusted timings to verify that the amount of information presented was reasonable for trainee comprehension and that the content of each lesson adequately covered the

teaching points specified in each objective. Actual timings of lessons during the pilot course are found in Appendix L: Section B, Part 3.

Course Implementation (Sequence of Lessons). The actual sequence of lessons and exercises during the pilot was identical with the following exceptions:

- 1. A lecture on ADP security was presented between EO 401.01 and EO 403.01.
- Lessons on computer viruses and duty lock up were added to the end of the course.
  - 3. Study Assignment 401/402 was not used.
- 4. A written performance check for Performance Objectives 401 and 402 was administered on the morning of the fourth day (originally a Take Home Performance Check).

Instructional Strategy. Table 4 is a summary of favourable responses by trainees to the questions asked on the lesson critiques (Appendix M) for Lessons 1, 2, and 3 of Enabling Objective 401.01. Only the areas which fell below the acceptable tolerance level (i. e. below 75 % favourable) and indicating further investigation are listed below. The level of tolerance was selected by the authour based on what subject matter experts and expereinced instructors from CFSIS believed to be reasonable.

Trainees' responses for EO 401.01 (Lesson 1) indicating further investigation include:

Nine trainees (43 %) reported they already knew the topic (Table 4, Item No.

- Seven trainees (33 %) said they wanted more information on the topic (Table
   Item No. 3).
- 3. Seven trainees (33 %) felt the instruction was not interesting (Table 4, Item No. 5).
  - 4. Seven trainees (33 %) did not participate in the class (Table 4, Item No. 8).
  - 5. Six trainees (28.5 %) did not like the lesson (Table 4, Item No. 10).
- 6. Nine trainees (43 %) did not learn to do something they couldn't do before (Table 4, Item No. 11).
- 7. Ten trainees offered suggestions to the instructor for improving the lesson (Item No. 12) such as: (a) relating the lesson to the actual workplace, (b) personalizing explanations, (c) providing more examples/more relevant examples, (d) providing for more class involvement, and (e) providing handouts for important points (too much time spent jotting down notes).

Trainees' responses for EO 401.01 (Lesson 2) indicating further investigation include:

- Eight trainees (38 %) wanted more information on the topic (Table 4, Item No.
   3).
- 2. Seven trainees (33 %) thought the instruction was not interesting (Table 4, Item No. 5).
  - 3. Eight trainees (38 %) did not participate in the class (Table 4, Item No. 8).
- 4. Eight trainees (38 %) did not learn to do something new (Table 4, Item No. 11).

Table 4
Summary of Favourable Opinions
From the Lesson Critiques (EO 401.01)

N =	21	Lesson 1	Lesson 2	Lesson 3	
Item	No				
1.	Did you understand the lesson objective?	20	19	18	
2.	Did you already know how to do what was taught in the lesson?	12	16	18	
3.	Should more information on the topic be presented?	13	12	<u>14</u>	
4.	Did the instructor ask clear questions?	18	20	20	
5.	Was the instruction interesting?	<u>14</u>	14	14	
6.	Was the instruction clear?	20	20	19	
7.	Were too many examples provided in the lesson?	21	21	21	
8.	Did you answer questions or get involved in class discussion?	<u>14</u>	13	12	
9.	Did you enjoy the video?	21	Planned Video not shown	N/A	
10.	Did you like the lesson?	<u>15</u>	19	18	
11.	Did you learn to do things you couldn't do before?	8	13	13	
12.	Can you suggest anything to improve this lesson?	11	15	11	

Note to Table 4: Underlined figures indicate that the frequency of responses is below the acceptable level of tolerance (75%).

5. Six trainees (28.5%) offered suggestions to the instructor for improving the lesson (Item No. 12) including: (a) providing more class participation, (b) less reading from the lesson plan, (c) providing handouts, and (d) personalizing the lesson with pertinent examples.

Trainees' responses for EO 401.01 (Lesson 3) indicating further investigation include:

- 1. Seven trainees (33 %) wanted more information on the topic (Table 4, Item No. 3).
- 2. Seven trainees (33 %) said the instruction was not interesting (Table 4, Item No. 5).
- 3. Nine trainees (42.8 %) did not participate in the class (Table 4, Item No. 8).
- 4. Eight trainees (38 %) did not learn to do something new (Table 4, Item No. 11).
- 5. Ten trainees (47.6) offered suggestions to the instructor for improving the lesson (Item No. 12) such as: (a) less reading from the lesson plan, (b) personalizing the lesson, (c) providing handouts, (d) having students follow along in the book, (e) providing relevant examples, (f) relating the topic to the actual workplace, and (g) familiarizing herself (instructor) with the topic.

Table 5 is a summary of favourable responses by trainees to the questions asked on the lesson critiques (Appendix M) for Lessons 1, 2, 3, and 4 of Enabling Objective

401.02. Only the areas which fell below the acceptable tolerance level (i.e. 75 percent favourable) are listed below.

Unfavourable responses indicating possible changes to Lesson 1 of EO 401.02 include: (a) eighteen (85.7 %) said they already knew the subject matter (Table 5, Item No. 2), (b) eight (38 %) thought the instruction was not interesting (Item No. 5), (c) ten (47.6 %) did not participate in the class (Item No. 8), and (d) eleven (52.4 %) said they did not learn to do something new (Item No. 11).

For Lesson 2 of EO 401.02, seven trainees (33 %) responded they already knew the subject matter (Table 5, Item No. 2). However, seventeen or 81 % said they learned to do something new (Item No. 11) which appears contrary to the previous response.

For Lesson 3 of EO 401.02 twelve trainees (57 %) said they already knew the subject matter (Table 5, Item No. 2). However, only five or 23.8 % said they did not learn to do something new (Item No. 11) and fifteen trainees (71 %) responded they did not participate in the class (Item No. 8).

For Lesson 4 of EO 401.02, fifteen trainees (71 %) responded they already knew how to do the activity covered in the lesson (Table 5, Item No. 2). Contrary to this, sixteen or 76 % said they learned to do something new (Item No. 11).

Table 6 is a summary of favourable responses by trainees to the questions asked on the lesson critiques (Appendix M) for Lessons 1 and 3 (Lesson 2 - Conduct unit physical verification was not taught during the field trial). Frequency of response to all items for Lessons 1 and 2 exceeded the benchmark of 75 % favourable. Therefore, the lessons for Enabling Objective 402.01 were not considered for revision.

Table 5
Summary of Favourable Opinions
From the Lesson Critiques (EO 401.02)

	From the Lesson Chuques (EO 401.02)								
N	= 21 L	esson	Lesson	Lesson	Lesson				
		1	2	3	4				
Ite	m No.								
_			·		-				
1.	Did you understand								
	the lesson objective?	21	19	18	21				
	-								
2.	Did you already know								
	how to do what was taugh	t							
	in the lesson?	3	<u>14</u>	<u>.9</u>	<u>_6</u>				
3.	Should more information								
	on the topic be presented?	17	19	16	17				
4.	Did the instructor ask	••	<b>A</b> 1	15					
	clear questions?	20	21	17	21				
_	We walk to the same and the								
Э.	Was the instruction	12	16	20	10				
	interesting?	13	16	20	19				
6	Was the instruction								
U.	clear?	20	21	21	21				
	cicai:	20	21	21	21				
7	Were too many examples								
٠.	provided in the lesson?	19	21	19	20				
	provided in the lesson.	17	21	17	20				
8.	Did you answer questions								
	or get involved in class								
	discussion?	11	18	6	17				
				<del>-</del>					
9.	Did you enjoy the video?	21	Video	N/A	19				
			not shown						
10.	Did you like the lesson?	<u> 18</u>	19	20	20				
11.	Did you learn to do things								
	you couldn't do before?	10	17	16	16				
				•					
12.	Can you suggest anything								
	to improve this lesson?	18	19	17	18				

Note to Table 5: Underlined figures indicate that the frequency of responses is below the acceptable level of tolerance (75%).

Table 7 is a summary of favourable responses by trainees to the questions asked on the lesson critiques (Appendix M) for the lesson covering Enabling Objective 403.01 and the lesson covering Enabling Objective 404.01. In the original course design these enabling objectives were intended to have multiple lessons. However, the Base Security Officer's staff combined the lessons so that one lesson was presented for each enabling objective. Only the areas which fell below the acceptable tolerance level of 75 % favourable are listed below.

For the lesson covering EO 403.01, seven trainees or 33 percent responded they already knew the subject matter (Table 7, Item No. 2). However, contrary to this response, nineteen or 90.5 % said they learned to do something new (Table 7, Item No. 11).

For the lesson covering EO 404.01, responses indicating further investigation include:

- 1. Six trainees (29 %) said the instructor did not ask questions during the lesson (Table 7, Item No. 8).
- 2. Seventeen trainees (81 %) said they did not participate in the class (Item No. 8).
- 3. Thirteen trainees (62 %) said they did not learn to something new (Item No. 11).
- 4. Seven trainees (33 %) offered suggestions for improving the lesson (Item No. 12) including: (a) less reading by the instructor from the book, (b) slower pace of instruction, (c) use of the overhead projector so students can follow along with the

Table 6
Summary of Favourable Opinions
From the Lesson Critiques (EO 402.01)

	= 21	Lesson 1	Lesson 2	Lesson 3
ite	m No.			· -·
1.	Did you understand the lesson objective?	21		19
2.	Did you already know how to do what was taught in the lesson?	16		15
3.	Should more information on the topic be presented?	19		18
4.	Did the instructor ask clear questions?	21		20
5.	Was the instruction interesting?	19		19
6.	Was the instruction clear?	21		20
7.	Were too many examples provided in the lesson?	21		17
8.	Did you answer questions or get involved in class discussion?	18		18
9.	Did you enjoy the video?	Video not shown		N/A
10.	Did you like the lesson?	20		19
11.	Did you learn to do things you couldn't do before?	17		16
12.	Can you suggest anything to improve this lesson?	17		15

Note to Table 6: Lesson 2 (Conduct unit physical security verification) was not taught during the field trial.

Table 7
Summary of Favourable Opinions
From the Lesson Critiques (EOs 403.01 and 404.01)

	= 21 n No.	Lesson 403.01	Lesson 404.01
1.	Did you understand the lesson objective?	18	18
2.	Did you already know how to do wh was taught in the lesson?	12	20
3.	Should more information on the topic be presented?	16	17
4.	Did the instructor ask clear questions?	20	15
5.	Was the instruction interesting?	18	16
6.	Was the instruction clear?	20	19
7.	Were too many examples provided in the lesson?	19	18
8.	Did you answer questions or get involved in class discussion?	17	2
9.	Did you enjoy the video?	Video not shown	N/A
10.	Did you like the lesson?	19	15
11.	Did you learn to do things you couldn't do before?	19	8
12.	Can you suggest anything to improve this lesson?	17	14

Note to Table 7: Only one lesson was presented during the field trial for each enabling objective. However, all planned teaching points were covered in accordance with the lesson specifications.

instructor, and (d) provision of a guide on how to write security orders.

Course Critiques. The response data provided on course critiques are presented in Appendix M. Trainees found the course well paced, sequenced and presented. They responded that practice exercises were well prepared and meaningful. Trainees said that comments and criticism by instructional staff were constructive and helpful. All topics were rated by the majority of trainees as well covered. However, there was a mixed reaction to the ADP lessons with comments from "was hoping for much more" to "too far into computers". ADP Security was reported as the topic most difficult to understand. Trainees offered the following suggestions for improving the course:

- 1. Instructors should strive to read less from lesson plans and the text.
- 2. Handouts should be provided for topics including physical security survey, unit security education plan, and ADP Security.
- 3. Less emphasis should be placed on the threats to security at the national level and more emphasis should be placed on the threats to security at the unit level.
  - 4. More course time should be allocated to work on unit security orders.

Teaching Method. The teaching method for each lesson met all the suitability criteria except INSTRUCTOR (Appendix L: Section A, Part 1). The evaluator observed that an instructor reading from a lesson plan or a text was a common occu.ence and that class discussions were not used. Only confirmation questions were asked; no developmental type questions were posed. In most cases, except for responding to confirmation questions, trainees did not participate in the lessons (Tables 4, 5, and 7).

Training Aids (Videotapes). The evaluator rated all videotapes as excellent

(professional) and relevant to the opics on the course in accordance with the evaluation checklists in Appendix L: Section A, Part 2. Although some of the videos were planned by the course design team as an introduction to a topic, they were presented at the end of the lesson. As well, "lead ins" to the videos were not conducted by the instructor. Trainees had no responses to make to the videos. "Follow ups" including emphasis and review of the key points were not conducted.

Training Aids (Still Visuals). All overhead projector (OHP) slides for the lessons covering EO 401.01 adhered to the criteria for good slides (Appendix L: Section A, Part 2) except that colour was not utilized. The evaluator observed that some of the stides for Lesson 1 appeared confusing or disorderly because of the way the information was presented on the slides.

Many of the slides used in the lessons covering EOs 401.02, 402.01, 403.01 and 404.01 lacked colour, the lettering was too small to be visible from the back of the room and important points were not emphasized by underlining, capitals, etc.

All written materials (i.e. handouts, forms) were professional in accordance with the criteria on the checklist in Appendix L: Section A, Part 2.

Miscellaneous Observations. Miscellaneous observations were recorded by the evaluator on the checklists in Appendix L: Section A, Part 5. Although there were three instructors, there was little variety in methods and training aids. There was no apparent attempt by instructors to establish the link or relationship between course content and the job. The evaluator observed that the trainees had little opportunity to express themselves and strategies were not employed to produce group interaction. Except for Unit Standing

Orders and PSCQs, trainees did not apply the course content or perform the tasks under job-like conditions. Where opportunities existed for application, feedback was immediate, complete and specific.

Testing. Tests (performance and enabling checks) were evaluated in terms of the Criteria for Evaluating Tests (Appendix L: Section A, Part 4). Not all performance checks provided in the package by the design team were used. Test instructions for the tests administered were oral not written. Tests, both performance and paper based, were rated by the evaluator as good based on the list of criteria in Appendix L. However, trainees were not provided practice time before doing the tests. Also, it was not observed whether the evaluation scheme was explained to the trainees, if guidelines for evaluating the tests were specified, and whether trainees were informed how their performance would be evaluated.

The ISD team based achievement tests on the performance objectives. For example, the performance check for Performance Objectives 401 and 402 required that trainees in pairs conduct a security check of an unoccupied office and identify and record the information and physical security violations (the performance checks are not presented here for security reasons but are available upon request). Unfortunately, a written test was administered in place of this particular performance check. The performance checks for Performance Objectives 403 and 404 were administered as planned in the course design. Trainees passed all exercises, enabling checks, and performance checks.

### Discussion

The field trial revealed several problems with the course design, the Instructor's Manual, and implementation of the course which required revision before the course could be recommended for full scale distribution and implementation.

It appeared that the course package worked for the instructors. Despite a busy work schedule, the B Secur O staff managed to successfully conduct the course. The package was flexible enough for the B Secur O staff to adjust timings of lessons which they felt required more or less emphasis; each base is likely to have a slightly different requirement. Also, the package was flexible enough for the B Secur O staff to add topics (eg. computer viruses and duty lock up) which suit the needs of the base.

Also, it appeared that the course package worked for the trainees: a large majority of the trainees learned to do unit security duties they could not do before they attended the course. The opinions of participants reported on the individual lesson critiques seemed to conflict with the overall assessment provided by participants on the course critique. The evaluator felt that the difference of opinion on the two types of participant reaction forms could be explained by the fact that the participants tended to be more critical during the conduct of the course when they were receiving only pieces of the big picture, that is they did not have the complete course to reflect upon. In retrospect, after the course was completed and they could see the big picture, the majority of the trainees judged the overall course to be useful and well presented.

Minor changes are required to make the Instructor's Manual more user friendly.

It was recommended that the Instructor's Manual be revised to include direction to the

Course Officer regarding a request to assign candidates to the course and a request for the provision of facilities and equipment. Also, the manual should be modified to achieve continuity by incorporating the Course Training Plan into the format of the Instructor's Manual. The new manual would have one table of contents, a single, consistent page numbering system, and one set of chapters and annexes.

Instructional staff require some training to hone their instructional skills. It was recommended that, if possible, the Base Security Officer's staff tasked to instruct the course be scheduled to attend the two week Instructional Techniques Course offered by Canadian Forces Training Development Centre. This course is often conducted locally at bases across the country by accredited instructors using course materials and procedures developed at the centre. There should be at least one qualified instructor who supervises and provides assistance to the other instructors.

Some of the visual aids require revision and all aids should be produced professionally. It was suggested that all the overhead slides be submitted to the Base Graphics Section for production. Each base has a graphics section trained to produce professional visual aids for presentation; Base Graphics personnel can provide advice on design, colour, and the amount of information to put on a slide.

Lesson plans should be revised to include learning activities that involve trainee participation such as discussions, practice exercises, and opportunities for hands on experience. Instructors were advised to revise their personal lesson plans based on the feedback from the individual lesson critiques. Videotapes should be used as intended by the ISD team, not as a substitute for instruction, but to support the lessons and to provide

common grounds for class participation. A handout should be developed for the topic of physical security surveys and the handout explaining the unit security education plan should be distributed and utilized as planned by the ISD team.

It is believed that the course length is adequate to cover course content if the schedule developed by the design team is followed. The home assignments and exercises designed and scheduled by the design team would have to be utilized as planned and no "pub crawl" exercises would be scheduled for classroom time. However, it was recommended that the course schedule be revised to reflect the lesson timings used by the instructors during the field trial and to provide more time for trainees to work on unit security orders.

Finally, time spent on ADP security should be kept to an absolute minimum since another specialty course covers the topic in detail. Less time spent on ADP security would permit Performance Check 401/402 Exercise Mosaic to be implemented as originally planned by the course design team.

### Chapter 6

### Conclusion

The Research and Development Model, based on its use during the development of the USS Course, was deemed practical by the author. The USS Course was ideal for a trial of the model because it is a highly structured course being run frequently.

Needs Assessment. The needs assessment process appeared to adequately identify the requirements of the job. This information provided useful input for the instructional systems design phase of the project. In the case of the USS Course, one complete task was eliminated and at least one topic taught on the old course was deemed unnecessary; since no other tasks or task elements (topics) were identified during the needs assessment, training could be reduced from nine to five training days. The remaining tasks and topics taught on the old course were required on the new course.

As well, the needs assessment revealed through the open-ended questions that the training lacked trainee participation; most of the learning activities were instructor oriented as opposed to being trainee oriented. This lead to the conclusion that learning activities used on the old course should be reviewed and revised as necessary to be more performance oriented.

Graduates of the USS Course reported that the course was necessary and that the amount of training was adequate for them to perform their duties.

Although the needs assessment as designed and conducted provided much useful information, the process was time consuming and costly. Time constraints and travel

restrictions made it impractical to distribute questionnaires by mail or to conduct interviews. Since there was no budget to hire personnel experienced in telephone survey techniques, inexperienced staff practiced using the questionnaire with local graduates by telephone before the start date for data collection. During the data collection phase, one of the data collectors recorded more than one answer for a question that required a single response; therefore some data were not usable.

Instructional Systems Design. The instructional design process was followed systematically and it appeared to work well. However, the format of the resulting training document required by the CF Training System was not considered by the instructors to provide useful guidance. Therefore an Instructor's Manual was produced with the objective that even an inexperienced instructor would be provided assistance to prepare for and conduct a course. The manual included much more information than was required in the Course Training Plan. Checklists, worksheets and samples were provided for various administrative and instructional duties beyond the classroom.

The instructional design process covered the standard ISD steps with a course document as output. To the best of the ability of the ISD team and in the time allotted, the target population was defined and considered during course development, course objectives consistent with the job requirement were produced, and the course content logically followed from the needs of the target population and the course objectives. Due to lack of training experience the instructors tended to read from their lesson plans, avoided class discussions, and inadvertantly discouraged trainee participation when the opportunities presented themselves.

Formative Evaluation - Field Trial. The trial's objective, to make recommendations based on the evaluation of the course being implemented in the environment for which it was intended, was achieved. Several problems surfaced as a result of the trial necessitating recommendations for change regarding implementation of future courses. Administrative details, lesson plans, training aids, lesson timings, tests, and instructors' qualifications were addressed in the recommendations.

The evaluation was confounded by deviations in implementation by the instructional staff. In this regard the evaluation plan for the field trial appeared to be weak. For example, the evaluator had to abandon any attempt to evaluate the course effectiveness based on the participants' achievement on performance measures. The consequence of error and the result of less than the minimum standard of performance on the tasks taught on the course were not deemed critical enough by instructional staff and the Military Police to justify strict adherence to standards in performance measurement. As well, it was felt that the generic nature of the course (the course was offered to all occupations) and time constraints made it difficult to enforce strict performance standards.

Also, the evaluation plan did not appear to be flexible enough to accommodate changes made to the course by the instructional staff. For example, during the field trial, the instructors introduced new topics, omitted some topics, and presented some topics in a sequence different than the schedule suggested by the ISD team. The instructional staff felt that the course covered some unnecessary topics and omitted some required issues. The course schedule was altered to accommodate the schedule and the availability of the instructors. These changes had an impact on the planned learning activities and on the

scheduled performance measurement in that there was not time to conduct all the planned events. This made data collection difficult at times.

Since the completion of this project, the course has been conducted twice in accordance with the recomendations presented above. The Standards (quality assurance) staff at Canadian Forces School of Intelligence and Security oversaw the implementation of the recommendations and the subsequent conduct of the course and reported that the course was efficient and effective in meeting all the objectives.

Finally, given the distance training factor and the inconsistencies in instructors' abilities, it should be noted that the author believes that computer based training would be an ideal candidate medium for the USS Course. Unfortunately, project restrictions like low budget and time constraints eliminated computer based training as an option for delivery of the course.

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### Appendix A

**Needs Assessment** 

**Task Statement Booklet** 

### GRADUATE

### TASK STATEMENT BOOKLET

UNIT SECURITY SUPERVISOR COURSE

QUESTIONNAIRE DE VALIDATION

CAHIER DES ENONCES DE TACHES

DU DIPLOME

COURS DE SUPERVISEUR DE LA SÉCURITÉ

TASK NUMBER 1	APPLY SECURITY OF INFORMATION COUNTERMEASURES (in respect to:)
1.01	Classification
1.02	Preparation/Handling/Transmission
1.03	Storage of Matter
1.04	Shipment
1.05	Destruction
1.06	Security Organization
1.07	Acts, Orders, Regulations
1.08	Threat, Principles of the Threat, Countermeasures of the Threat
1.09	Custody
1.10	Protection
1.11	Reporting Security Violations
1.12	NATO/Atomal Information

TASK NUMBER 2	APPLY PHYSICAL SECURITY COUNTERMEASURES (in respect to:)
2.01	Security of small arms/small arms ammunition
2.02	Categories of establishments
2.03	Restricted areas and fencing
2.04	Lighting and intrusion alarms
2.05	ID Cards and passes
2.06	Security of funds and narcotics
2.07	Security of tempest equipment and hardware
2.08	Sensitive discussion areas
2.09	Physical security surveys

TASK NUMBER 3	MAINTAIN A UNIT SECURITY CLEARANCE PROGRAMME (in respect to:)
3.01	Security clearance program
3.02	Change of circumstances report
3.03	Unit responsibilities
3.04	Social contact and leave control

TASK NUMBER 4	CONDUCT UNIT SECURITY TRAINING AND ADMINISTRATION (in respect to:)
4.01	Unit Security Orders
4.02	Unit Security Education/Awareness
4.03	Crimes and drugs in the CF

TASK NUMBER 5	APPLY ADP/AGE SECURITY COUNTERMEASURES
5.01	Duties of the Unit Security Officer vice Unit ADP Secur O
5.02	ADP threats/safeguards
5.03	ADP - 300 series
5.04	AOE guideline
5.05	Marking, handling, storage and destruction of ADP/AOE media

### INTERVIEWER:

NOW TURN TO THE BACK OF THE RESPONSE BOOKLET

PART III - OPEN-ENDED RESPONSES

Appendix B

**Needs Assessment Survey** 

Questionnaire

ANNEX F to 4640-2008-10 (COMDT/CFSIS) dated 2/f August 1990

TASK 1
TACK APPLY SECURITY OF INFORMATION COUNTERMEASURES

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ANNEX F to 4640-2008-10 (COMDT/CFSIS) dated August 1990

APPLY PHYSICAL SECURITY COUNTEMEASURES

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TASK 3 TÅCHE

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DO CONSET.

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ANNEX F to 4640-2008-10 (COMDT/CFSIS) dated August 1990

TASK 4
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TES (APPLIED FREEZHING GWESTIGNS FOR EACH TASK LEFERT)

64 GWE (MENDEZ ANS QUESTIGNS EL-APHÉS POUR CAPIET NE LA TÂCKE)

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F-4

TASK 5
TÁCIE APPLY ADP/AGE SECURITY COURTERMEASURES

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34 WS (ARIMED FREDRING QUESTIONS FOR EACH TASK ELLUTHY)

ON (MENDEZ ANK QUESTIONS CL-ANDS POUR CHARGE ASPECT DE LA TÂCHE)

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### Appendix C

Performance Objectives

for the

**Unit Security Supervisor Course** 

### Performance Objectives for the Unit Security Supervisor Course

### PO 401

- 1. Pertormance. Mainatain security of information countermeasures.
- 2. Conditions. Given:
  - a. references; and
  - b. assistance.
- 3. <u>Standard</u>. IAW A-SJ-100-001/AS-000 and Government Security Policy ensures the security of information to include:
  - a. classification;
  - b. preparation;
  - c. handling;
  - d. transmission;
  - e. storage:
  - f. shipment; and
  - g. destruction of classified information.

### PO 402

- 1. <u>Performance</u>. Maintain physical security countermeasures.
- 2. Conditions. Given:
  - a. references; and
  - b. supervision.
- 3. <u>Standard</u>. IAW A-SJ-100-001/AS-000 and Government Security Policy ensures the physical security of Unit Establishments to include:
  - a. category of the establishment;
  - b. restricted areas;
  - c. fencing;
  - d. lighting;
  - e. intrusion alarms;
  - f. ID cards and passes;
  - g. funds and drugs;
  - h. security equipment and hardware;

- j. sensitive discussion areas:
- k. physical security surveys: and
- m. small arms and small arms ammunition.

### PO 403

- 1. Performance. Maintain a Unit Security Clearance Programme.
- 2. Conditions. Given:
  - a. references;
  - b. relevant forms; and
  - c. assistance.
- 3. <u>Standard</u>. IAW A-SJ-100-001/AS-000 and Government Security Policy completes and vets security clearance related forms.

### PO 404

- 1. Performance. Conduct unit security training and administration.
- 2. Conditions. Given:
  - a. references:
  - b. assistance; and
  - c. Mosaic Programme.
- 3. <u>Standard</u>. IAW A-SJ-100-001/AS-000, Government Security Policy and CFSIS format:
  - a. develop unit security education programme:
  - b. produce unit security orders; and
  - c. which are appropriate to the specific unit organization.

### PO 405

- 1. Performance. Maintain ADP/AOE security countermeasures.
- 2. Conditions. Given:
  - a. references;
  - b. assistance; and
  - c. ADP/AOE system.
- 3. <u>Standard</u>. IAW A-DP-300 Series, CFSIS AOE guidelines handout, DNDP 17-2, A-SJ-100-001/AS-000 and Government Security Policy ensures the security of unit ADP/AOE resources.

### Appendix D

**Needs Assessment** 

**Open-ended Questions** 

Response Analysis

### Needs Assessment - Open-ended Questions and Response Analysis

1. List additional tasks, if any, you feel require training on this course. Explain.

70/80 (87.5 %) reported "NO".

10 reported "YES".

There was no consensus on these topics.

### Spend more time on:

- (1) classification and shipment
- (2) lighting and intrusion alarms
- (3) security of tempest equipment
- (4) sensitive discussion areas
- (5) Unit Security Education and BDF Security
- (6) ADP/AOE, personnel security, and PROTECTED information
- (7) physical security countermeasures
- (8) physical security surveys
- (9) preparation of Unit Security Orders
- 2. List other courses that you have taken which essentially <u>covered the same content</u> as this course.

57/80 (71 %) responded "NONE".

### 23 responded:

Basic Administration
CFBA Security Briefing
Basic Personnel Security
Communications
OPDP - General Service Knowledge
BOTC

Small Arm Ranges Base Defence Force Unit ADP Security
JLC/SLC
Radio Operator
CE Technician

COMSEC Custodian Teletype Operator Electronics Security 3. Have you performed the tasks taught on this course often enough at your unit to maintain the proficiency required for the job? If not, explain.

28/80 (35 %) responded "YES".

2 (2.5 %) responded "NO".

50 (62.5 %) did not respond to this question.

4. Do you feel the training could be improved? If yes, explain.

41/80 (51 %) reported "NO".

One (1) said "PROBABLY".

38 (47.5 %) had suggestions as follows:

- (1) more self-reading and less reading by the instructor,
- (2) less emphasis on "physical security",
- (3) ADP requires improvement/additional training.
- (4) course should be shortened too much information,
- (5) use current references (the new A-SJ-100-001/AS-000),
- (6) more student participation (i.e. actively involved in areas such as lighting, fencing, and physical security as opposed to just reading about them).
- (7) more information on classified materials,
- (8) too much emphasis is placed on security orders/not enough emphasis on standard security clearance forms,
- (9) more practical training for physical surveys,
- (10) more examples,
- (11) more physical objects in presentations,

- (12) more time spent on preparing Unit Security Orders.
- (13) more discussions,
- (14) course instructional strategy needs improvement,
- (15) reflect the course to the needs of units in Europe,
- (16) requires hands-on practice and how to obtain references,
- (17) teach how to classify matter, and
- (18) more on computer systems investigations.

## Appendix E

**Target Population Description** 

For the Unit Security Supervisor Course

# Target Population Description for the Unit Security Supervisor Course

Course candidates will be employed or selected for employment as a Unit Security Supervisor.

Age. Normally in early twenties or older.

Occupation. All occupations.

Rank. Sergeant or Petty Officer Class 2 and above

### Training.

Non-commissioned Members - minimum of Occupation Training and Junior Leadership Course.

Officers - minimum of Basic Officer Training Course and Occupation Training.

Security Clearance. Security cleared to Level 1.

### Abilitites.

- can work independently without supervision,
- can make decisions based on references,
- possess moderately good written and oral communication skills, and
- can read moderately well but not necessarily in the habit of reading very much.

Interests. Varied.

Motivation. May resent having been tasked to perform USS duties. Some candidates will be highly motivated to learn.

### Appendix F

**Enabling Objectives** 

for the Unit Security Supervisor Course

### Enabling Objectives for the Unit Security Supervisor Course

### EO 401.01

- 1. Performance. Identify countermeasures aimed at defeating the threat to good security.
- 2. Conditions. Given:
  - a. Security Orders for DND and the CF (reference)
- 3. Standard. In accordance with reference, Chapter 1:
  - a. identify threats to security;
  - b. identify the principles of good security; and
  - c. identify countermeasures aimed at defeating the threat to good security.

### EO 401.02

- 1. <u>Performance</u>. Apply security of information countermeasures.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000
- 3. Standard. While carrying out secondary duties of Unit Security Supervisor:
  - a. ensure information is identified as classified and/or designated IAW reference, Chapter 6;
  - b. ensure unit personnel follow applicable security regulations pertinent to handling of classified matter IAW reference, Chapters 34, 36, 45, and 52;
  - c. ensure unit personnel have the minimum requirement in terms of equipment and facilities to store classified and waste IAW reference, Chapters 33 and 35; and
  - d. detect and report violations of security orders IAW reference, Chapter 10.

### EO 402.01

- 1. <u>Performance</u>. Assist in the conduct of a unit physical security survey.
- 2. <u>Conditions</u>. Given:
  - a. A-SJ-100-001/AS-000
- 3. <u>Standard</u>. IAW reference, Chapters 30, 31, 32, 33, 36, 37, and 62; Canadian Forces Administrative Orders 19-21, 26-3, and 202-2; and Canadian Forces Management Orders 6.02:
  - a. implement policies affecting unit physical security;
  - b. conduct unit physical security verification; and
  - c. assist in the conduct of physical security survey.

### EO 403.01

- 1. Performance. Maintain a unit security clearance program.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000; and
  - b. A-JS-000-053/JP-000.
- 3. Standard. IAW references:
  - a. monitor status of security clearances for unit personnel;
  - b. conduct individual, security clearance briefings with unit personnel;
  - c. vet PSCQs and other related forms and maintain contact with local Military Police for information on the security clearance program; and
  - d. coordinate briefings/debriefings by the Base Security Officer to unit personnel going on leave to or returning from scheduled countries.

### EO 404.01

- 1. <u>Performance</u>. Ensure unit personnel are conversant with and practice unit security policy.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000;
  - b. Unit Security Standing Orders; and
  - c. the Security Education Outline handout.
- 3. Standard. While carrying out the duties of Unit Security Supervisor:
  - a. revise (as necessary) Unit Security Standing Orders;
  - b. write a one year Unit Security Education Program plan for a program to promote awareness of security IAW the Security Education Outline handout; and
  - c. conduct the administration required to run an education and awareness program.

Appendix G

Course Sequence

(Planned and Actual)

Appendix G: Course Sequence (Planned and Actual)

The field trial deviated from the planned sequence of lessons as illustrated in the Table (below):

Planned Sequence of Lessons:			Sequence of lesson followed during the field trial:		
Enabling Objective	Lesson No.	Enabling Objective	Lesson No.		
404.01	1	404.01	1		
401.01	1	401.01	1		
* 401.01	2	404.01	2		
401.01	3	401.01	3		
*		Three periods of day (pm) used Introduction to	to present		
403.01	4	403.01	4		
401.02	1	401.02	1		
* 401.02	2	401.02	part of 2		
* 401.02	3	401.02	part of 3		
* 402.01	2	402.01	1		
* 404.01	2	401.02 g	part of 2		
* 404.01	3	404.01	2		
401.02	4	401.02	4		
* 402.01	1	402.01	2		
402.01	3	402.01	3		
403.01	1	403.01	1		
403.01	2	403.01	2		
403.01	3	403.01	3		

Note: Asterisk denotes difference in planned and actual.

## Appendix H

**Enabling Objectives** 

with Selected Teaching Methods

### NOTES to Appendix H: List of Teaching Methods by Enabling Objective

- 1. OBJECTIVE examine the objective to determine whether the instruction is to:
  - a. introduce a subject,
  - b. teach manual or manipulative skills,
  - c. develop concepts,
  - d. teach operation or functioning of skills,
  - e. develop teamwork,
  - f. stimulate interest,
  - g. provide remediation,
  - h. accelerate, enrich, or build academic skills, and/or
  - i. improve reasoning and problem solving skills.
- 2. CONTENT consider nature and scope including type (i.e. knowledge or skill), and difficulty.
- 3. TARGET POPULATION consider class size, educational level, previous training, maturity, and aptitude.
- 4. INSTRUCTOR consider the availability and qualifications.
- 5. FACILITIES, ETC. consider availability, instructor competence, and the balance between effectiveness (transfer of learning) and efficiency (cost).
- 6. TIME consider availability (i.e. total available time allotted for course conduct including administrative periods and performance checks as in the Course Training Standard).
- 7. COST consider degree of effectiveness sacrificed for efficiency (consider in conjunction with FACILITIES and TIME).

### Enabling Objectives With Selected Teaching Methods

### EO 401.01

- 1. Performance. Identify countermeasures aimed at defeating the threat to good security.
- 2. Conditions. Given:
  - a. Security Orders for DND and the CF (reference)
- 3. Standard. In accordance with reference, Chapter 1:
  - a. identify threats to security;
  - b. identify the principles of good security; and
  - c. identify countermeasures aimed at defeating the threat to good security.
- 4. Teaching Methods.
  - a. Lecture to introduce basic material;
  - b. <u>Discussion</u> to secure maximum trainee participation and interest and to promote understanding of the principles; and
  - c. <u>Study Assignment</u> to enrich the material presented by lecture and to ensure trainees read and understand the reference material.

### EO 401.02

- 1. Performance. Apply security of information countermeasures.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000
- 3. Standard. While carrying out secondary duties of Unit Security Supervisor:
  - a. ensure information is identified as classified and/or designated IAW reference. Chapter 6;
  - b. ensure unit personnel follow applicable security regulations pertinent to handling of classified matter IAW reference, Chapters 34, 36, 45, and 52;
  - c. ensure unit personnel have the minimum requirement in terms of equipment and facilities to store classified and waste IAW reference, Chapters 33 and 35; and
  - d. detect and report violations of security orders IAW reference, Chapter 10.

### 4. Teaching Methods.

- a. Lecture to cover a large quantity of new material as quickly as possible; and
- b <u>Study Assignment</u> to enrich the material presented by lecture and to ensure trainees read and understand the reference material.

### EO 402.01

- 1. Performance. Assist in the conduct of a unit physical security survey.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000
- 3. <u>Standard</u>. IAW reference, Chapters 30, 31, 32, 33, 36, 37, and 62; Canadian Forces Administrative Orders 19-21, 26-3, and 202-2; and Canadian Forces Management Orders 6.02:
  - a. implement policies affecting unit physical security;
  - b. conduct unit physical security verification; and
  - c. assist in the conduct of physical security survey.
- 4. Teaching Methods.
  - a. Lecture to cover a large quantity of new material as quickly as possible:
  - b. <u>Discussion</u> to secure maximum trainee participation and interest and to promote understanding of policy; and
  - c. <u>Study Assignment</u> to enrich material presented by lecture and to ensure trainees read the reference material.

#### EO 403.01

- 1. Performance. Maintain a unit security clearance program.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000; and
  - b. A-JS-000-053/JP-000.

### 3. Standard. IAW references:

- a. monitor status of security clearances for unit personnel;
- b. conduct individual, security clearance briefings with unit personnel;
- c. vet PSCQs and other related forms and maintain contact with local Military Police for information on the security clearance program; and
- d. coordinate briefings/debriefings by the Base Security Officer to unit personnel going on leave to or returning from scheduled countries.

### 4. Teaching Methods.

- a. Lecture to present introductory material; and
- b. <u>Demonstration/Practice</u> to provide practice in completing relevant forms.

### EO 404.01

- 1. <u>Performance</u>. Ensure unit personnel are conversant with and practice unit security policy.
- 2. Conditions. Given:
  - a. A-SJ-100-001/AS-000;
  - b. Unit Security Standing Orders; and
  - c. the Security Education Outline handout.
- 3. Standard. While carrying out the duties of Unit Security Supervisor:
  - a. revise (as necessary) Unit Security Standing Orders:
  - b. write a one year Unit Security Education Program plan for a program to promote awareness of security IAW the Security Education Outline handout; and
  - c. conduct the administration required to run an education and awareness program.

### 4. Teaching Methods.

- a. <u>Lecture</u> to present introductory material in the shortest period of time and to provide an introduction to the Study Assignment; and
- b. <u>Study Assignment</u> to enrich material presented by lecture, to ensure the trainees read the reference materials, and to provide opportunity to practice the task.

## Appendix I

**Selected Training and Learning Aids** 

for the Unit Security Supervisor Pilot Course

### List of Selected Training and Learning Aids

### Videotapes (in support of lectures):

- a. Open Secret,
- b. The Spies Among Us, and
- c. The Mosaic Series: No's 1, 2, 3, 6, 7, 8, and 10.

### Publications (one per trainee):

- a. A-JS-000-053/JP-000 MOSAIC Security Awareness Bulletin (most current issue),
- b. A-SJ-090-002/AF-001 MOSAIC Security Measures for DND Personnel.
- c. A-SJ-090-003AF-001 MOSAIC Security Policy.
- d. A-SJ-100-001/AS-000 CF Security Orders (trainees bring the copy from their unit),
- e. Reference Booklet for the Protection of Sensitive Information, and
- f. Student's Manual <u>Related References</u> (the instructor is responsible for ensuring that the manual contains the most current versions of CFAOs, QR&Os and other related references).

<u>Lesson Plans</u> (to be developed by instructors from the lesson specifications in the CTP section of the Instructor's Manual).

Overhead Projector Slides (to be developed in conjunction with the lesson plans; the Base Graphics Section can produce them).

### List of Home Study Assignments:

- a. Home Assignment 401/402, and
- b. Home Assignment 404.

### Exercises:

- a. PSCQ Exercise (403), and
- b. EC 401.01/401.02/402.01.

# Appendix J

Sample Lesson Specification

from the Unit Security Supervisor Course

### Sample Lesson Specification from the Course Training Plan for the Unit Security Supervisor Course

#### EO Number 401.02

- 1. <u>Performance</u>. Apply security of information countermeasures.
- 2. Condition. Given:
  - a. A-SJ-100-001/AS-000 (reference)
- 3. Standard. While conducting the duties of Unit Security Supervisor:
  - a. ensure information is identified as classified and/or designated IAW reference, Chapter 6;
  - b. ensure unit personnel follow applicable security regulations pertinent to handling classified matter IAW reference, Chapters 34, 36, 45, and 52;
  - c. ensure unit personnel have the minimum requirements in terms of equipment and facilities to store classified matter and waste IAW reference, Chapters 33 and 35; and
  - d. detect and report violations of security orders IAW reference, Chapter 10.
- 4. Teaching Points:

### 5. References:

### SHOW VIDEOTAPE: MOSAIC 2

- a. Ensure information is identified as classified and/or designated.
  - (1) classification of matter including:

(a)	purpose, scope of grading	6-1
(b)	classification Levels	6-4
(c)	authority and responsibility	6-5
(4)	security classification anidance	6 A 1

(d) security classification guidance 6A-1 to 6-6

(e) declassification and downgrading 6-8

(f) marking 6-6 to 6-9

(2) designation of matter including:

(a) new security policy (MOSAIC 2) 6-10 to 6-13 (b) information designated protected 6-11/6-12

4. Teachir	g Points:	5. References:
(c)	marking of protected matter	6-13
	re-marking and downgrading	6-14
	access	6-14
	external use	6-16
	dual sensitivity	6-16
	safeguards	6-17
b. Ensure	unit personnel follow applicable secu	rity
	ons (preparation, handling, shipping,	
(1)	responsibilities of originators	52-1/52-2
	reproduction	52-2
(3)	responsibilities during handling	45-1
(4)	classified central registries	45-1
(5)	responsibilities of personnel in	
	charge of classified sections	45-2
(6)	requisitioning files	45-2
	opening classified matter	45-2
(8)	preparation and transmission (courie	ers
	and messengers)	45-12
( <del>9</del> )	shipping including:	
	(a) responsibility	34-1
	(b) packaging	34-1 and
		45-3 to 45-5
	(c) notification, receipt, document,	
	and customs	34-3
	(d) discrepancy, loss, damage, or	
	compromise	34-4
(10	) destruction to include: (1 period)	
	(a) responsibility	35-1
	(b) security of classified waste	35-1
	(c) destruction authority	35-1
	(d) witnessing	35-2
	(e) certificates of destruction	35-2
	(f) methods	35-4
	(g) document shredders	35-4
	(h) incinerators	35-3
	(j) emergency destruction	35-5

SHOW VIDEOTAPE: MOSAIC 3

### 4. <u>Teaching Points</u>:

### 5. References:

c. Ensure unit personnel have minimum requirement in terms of equipment and facilities for storage, custody, and protection.

(1) responsibilities including:	33-1
(a) general	
(b) Commander's	
(c) individual's	
(2) protected areas including:	
(a) definition	33-1
(b) minimum storage requirements	33-1
(3) containers	33-2
(4) combination locks including:	33-4
(a) combinations	
(b) combination changes	
(c) combination numbers	
(5) custodial officers	33-4
(6) classified key control	33-4
(7) transmittal	33-5
(8) office security	33-5
(9) custody of classified equipment	33-6
(10) photography	33-6
(11) security of drafts and miscellaneous	
materials including:	52-3 to 52-6
(a) typewriter ribbons	
(b) sound recording tapes	
(c) tape recorders and dictating machines	
(d) electric typewriters	
(e) photocopiers	

## d. Detect and report violations of security orders.

(2)	responsibilities espionage, sabotage, and subversion security breaches and infractions	10-2 10-2 to 10-4
(-)	investigations	10-4 to 10-6
(4)	reporting	10-6 to 10-8
(5)	loss or compromise	10-8 to 10-10
(6)	security infractions	10-10 to 10-11
	corrective action	10-11 to 10-12

SHOW VIDEOTAPE: Open Secret

### 6. Time:

a. instruction 7 X 50 minute periods

b. enabling check .5 X 50 minute period

c. performance check 1 X 50 minute period

NOTE: The EC and PC are components of EC 401.01/.02/402.01 (2 periods) and PC 401/402 (3 periods)

7. Method/Approach. Lecture and study assignment.

### 8. Substantiation:

- a. Lecture is used to cover a large quantity of new material as quickly as possible.
- b. Study assignment is used to enrich the material presented by lecture and to ensure the trainees read and understand the reference material.

### 9. Training Aids:

a. Videotape: MOSAIC 2

b. Videotape: MOSAIC 3

c. Videotape: Open Secret

### 10. Learning Aids:

- a. A-SJ-100-001/AS-000 Canadian Forces Security Orders
- b. Reference Booklet for the Protection of Sensitive Information
- c. Study Assignment (Annex C)

### 10. Learning Aids:

- a. A-SJ-100-001/AS-000 Canadian Forces Security Orders
- b. Reference Booklet for the Protection of Sensitive Information
- c. Study Assignment (Annex C)

### 11. Test Details:

- a. the theory is tested in conjunction with EOs 401.01 and 402.01 on Enabling Check 401.01/.02/402.01
- b. the trainee's skill is tested (in syndicate of two persons) by completing a practical test: PC 401/402 EXERCISE MOSAIC in accordance with the exercise details and checklist at Annex A, Appendix 1.
- 12. Remarks: Videotape MOSAIC 2 will be shown prior to instruction of this EO. Note that teaching point "b (10)" takes approximately 1 period to cover. The study assignment will be distributed on the first day to get the trainees involved as soon as possible in reading the reference. Each videotape should be introduced by explaining how it links to the lecture material and trainees should be given a list of points to be noted while watching the video which will be discussed later in the videotape wrap-up session.

## Appendix K

**Selected Excerpts** 

From the Instructor's Manaul

For the Unit Security Supervisor Course

### **FOREWORD**

#### HOW TO USE THIS MANUAL

- 1. The aim of the Unit Security Supervisor Course Instructor's Manual is to assist both the experienced and inexperienced instructor to conduct the course in accordance with the Course Training Plan (CTP). The Terms of Reference for Instructor are found on page 6.
- 2. Read the TABLE OF CONTENTS following the FOREWORD to get a clear view of the contents of this manual. DO THIS NOW BEFORE YOU PROCEED Knowing where to find the information when you need it is better than attempting to memorize the contents of this manual.
- 3. The success of the course depends on the thoroughness of your planning and how well you anticipate the situations and problems which may occur. Obviously, all possible situations and problems cannot be anticipated. Each section of the manual begins with Course Administration. Use these parts of each section as a checklist to aid your course preparation and planning.
- 4. If this is your first time as Instructor for the Unit Security Supervisor Course, refer to Section I: Course Timetable and read Course Requirements in each Section of the manual to get the big picture (that is, the whole task in terms of administration and instruction). The Course Timetable and Course Requirements will help even the experienced instructor to organize the week, day by day.
- 5. Collect all course materials, references and aids in advance of the course start date. As they become available, add any new materials, aids, etc you deem appropriate for the course to the list found in Section I.
- 6. Annex A on Security Education is an excerpt from A-SJ-100-001/AS-000 CF Security Orders. For your convenience, this excellent summary of methods is included in this manual. Please read it.
- 7. Also for your convenience, excerpts are included from the MOSAIC Security Education Audio Visual Training Manual (see Annex B) pertaining to videos used on this course. Here you will find a description with questions and answers for each video.
- 8. Carefully read Section II: CTP. **MOTE**: this sub-section has its own TABLE OF CONTENTS and ANNEXES). Chapter 1 contains the outline and training philosophy of the course and the use of the CTP. Chapter 2 states the aim of the course, resource requirements, suggested sequence

and timings and special instructions. Chapter 3 provides training assessment procedures and Chapter 4 contains the performance objectives (POs), enabling objectives (EOs) and the lesson specifications. Also, Chapter 4 provides a reference list and the information required to prepare your lesson plans. The performance check and enabling checks are found at Annex A to D to the CTP.

- 9. A list of forms to be removed from the manual, photocopied and placed back in the manual follows:
  - a. COURSE ADMINISTRATION ( Precourse);
  - b. TIMETABLE WORKSHEET;
  - c. SAMPLE JOINING INSTRUCTIONS;
  - d. COURSE ADMINISTRATION DAY 1/DAY 4/DAY 5;
  - e. STUDENT RECORD BOOK:
    - (1) TRAINEE DATA AND HISTORY SHEET;
    - (2) PROGRESS RECORD SHEET;
  - f. EXERCISE MOSAIC PC 401/402;
  - g. PERFORMANCE CHECK 403;
  - h. EC 401.01/.02/402.01;
  - i. COURSE CRITIQUE;
  - k. COURSE ADMINISTRATION (Following week of the course); and
  - m. COURSE REPORT CF 377.
- 10. Finally, as instructor, it is your responsibility to amend the Instructor's Manual, Visual Aids, etc as CF Security Policy evolves.

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<sup>\*</sup> See CTP for separate Table of Contents, p. 25.

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**SECTION I** 

PRE-COURSE

# **COURSE ADMINISTRATION**

<u>P</u>	PRE-COURSE:			
-	reserve: classroom (with OHP, screen)  VCR playback equipment  videos (see list of Course Materials)	(	)	
-	submit form DSS-MAS 3149 2A to Queens Printer:			
	Ref 6	(	)	
_	obtain form CF 377 (one per trainee)	(	)	
-	prepare and copy (one per trainee):  Personal History Form  Student Record Book	(	)	
	Timetable Course Critique	(	)	
-	prepare Nominal Roll of trainees fom course loading message(s)	(	)	
-	prepare classroom (see Course Requirements)	(	)	
-	prepare/forward joining instructions	(	)	
-	organize guest lecturer (AJAG) for Crime & Drugs in the CF lecture	(	)	
-	Coordinate instr duties, if more than one instructor (see Timetable Worksheet)	(	)	
	verify CFAOs are current to ensure latest policy is	(	,	

### **COURSE REQUIREMENTS**

- View course loading to determine number of trainees.
- 2. Set up classroom as follows:
  - a. each desk to include -
    - (1) History Form;
    - (2) Student's Course Manual;
    - (3) Refs: A1, A2, A3, A4, A5 and A7 (see CTP Ch 4);
    - (4) a few sheets of looseleaf paper;
    - (5) pencil; and
    - (6) blank card 8" x 5";
  - b. room to include:
    - (1) OHP (check for serviceability);
    - (2) screen; and
    - (3) flip chart (optional);
  - c. Instructors, podium to include -
    - (1) Instructor's Manual;
    - (2) Course timetable;
    - (3) pencil;
    - (4) magic marker; and
    - (5) list of Course Administrative Details:
  - d. test VCR and monitor for serviceability and ensure that tapes are available; and
  - e. notice board to include -
    - (1) course timetable.

- 3. (Optional) Set-up coffee area to include:
  - a. 1 cup per trainee;
  - b. 1 coffee urn;
  - c. 2 spoons;
  - d. coffee;
  - e. sugar; and
  - f. powdered cream.

				-					
FROM DU TO AU		COURSE OFFICER: OFFICIER DU COURS:			COURSE	MO/ADJ DU COURS:			
DATE	MON/LUN		TUES/NAR		MED/MER		THUR/JEU		FRI/VEN
	DAY/JOUR	? 1	DAY/JOUR	2	DAY/JOUR	3	DAY/JOUR	4	DAY/JOUR 5
0800 TO/A 0815	401 ISSUE STUDY ASSIGNMENT	1/402	401) HAND IN STIR ASSIG <b>NE</b> NT				HAND 11 PC 404 S/A 404	AND	DEBRIEFING EC 401/402
0815 TO/A	COURSE		SOCIAL CONTACT MOSAIC 6/7 60 MIN	<b>403.0</b> 1	REPORTING SECURI VIOLATIONS OF CLASSIFIED	1.02 ITY			
0905			19 MIN EACH		DOCUMENTS & MATERIAL		EC 401.01/0.	.02/	PC 403 - PSCQ
0910 TO/A	INTRODUCTI	<b>'01</b>	CLASSIFICATION MATTER MOSAIC 2 18 NIN	401.02 Y OF	VIDEO: OPEN SEC	CIRET	402.01		
1000			j						
1015	40	4.01		401.02	402	2.01	40	13.01	402.01
TO/A 1105	UNIT SECURITY PC 404	!	STORAGE, CUST PROTECTION & C		INTRO TO PHYSICA SECURITY & CATEGORIES OF ESTABLISHMENTS	L.			CONDUCT AN OFFICE SECURITY CHECK
1110 TO/A	TAKE HONE		TION OF CLASSI NATTER		RESTRICTED AREAS & FENCING	?.01 5			;
1200					LIGHTING & INTRUSION ALARMS	5			
1300	4	01.01		401.02	402 ID CARDS & PASSES	2.01			
TO/A			PREPARATI HANDLING		SENSITIVE DISCUS	SION	SECURITY CLEA	RANCE	PC 401/402 - EXERCISE MOSAIC AND DEBRIEF
1350			TRANSHISS NOVENENT	OF			PROGRAM		ł
1355 TO/A			CLASSIFIED DOC # MATERIA MOSAIC 3 - 1	Ľ	SECURITY OF FUNDS & ORES		MOSAIC 8 - 1	O MIN	
10/A 1445	THE THRE COUNTERNEASU PRINCIPL	RES AND			· emps a setts	~			
1450	MOSAIC 1 - 26 MIN VIDEO - SPY AMONG US (60 MIN)		4	02.01	402	2.01			
TO/A			SECURITY OF SA SAA MOSAIC 10 - 10	l #	SECURITY EQUIPMENT & HAROMARE				DEBRIEFING
1545									MA) 404
1545 TO/A			SECURITY EDUCAT PROGRAM S		INTRO TO	2.01			PC 403 AND 404
1635			401/4 REVIEW S/A		SECURITY SURVEYS				COURSE 126 REPORTS

### **TERMS OF REFERENCE**

### INSTRUCTOR

- 1. The instructor for Unit Security Supervisor Course will be responsible to the B Secur 0.
- 2. The primary duties of an instructor are to:
  - a. prepare and present course lessons IAW CTP, Chapter 4;
  - introduce and debrief any individual or syndicate exercises included in the course;
  - c. provide advice, assistance, supervision and remedial instruction to trainees;
  - d. provide regular feedback so that trainees are aware of their weaknesses and/or progression;
  - e. refer to B Secur O/B Adm O:
    - (1) failure of the PC or an EC;
    - (2) development of an attitude problem;
    - (3) occurrence of an administrative problem; and
    - (4) provide remedial action as required;
  - f. draft course reports;
  - g. complete appropriate documentation (monitoring forms, etc) to be incorporated into each course or trainee file (Student Record Book);
  - h. ensure facilities are conducive to learning;
  - j. maintain the inventory of course hand-outs and manuals to ensure sufficient copies are on hand for conducting lessons;
  - k. amend, as necessary, and order visual aids for course lessons from Base Graphic Arts;

- m. make recommendations through the B Secur O to CFSIS (as appropriate) for modifications to course content or to the schedule;
- n. administer enabling checks/performance check and monitor trainee progress to accomplish the provision of:
  - (1) early warning of trainee difficulty;
  - (2) feedback on performance (effectiveness of trg);
  - (3) information to determine if a trainee should be permitted to continue training or not;
  - (4) basis for decision on subsequent action following failure (eg recommend retraining); and
  - (5) evaluate trainees completed ECs/PCs;
- p. plan efficient use of resources:
  - (1) consider impact of running the course on other taskings (staff, facilities, equipment, etc);
  - (2) consider time required to prepare for instruction; and
  - (3) consider obtaining TA/TF qualification as Classroom Instructor:
- q. prepare optimum timetable (if one provided is not appropriate) including factors and conditions pertinent to the given base and command;
- r. conduct miscellaneous administrative procedures associated with the course including:
  - (1) dispatch of candidate joining instructions;
  - (2) arrangement of orderly room and typing support as required;

- (3) arrangement of rations and quarters (possible transportation) for candidates not at base (eg. candidate from a station);
- (4) coordination of reception and dispatch arrangements as necessary; and
- (5) preparation of student record books and maintenance of student and course files;
- s. preparation of IN/OUT routine procedures if applicable;
- t. distribution of course reports IAW CFAO 26-12;
- u. amend course through B Secur O as required, to keep content current; and
- v. other duties as assigned by the B Secur O.

# LIST OF COURSE MATERIAL

### **AND TRAINING AIDS**

- 1. Classroom.
- Overhead projector and screen.
- 3. VCR Playback with monitor.
- 4. List of References for Instructor (see CTP, Ch 4)
- 5. Videos:

The Spies Among Us
Mosaic Series #1, #2, #3, #6, #7, #8, and #10
Open Secret

- 6. Publications (1 per trainee)
  - a. A-JS-000-053/JP-000 MOSIAC Security Awareness Bulletin (most current issue);
  - b. A-SJ-090-002/AF-001 MOSAIC Security Measures for DND Personnel;
  - c. A-SJ-090-003/AF-001 MOSAIC Security Policy;
  - d. A-SJ-100-001/AS-000 CF Security Orders;
  - Reference Booklet for the Protection of Sensitive Information;
     and;
  - f. Student's Manual Related References.
- 7. Lesson Plans (to be developed by instructor from lesson specifications (CTP, Ch 4);
- 8. Overhead Projector Transparencies (see Annex C).

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- a. Course Critiques;
- b. Timetable;
- c. Home Assignment 401/402;
- d. PC 404 Home Assignment;
- e. Home Assignment 404;
- f. EC 401.01/401.02/402.01;
- g. PC 403 PSCQ;
- h. PC 401/402 EXERCISE MOSAIC; and
- j. Checklist.

# SAMPLE JOINING INSTRUCTIONS

### LETTERHEAD

FILE NUMBER

**ADDRESS** 

DATE

ADDRESS

JOINING INSTRUCTIONS
UNIT SECURITY SUPERVISOR
DATE OF COURSE

- 1. Congratulations on being selected to attend the Unit Security Supervisor Course serial  ${\color{blue} }$  .
- 2. The enclosure to this letter will answer some preliminary questions you may have and clarify the content of the course. I trust you will find it informative. Do not hesitate to contact your course instructor at at local should you still have questions after reviewing the enclosure.

Base Security Officer

Enclosure: 1

### JOINING INSTRUCTIONS

#### UNIT SECURITY SUPERVISOR COURSE

- 1. Welcome to the Military Police Section of CFS , and Unit Security Supervisor Course serial . You will be with us for five training days commencing (data) , and we hope you will both benefit from this course and enjoy your stay with us.
- 2. To prepare for this course you are required to read A-SJ-100-001/AS-000 Security Orders for the DND, on the following subjects:
  - a. security organization;
  - b. threats to security;
  - c. countermeasures to the threat;
  - d. custody, preparation, handling, transmission, movement and destruction of classified matter;
  - e. security violations;
  - f. security of SA and SAA;
  - g. physical security;
  - h. security checks;
  - j. security clearance program; and
  - k. security education.

After instruction on the respective subjects, you will be required to formulate a set of unit security orders and a security education plan for your unit. Therefore it is strongly recommended you bring a copy of A-SJ-100-001/AS-000 and your own unit's security orders and security education plan.

- 3. The following provides general information which is necessary prior to your arrival:
  - a. <u>Dress</u> Dress is governed by CFP 265 (Canadian Forces Dress Manual) and CFB Standing Orders. During this course "Dress of the Day" is as applicable to your home unit: (Environmental clothing excluded).

- b. Communications. Students may be reached by calling or asking the Base Operator at \_\_\_\_\_\_.
- 4. At 0800 hrs, report to Bldg at hrs. in DEU. Initial administrative details will be processed at that time.
- 5. During the course, you are not available for duties at your parent unit. There are some Study Assignments and a Take Home Exam which you are expected to complete in the evening hours. You will be available to your parent unit five working days after the course start date.

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# **SECTION II**

# **DURING THE COURSE**

# **COURSE ADMINISTRATION**

DAY	<u>1</u>	CHE	<u>CK</u>
-	Hand out course critique (brief trainees IAW Section II Course Critique, para 5	(	)
-	Hand out Personal History Forms	(	)
•	Add completed Personal History Form information to Student Record Book	(	)
-,	Check Nominal Roll against present course candidates	(	)
*-	Submit Nominal Roll to OR (OR submits Intake Report via message to CFTSHQ Trenton//SO SCHED//)	(	)
*	ORs not familiar with Individual Training Reporting Procedures will find necessary information in A-P9-000-007/IS-000 (Stock Reprint Feb 86).		
DAY	<u>4</u>	<u>CH</u>	<u>ECK</u>
-	Update Student Record Book	(	)
*-	write Course Reports (CF377)	(	)
-	submit Course Reports for typing	(	)
-	proof read Course Reports and amend as necessary	(	)
-	submit Course Reports to B Secur O for signature	(	)
*	See sample CF 377 provided in Section III.		
DAY	<u>5</u>	CH	ECK
-	collect Course Critiques	(	)
-	brief IAW Section II: Course Critique	(	)
-	students sign Course Reports	(	)
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# **COURSE REQUIREMENTS**

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#### REQUIREMENTS FOR DAY ONE

#### DAY 1 MORNING

- Open and air classroom by 0730 hrs.
- 2. Prepare coffee by 0745 hrs.
- Conduct requirements for <u>course administration</u> as follows:
  - a. welcome (usually B Secur O/B Adm O);
  - b. course duration (go over timetable);
    - (1) 5 days;
    - (2) home assignments/take home PC; and
    - (3) graduation Friday afternoon;
  - c. ask trainees if they have had any problems eg.
    - (1) accommodation (if any trainees from other base or station; and
    - (2) transportation;
  - d. class hours -
    - (1) 0800-1200 (morning);
    - (2) 1200-1300 (lunch);
    - (3) 1300-1600 (afternoon); and
    - (4) evening work required (see timetable);
  - e. history forms to be filled out by trainees -
    - (1) ensure that forms are correct and complete; and

- (2) be specific with regards to rank ie. PO2 vice Sgt;
- f. coffee;
- g. smoking is not permitted in classroom nor syndicate rooms;
- h. rooms security and cleanup -
  - (1) daily routine; and
  - (2) out routine;
  - (3) stress the following:
    - (a) windows locked;
    - (b) eliminate potential fire hazards; and
    - (c) keep rooms neat and tidy;
- j. parking;
- k. course critique -
  - (1) critique;
  - (2) keep daily record; and
  - (3) require one critique per student Fri morning prior to 1100 hrs.
- 4. Mutual introduction:
  - a. instructors introduce themselves;
  - b. each trainee introduces himself -
    - (1) introduction to include reason for taking the course and description of his job; and
  - c. introduction to be kept short ie. two to three minutes each.

- 5. Hand out and explain Home Assignment 401/402.
- 6. Course introduction(Security Organization/Orders, regs):
  - a. prepare handouts/refs as required; and
  - b. require course intro lesson plan and OHPs.
- 7. Lecture: Unit Security Orders:
  - a. prepare handouts, refs as required;
  - b. require lesson plan, OHPs and training aids; and
  - c. hand out PC 404 Take Home.

# REQUIREMENTS FOR DAY ONE DAY 1 AFTERNOON

- Lecture: The Threat, Countermeasures and Principles:
  - a. require the following:
    - (1) lesson plans (see CTP EO 401.01 lesson specs for teaching points);
    - (2) OHPs; and
    - (3) videos: MOSAIC 1 and SPY AMONG US; AND
  - b. prepare VCR.
- 2. See CTP, EO 401.01 for sequence of lessons and videos.

# SECTION III

# **AFTER THE COURSE**

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### **COURSE ADMINISTRATION**

#### Following week of the Course

- write a summary of data provided on course critiques ( )

- write the End of Course Report

#### **COURSE REQUIREMENTS**

- 1. Coordinate distribution of Course Reports IAW CFAO 26-12.
- File Student Records.
- 3. Summarize Course Critiques in tabular form.
- 4. Write End of Course Report.
- File Course Critiques, Course Critique Summary for serial (see para 3 above) and copy of End of Course Report.

# ANNEX A TO END OF COURSE REPORT

UNIT SECURITY SUPERVISOR		DISTRIBUTION				
END OF COURSE REPORT	<u> </u>			DATE	INITL	ALS
SERIAL -	ų,					
DATES OF COURSE	=   					
NAME OF INSTRUCTOR(S)	=    -					<u>.                                     </u>
	- i					
	=  .  -	<del></del>			<u> </u>	
				 	 L <sub>ee</sub>	
NUMBER OF STUDENTS WHO NEED THIS (WITHIN 6 MONTHS) EMPLOYMENT	COURSI	E FO	R T	HEIR PRES	SENT OR	FUTURI
NUMBER WHO DON'T NEED COURSE FOR EN	1PLOYME	NT _				
NUMBER WHO DON'T KNOW						<del></del>
TOTAL NUMBER OF GRADUATING STUDENTS	·			<u> </u>		<u></u>
1. GENERAL REMARKS (See para 60	04(2))					
					···	
					<u></u>	
			<u> </u>			
D.	ATE:					

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# ANNEX A TO END OF COURSE REPORT

2.	INSTRUCTOR	RECOMMENDATIONS/ACTIONS
<u> </u>		
		•

- 3. COMMENT/ACTIONS
- 4. COMMENTS/ACTIONS

DATE FILED:

#### **GLOSSARY OF TRAINING TERMS**

- 1. COURSE TRAINING PLAN (CTP) The CF control document that contains the detailed plan for achieving the objectives as stated in the Course Training Standard (CTS).
- 2. ENABLING CHECK (EC) test administered at intervals during the course to check the progress of the trainees towards the attainment of the necessary knowledge and skills embodied in the enabling objectives.
- 3. **ENABLING OBJECTIVE (EO)** states the performance, conditions and standard of a particular knowledge, skill and/or attitude essential to the attainment of the performance objective.
- 4. HOME ASSIGNMENT (H/A) any exercise or assignment which the student works on and completes outside classroom time.
- 5. **LESSON OBJECTIVE (LO)** clear and concise statement of what the trainee will be able to do at the end of the lesson; may be an enabling objective but often an enabling objective is broken into two or more lessons, each with its own objective.
- 6. **PERFORMANCE CHECK (PC)** the individual record of trainee achievement of the performance, conditions and standard specified in the POs and the actual measurement document.
- 7. **PERFORMANCE OBJECTIVE (PO)** the job-related objectives or goals that the service member works towards achieving while he/she is under training.
- 8. **STUDY ASSIGNMENT (SA)** a teaching method in which the instructor assigns the study of books, periodicals, manuals or handouts, etc; requires the completion of a project or paper; or prescribes problems and exercises for the practice of a skill.

#### Appendix L

#### Observation Tables, Checklists, and Interview Guides

#### for the Field Trial of

#### the Unit Security Supervisor Course

#### Section A:

- Part 1 Suitability of Teaching Methods
- Part 2 Training Aids Checklist
- Part 3 Course Implementation
- Part 4 Criteria for Evaluating Tests
- Part 5 Instructional Strategy

#### Section B:

- Part 1 Administrator Attitude Towards
- the Course Documentation
- Part 2 Instructor Attitude Towards the
- Course Documentation

# Appendix L: Observation Tables, Checklists, and Interview Guides

### Section A. Part 1 - Suitability of Teaching Methods

#### **ENABLING OBJECTIVE 401.01**

Criteria:	Lesson Objective 1	Lesson Objective 2	Lesson Objective 3
1. OBJECTIVE	YES	YES	YES
2. CONTENT	YES	YES	YES
3. TRAINEE POPULATION	YES	YES	YES
4. INSTRUCTOR	NO	NO	NO
5. RESOURCES (facilities, equipment and materials)	YES	YES	YES
6. TIME	YES	YES	YES
7. COST	YES	YES	YES

# Appendix L: Observation Tables, Checklists and Interview Guides

### Section A. Part 1 - Suitability of Teaching Methods

#### **ENABLING OBJECTIVE 401.02**

Criteria:	Lesson Obj. 1	Lesson Obj. 2	Lesson Obj. 3	Lesso Obj. 4
1. OBJECTIVE	YES	YES	YES	YES
2. CONTENT	YES	YES	YES	YES
3. TRAINEE POPULATION	YES	YES	YES	YES
4. INSTRUCTOR	NO	NO	NO	NO
5. RESOURCES (facilities, equipment and materials)	YES	YES	YES	YES
6. TIME	YES	YES	YES	YES
7. COST	YES	YES	YES	YES

# Appendix L: Observation Tables, Checklists and Interview Guides

#### Section A. Part 1 - Suitability of Teaching Methods

#### **ENABLING OBJECTIVE 402.01**

Criteria:	Lesson	Lesson	Lesson
	Objective 1	Objective 2	Objective 3
1. OBJECTIVE	YES	n/a	YES
2. CONTENT	YES	n/a	YES
3. TRAINEE POPULATION	YES	n/a	YES
4. INSTRUCTOR	NO	n/a	NO
5. RESOURCES (facilities, equipment and materials)	YES	n/a	YES
ó. TIME	YES	n/a	YES
7. COST	YES	n/a	YES

Note: Lesson 2 (conduct unit physical security verification) was not presented as a separate lesson. The teaching points were covered in Lessons 1 and 3.

# Appendix L: Observation Tables, Checklists and Interview Guides

#### Section A. Part 1 - Suitability of Teaching Methods

#### ENABLING OBJECTIVES 403.01 and 404.01

Criteria:	EO 403.01	EO 404.01
1. OBJECTIVE	YES	YES
2. CONTENT	YES	YES
3. TRAINEE POPULATION	YES	YES
4. INSTRUCTOR	NO	NO
5. RESOURCES (facilities, equipment and materials)	YES	YES
6. TIME	YES	YES
7. COST	YES	YES

Appendix F: Observation Tables and Checklists

Note: The lessons for EO 403.01 were combined into one lesson. The lessons for EO 404.01 were combined into one lesson.

#### Section A. Part 2 - Training Aids Checklist

Note: The findings of the sample provided (below) are typical of the findings of the other lessons for all EOs.

ENABLING OBJECTIVE 401.01	LESSON OBJECTIVE 1
Hardware	
Do training aids support the learning activity?	YES
Are aids available in sufficient variety?	YES
Are aids available in sufficient quantity?	YES
Are aids catalogued and stored for ease of access?	n/a
Do aids fit the maturity of trainees?	YES
Do aids fit the abilities of trainees?	YES
Are aids interesting for trainees?	YES
Are aids used to compliment rather than duplicate othertraining	g resources? YES
Training aids are not over-used?	YES
Is a good balance of aids utilized?	YES
Are aids used effectively (eg. visible/available to all forappropriate length of time)?	NO
Where lacking, aids have been ordered?	NO
Software (OHP transparencies, slides, videos, etc.)	
Are still visuals professional:	
- important points are emphasized by underlining, capitals,	colour, etc.? NO
- layout is balanced?	NO
- colour is used to differentiate?	NO
- content relates to specific teaching point(s)?	YES
- image is uncluttered?	NO

# Section A. Part 2 - Training Aids Checklist

#### Software (cont'd)

- grammatically correct?	YES
- contain significant information only?	NO
<ul> <li>lettering is large enough to be visible to all?</li> </ul>	NO
Are <u>videos</u> professional:	
- smooth transition from one visual to the next?	YES
<ul><li>narration/text is relevant to the visuals?</li></ul>	YES
- visuals are described in enough detail?	YES
- visuals are realistic?	YES
- pauses permit learner comprehension?	YES
- script relates to specific objectives?	YES
- trainees have learned what is relevant to the topic?	?
- narration/text is easy to understand?	YES
- visuals are broken into segments?	YES
- video holds attention?	YES
- each point is presented in a reinforcing way?	YES
- trainees have responses to make?	NO
- a "lead in" to video is planned by instructor	NO
- a "follow-up" is planned and conducted?	NO
- conclusion reviews the purpose or key points?	NO
- key points are emphasized so audience will remember?	YES

### Section A. Part 2 - Training Aids Checklist

#### Software (cont'd)

#### Are written materials professional:

- necessary jargon is defined clearly?	YES
- reading level is appropriate for the population?	YES
- topics are organized around tasks?	YES
- readings are directly related to objectives?	YES
- a table of contents is provided?	YES
- an index is provided?	YES
- illustrations/diagrams are of good quality?	n/a
- illustrations/diagrams are understandable?	n/a
- type is legible (size and quality of copy)?	YES
- content is current?	YES
- pages are numbered?	YES
- previews and summaries are used?	NO
- writing style is clear?	YES
- manual is divided into appropriate units/chapters?	YES
- sequence of topics is appropriate?	YES
- balance between copy and white space is pleasing?	YES
- page format for instructional material is consistent throughout the manual?	n/a
- page format for reference material is consistent?	YES
- related items/topics are cross-referenced?	YES

#### Section A. Part 2 - Training Aids Checklist

#### Software (cont'd)

- italics, underlining, capitalization, etc. are used for emphasis?

- reading materials are <u>not</u> overused? NO (they are overused

- content of reading materials compliment and supplement periods of instruction (not replace instruction)?

YES

# Section A. Part 3 - Course Implementation

Training Management	
- Is there a terms of reference for the instructor?	YES
- Is there on-going measurement of trainees' progress (enabling checks) toward achieving each performance objective?	YES
- Do paper exercises assess trainees' application of knowledge and determine their comprehension?	?
- Are practical exercises conducted to provide practice and to verify trainees' ability to apply skills?	NO
- Is there a performance check to cover each performance objective (one check can cover more than one objective)?	YES
- Is the course grading system specified and followed?	NO
- Is there a Trainee Record Book or file containing records of each trainee's performance during the course?	YES
- Is there directions on how to deal with unsatisfactory course progress?	YES
- Are trainees given the opportunity to improve performance on weak or failed enabling and performance checks?	NO
- Are instructors provided time to prepare lessons?	YES

### Section A. Part 3 - Course Implementation

	· <del></del>
Training Management	
- Are the instructors trained to instruct?	NO
- Do instructors have the specific knowledge and skills required to instruct the content of the course?	YES
- Should incremental staff be requested?	NO
- Does the conducting of the course impact adversely on other taskings of the unit?	NO
- Does the course timetable work well within the unit?	YES
- Is there administrative support to assist implementation of the course?	NO
- Is there ample lead-time to prepare for the course?	YES

Appendix L: Observation Tables and Checklists

#### Section A. Part 3 - Course Implementation

PO 402

Timings of Lessons		
Objective	Planned Time (minutes)	Actual Time (minutes)
PO 401	775	350
EO 401.01	300	100
Lesson Objective 1	100	75
Lesson Objective 2	100	12.5
Lesson Objective 3	100	12.5
EO 401.02	350	250
Lesson Objective i	50	50
Lesson Objective 2	100	50
Lesson Objective 3	100	50
Lesson Objective 4	100	100
EC 401.01/401.02	50	0
PC 401	75	0

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Appendix L: Observation Tables and Checklists

### Section A. Part 3 - Course Implementation

Timings of Lessons		
Objective	Planned Time (minutes)	Actual Time (minutes)
EO 402.01	400	175
Lesson Objective 1	300	50
Lesson Objective 2	50	100
Lesson Objective 3	50	25
EC 402.01	50	0
PC 402	75	0
PO 403	450	400
EO 403.01	350	300
Lesson Objective 1	100	
Lesson Objective 2	20	250
Lesson Objective 3	25	
Lesson Objective 4	25	50
EC 403.01	0	0
PC 403	100	100
PO 404	50	115

Appendix L: Observation Tables and Checklists

# Section A. Part 3 - Course Implementation

Objective	Planned Time (minutes)	Actual Tim (minutes)
EO 404.01	50	35
Lesson Objective 1	12.5	30
Lesson Objective 2	12.5	0
Lesson Objective 3	25	0
EC 404.01	0	0
PC 404.01	0	50
Course Introduction	25	25
Administration	75	75

Facilities and Equipment			
1.	Are facilities conducive to learning?	YES	
2.	Are facilities conducive to instruction?	YES	
3.	Are facilities adequate for the number of trainees?	YES	
4.	Were facilities available when required?	YES	
5.	Was equipment available when required?	YES	
6.	Did equipment break down?	NO	

General Considerations		
1. Does each test relate to the job requirement?	YES	
2. Can the test be assessed objectively?	YES	
3. Are the test instructions clear and direct?	YES	
4. Do the test instructions tell the trainee:		
a) What to do?	YES	
b) How to do it?	YES	
c) How the test is evaluated?	YES	
d) How to receive more information?	YES	
e) How to make comments on the test?	YES	
5. Are the examiner's instructions clear?	YES	
6. Do they state:		
a) Conditions under which the test is to be administered?	YES	
b) Procedures to be followed?	YES	
c) The list of materials needed by the trainees?	YES	
d) When and how assistance may be given to trainees?	YES	
e) The evaluation scheme?	NO	
f) The amount of time allowed for each part of the test?	YES	
g) Instructions for reporting problems with the testing procedure?	NO	

Performance Tests	
1. Is the test based on a Performance Objective?	YES
2. Does the test duplicate the requirements of the Performance Objective as closely as possible?	YES
3. Does the test simulate task performance?	YES
4. Are the testing conditions specified?	YES
5. Is proficiency being measured on an all-or-none basis; that is, the learner either meets or does not meet the minimum standa	ard? NO
6. Are the standards precise and measurable?	YES
7. Does the test measure "doing" rather than "knowing how to do"?	YES/NO
8. Will there be enough time, equipment, facilities, etc. to use the test as laid out?	YES
9. Are actual job materials and equipment being used	? YES
10. Have guidelines for evaluating trainee test performance been specified?	YES
11. Is the choice of evaluation a product, a process, or combination of process and product?	YES
12. Will testing tools and equipment allow the trainee to display the skill properly?	YES
13. Has the decision to measure speed, accuracy, and/or errors been made logically?	YES
14. Will the performance test measure different skills than could be measured by a written test?	YES
15. Have trivial activities or elements been omitted from the test?	YES

Per	rformance Tests	
16	. Do trainee instructions state only what to do rather than how to do it?	YES
17	. Is scoring as objective as possible?	YES
18	Does the examiner have a product/process checklist or rating scale for measuring the trainee's performance?	YES
19	. Is the trainee informed how his performance will be evaluated?	YES
Pa	per Based Tests	
1.	Are test items specifically related to the job?	YES
2.	Are test items specifically related to teaching points?	YES
3.	Do the items on the test represent an adequate sample of the knowledge and skill area covered by training?	YES
4.	Does each item measure specific knowledge gained through training rather than general knowledge?	YES
5.	Does each item contain the language of the job and not unnecessary technical terms?	YES
6.	Is each item grammatically correct?	YES
7.	Does each item contain only material relevant to the answer?	YES
8.	Does each item avoid implausable, trivial or obviously incorrect leads?	YES
9.	If more than one answer is correct, does it say so in the test directions?	YES
10	. Are trick questions avoided?	YES

# Section A. Part 5 - Instructional Strategy

Sequence	
1. Planned Sequence:	Actual Sequence:
EO 404.01 (Lesson Objective 1)	see Appendix G _
EO 401.01 (Lesson Objective 1)	
(Lesson Objective 2)	
(Lesson Objective 3)	
EO 403.01 (Lesson Objective 4)	
EO 401.02 (Lesson Objective 1)	
(Lesson Objective 2)	
(Lesson Objective 3)	
EO 402.01 (Lesson Objective 2)	
EO 404.01 (Lesson Objective 2)	
(Lesson Objective 3)	
EO 401.02 (Lesson Objective 4)	
EO 402.01 (Lesson Objective 1)	
(Lesson Objective 3)	
EO 403.01 (Lesson Objective 1)	<u></u>
(Lesson Objective 2)	
(Lesson Objective 3)	
2. Does instruction contain prerequisite sequence?	YES
3. Does instruction contain job sequence (if application)	able)? YES
4. Are easily learned tasks covered early in sequen	ice? YES

### Section A. Part 5 - Instructional Strategy

Sequence	
5. Are general and broad concepts covered early in sequence?	YES
6. Are similar tasks grouped together?	YES
7. Does the sequence alternate from the difficult to the less difficult?	YES
8. Are shared concepts learned early in the session?	YFS
•	NO(eg. shown after the lesson)
10. Are heavy sessions avoided during the latter part of the morning and afternoon?	YES
11. Are the high points of the day (9:00 - 11:00 and 13:30 - 15:00) used adequately?  Content	YES
1. Is the content of the course factually correct?	YES
2. Is the content presented in an interesting fashion?	YES/NO
3. Is the amount of information presented reasonable for trainee comprehension?	YES
4. Do the visuals (video tapes, Overhead Projector transparencies, etc. support the verbal presentations?	YES
5. Does the content adequately cover the material specified in the objectives?	YES
6. Is the content up-to-date?	YES
7. Are any topics overemphasized which do not merit detailed treatment?	NO(except ADP security)

# Section A. Part 5 - Instructional Strategy Content 8. Are the learning activities challenging, but NO(not not discouraging to the trainees? challenging) 9. Are there extreme variations in the difficulty of the content? YES 10. Are difficult/complex topics treated clearly and simply? YES 11. Does the course begin at a point which is familiar to the trainees? YES 12. Does the course sequence follow (check one): ...... (a) easy to difficult ..... (b) simple to complex ..... (c) concrete to abstract ....X.... (d) known to unknown ...... (e) other \_\_\_\_\_ 13. Is "nice to know" (vice need to know) information excluded from the course? YES 14. Is there confusing information presented? NO 15. Are new terms clarified as they are introduced? YES 16. Are content examples interesting? YES 17. Does the course appear to be personalized? NO 18. Does the course "talk down" to the trainees? YES 19. Are topics based on the job? YES

20. Can all teaching points be related directly back to specific tasks of the job?

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YES

### Section A. Part 5 - Instructional strategy

Motivation	
Is there an adequate interval change in method, media or activity?	YES
2. Is the level of challenge appropriate?	YES
3. Are objectives clearly stated to the trainees?	YES
4. Does the course meet the needs (job requirement) of the trainees?	YES
5. Are advanced organizers used effectively for lectures?	NO(not used)
6. Are scheduled activities explained to the trainees?	YES
7. Is there variety in methods and training aids?	YES
8. Are training aids (eg. videos) interesting for the trainees?	YES
9. Is excessive "nice to know" information avoided?	YES
10. Is the pace varied?	NO
11. Is the importance of the content pointed out?	YES
12. Is the relationship between content and the job conditions pointed out?	NO
13. Is the trainee constantly responding to and applying the content?	NO
14. Are trainees made aware of their progress?	YES
15. Do trainees have an opportunity to express themselves?	NO
16. Is new material introduced in an appealing way?	NO
17. Are strategies employed to produce group interaction?	NO
18. Are small group exercises planned?	NO

### Section A. Part 5 - Instructional Strategy

Acquisition		
1. Is there an overview of the course?	NO	
2. Are similarities and differences with previous learning pointed out?	NO	
3. Are frequent reviews and summaries conducted	? NO	
4. Do trainees participate in the reviews and sumr	maries? NO	
5. Is technical jargon explained clearly?	YES	
6. Are complex items repeated in different words?	YES	
7. Are many senses employed by the trainee?	YES	
8. Is practice distributed appropriately over the co	urse? NO	
9 Is enough content covered in the time available	YES	
10. Is overloading of the trainee avoided?	YES	
11. Are there frequent pauses in the action to allow for mental review?	YES	
12. Is there a final summary?	NO	
13. Are there adequate opportunities for application and feedback?	YES	
14. Is the feedback complete and specific?	YES	
15. Is the feedback immediate?	YES	
16. Are key items repeated?	YES	
17. Are key items covered at the beginning and end of the session?	YES/NO	
18. Are examples based on familiar situations and	objects? YES	
19. Are plenty of examples, cases, samples, etc. use	ed? YES	

### Section A. Part 5 - Instructional Strategy

Acquisition	
20. Are numerous questions used to promote thought?	NO
21. Do trainees actually perform the task(s)?	YES/NO
22. Are components practiced before total task is attempted?	YES
23. Is there enough practice under varied conditions?	NO

### Section B. Part 1 - Administrator Attitude Towards the Course Documentation

		<del></del>
Co	onsistency	
1.	Was the format consistent in each section of the Instructor's Manual?	NO
2.	Was terminology consistent throughout the manual?	YES
3.	Was the page format similar throughout the manual?	NO
<b>4</b> .	Does the different format for the Course Training Plan (C) in the middle section of the manual confuse you?	ΓP) YES
Co	ompleteness	
	se the other side of the page if more space is required estions.)	to answer the following
1.	Which lesson specifications do not provide adequate conduct instruction?	detail and information to
	None	
2.	Which areas of the manual (other than lesson specif detail?	ications) were lacking in
	Administration details on course loading - letter requestindidates	ing units to select course
3.	What other information should be in the Instructor's M	anual?
	_same as question 2 (above)	

### Section B. Part 1 - Administrator Attitude Towards the Course Documentation

Format	
1. Is information easy to find?	YES
2. Is the sequence of information appropriate?	YES
3. Is the manual divided into appropriate "sections"?	YES
4. If no, how would you organize the manual?	
	····
Accuracy	
1. Is the content of the manual factually correct?	YES
2. Are the lists and procedures correct?	YES
Usefulness	
1. Is the writing style clear?	YES
2. Does the Preface explain precisely how to use the manua	l? YES
3. Is the terminology appropriate for your knowledge of training?	YES
4. Were the provided lists and samples helpful?	YES

### Section B. Part 2 - Instructor Attitude towards the Instructor Manual

Format
No _X_  1. (a) Did you find the <u>page format</u> consistent throughout the manual?  Yes No _X_
CommentsInstructor's Manual page numbering system isdifferent than the CTP section
(b) If not, did this inconsistency make using the manual cumbersome or difficult?  Yes _X_ No
CommentsFound the different numbering systems and formats
_very confusing
2. (a) Would you say that the balance between copy (text) and white space was: "pleasing",
"too much text",
"too much wasted white space", or
other, please explainIt was "OK"
(b) Do you have any suggestions for making page format more pleasing and easier
read?  Yes No _X_  Comment

Section B. Part 2 - Instructor Attitude towards the Instructor Manual	
Format	
3. (a) Is the manual divided into appropriate units/sections?  Yes _X_ No	
Comment	
(b) Are the sections in the appropriate sequence?  Yes _X_ No	
Comment	
(c) Is the information within each unit presented in the appropriate sequer Yes _X_ No	ice?
Comment	
4. (a) Is information easy to find?  Yes _X_ No	
CommentExcept for problem with different page numbers	
_systems, formats and Table of Contents	
(b) Are all pages numbered? Yes _X_ No	
Comment	

### Section B. Part 2 - Instructor Attitude Towards the Instructor Manual Legibility 1. Is the writing style clear? Yes \_X\_ No \_\_\_ Comment \_\_\_\_\_ 2. Is jargon used unnecessarily? Yes \_\_\_ No \_X\_ Comment \_\_\_\_\_ 3. Is necessary jargon defined clearly? Yes \_X\_ No \_\_\_ Comment \_Glossary at back of manual was useful.\_\_\_\_\_ 4. Are too many long words used? Yes \_\_\_ No \_X\_ Comment \_\_\_\_\_ 5. Are too many long sentences used? Yes \_\_\_ No \_X\_ Comment \_\_\_\_\_

	gibility
	Did you find the manual difficult to read (in terms of reading level)'  Yes No _X_  Comment
7.	Do the headings accurately summarize/reflect the content?  Yes _X_ No  Comment _Headings were very useful
 Со	entent
1.	Is the content accurate?  Yes _X_ No  Comment
2.	Is the Preface useful? Yes _X_ No Comment
3.	Is the <u>Table of Contents</u> useful?  Yes _X_ No  Comment _Different Table of Contents for CTP was confusing

### Section B. Part 2 - Instructor Attitude Towards the Instructor Manual Content 4. Is the Glossary of Terms useful? Yes \_X\_ No \_\_\_ Comment \_\_\_\_\_ 5. Is <u>Section I: Pre-course</u> complete? Yes \_\_\_ No \_X\_ Comment \_\_Need direction on loading the course.\_\_\_\_ 6. Is Section II: During the Course complete? Yes \_X\_ No \_\_\_ Comment \_\_\_\_\_ 7. Is <u>Section III: After the Course complete?</u> Yes \_X\_ No \_\_\_ Comment \_\_\_\_\_ 8. Are the Appendixes useful? Yes \_X\_ No \_\_\_ Comment \_\_\_Only used the Glossary.\_\_\_\_\_ 9. Is the Course Training Plan complete? Yes \_X\_ No \_\_\_ Comment \_\_\_\_\_

### Section B. Part 2 - Instructor Attitude Towards the Instructor Manual

very well	•	poorly	
X	!	!	<b>!</b> -
<del>-                                    </del>	manual prepare you as an i		
very well		poorly	
!	! X	·	!
Comment	^		Ē
3. Did you find the <u>c</u>		ry little	
very much so	ve !	ery little	 !
very much so	!	ry little	<u>!</u>
very much so  !  Comment  Was the manual at	ve ! ble to provide you with "then and instruction?	ery little ! ne big picture", that is the	

totally not at all	11			
Pid you enjoy conducting the course?  Try much very little  !!!!  Comment!  What suggestions can you make to improve the manual for future use of the course in the course is a second or suggestion.	ould you say that the m	anual contributed t	o the success of th	e course?
Comment				
Did you enjoy conducting the course?  ery much very little  !!!!!  Comment  What suggestions can you make to improve the manual for future use	X Comment			
Comment  What suggestions can you make to improve the manual for future use of	nuch		•	
What suggestions can you make to improve the manual for future use				
What suggestions can you make to improve the manual for future use ers?				
	at suggestions can you r	make to improve th	e manual for future	e use of y
One Table of Contents or separate the CTP from the		Comp. c	om the	
nstructor's Manual		separate the CIP fr		

Appendix M
Sample Lesson Critique
Administered for Each Lesson
During the Field Trial for
Unit Security Supervisor Course

### Lesson Critique

Please answer the following questions to help us understand what you think about the lessons on <u>identifying countermeasures aimed at defeating the threat to good security</u>. Your comments are welcome and your opinions will help us make better lessons for future courses.

EO 401.01 LESSON I - Identify the threats to security
1. Did you understand that you were going to learn to identify the threats to security?
Yes No
2. Did you already know how to identify the threats to security?
Yes No
3. Do you wish more information on identifying threats to security had been included in the lesson?
Yes Comment
No
4. Did you think the questions asked by the instructor during the lesson were:
Clear Comment
Confusing
5. Was the instruction interesting?
Yes Comment
No
5. Was the instruction clear?
Yes No
What wasn't clear?

. W	ere there too many examples provided in the lesson?
•	Yes Comment
Ì	No
. Di	id you answer any questions or get involved in class discussion?
`	Yes
Ì	No Why?
Di.	d you enjoy the video <u>Mosaic 1</u> ?
	Yes Comment
ľ	No
0. D	id you like the lesson?
•	Yes Comment
ľ	No
1. D	id you learn to do things you couldn't do before?
7	Yes No
2. W	hat do you think would improve the lesson most?

### Appendix N

**Course Critique** 

Administered during

the Unit Security Supervisor Course

### USS COURSE INSTRUCTOR MANUAL

SERIAL NO \_\_\_9101

NAME B SECUR O

### COURSE CRITIQUE FOR

### THE UNIT SECURITY SUPERVISOR COURSE

- 1. Course critiques are an integral part of instructional evaluation. They provide valuable feedback from trainees on the effectiveness and efficiency of the training. During the course you will be required to complete this course critique.
- 2. Your comments, in the form of constructive criticism, are solicited on the overall conduct of the course. All comments will be carefully analyzed to enable the instructors to identify means by which the course can be improved.
- 3. This critique covers the following performance objective (POs):
  - a. PO 401 Apply security of information countermeasures;
  - b. PO 402 Apply physical security countermeasures;
  - c. PO 403 Maintain a Unit Security Clearance program; and
  - d. PO 404 Conduct Unit security training and administration.

While completing the course critique please keep these POs in mind.

- 4. There are three parts to this questionnaire dealing with:
  - a. course content;

i . .

- b. ratings of the course; and
- c. open-ended questions.

Please complete all aspects of the questionnaire and pass the completed form to your instructor.

### USS COURSE INSTRUCTOR MANUAL

### PART 1

### QUESTIONS ON COURSE CONTENT

- 1. The following list summarizes the course content. Indicate in the adjacent scale whether the particular topic was covered:
  - a. Very Poorly;
  - b. Poorly;
  - c. Adequately;
  - d. Well;
  - e. Very Well.

### PO 401 - APPLY SECURITY OF INFORMATION COUNTERMEASURES

EO 401.01 - Identify Countermeasures aimed at defeating the threat to good security:

a. threats to security

b. principles of good security

c. countermeasures

1	2	3	4	5
		5/20	14/20	1/20
		4/20	15/20	1/20
		5/20	15/20	

EO 401.02 - Apply security of information countermeasures:

a. classification/designation

b. preparation/handling/ shipping/transmission

c. storage/custody/protection/
 destruction

d. detection/reporting violations

1	, 2	3	4	5
		5/20	14/20	1/20
		4/20	16/20	
		5/20	13/20	2/20
		5/20	14/20	1/20

COMMENTS: - Subject was adequately covered, however, unclear of security zones vice Protected/not Protected for storage purposes.

- may be some prepackage examples to flash.

- too much reading out of the book.

### PO 402 - APPLY PHYSICAL SECURITY COUNTERMEASURES

EO 402.01 - Assist in the conduct of a physical security survey:

a. Policies affecting physical security (categories of establishment, restricted areas, lighting and intrusion alarms, IDs and passes (security equipment and hardware)

 unit physical security verification (classified materials and waste, small arms and ammunition, funds and narcotics, sensitive discussion areas)

c. physical security survey

1	2	3	4	5
		2/20	14/20	4/20
		3/20	14/20	3/20
N/A 2/20		3/20	13/20	2/20

COMMENTS: - too much reading out of the book

- the physical security portion was very enlightening - survey handout useful to user sections

- well covered

- a actual hands on survey would be a very good example

to try.

### PO 403 - MAINTAIN A UNIT SECURITY CLEARANCE PROGRAM

status of security clearances for unit personnel

PSCQ and related forms

1	2	3	4	5
		4/20	13/20	3/20
		'	Ť	·
				- 400
		3/20	12/20	5/20
			1	

COMMENTS: - big help in performance duties.

### PO 404 - CONDUCT UNIT SECURITY TRAINING AND ADMINISTRATION

EO 404.01 Ensure unit personnel are conversant with and practice unit security policy

Unit Security Standing a. Orders

Unit Security Education Plan b.

1	2	3	4	5
		4/20	13/20	3/20
		5/20	13/20	2/20

COMMENTS: - need more of this at our unit.

PART II

M-i

### RATING THE COURSE

Below are a series of statements which may be made about the course. Indicate by checking the appropriate box whether you:

If you select 1 or 2, please	1. Strongly Disagree	Na <b>ug</b> ree				
explain why.		2. Disagree				
			3. Neither A	3. Neither Agree Nor Disagree	Luce	
	<u></u>	- <del>-</del>		4. Agree		
		5.	ě		5. Strongly Agree	<b>L</b> ITTLE
				· <b>+</b>	5.	COMMENTS
1. This course was well presented.	02/1		02/2	15/20	02/2	Instructors' enthusiasm commended
2. The presentation methodology of the course material was well switch for each topic.	02/1		9/20	14/20	3/20	
3. The practice exercises were well propared and meaningful.	02/1	07/1	02/1	13/20	4/20	decrinomaires were helpful
4. The course was well sequenced.	1/20		2/20	17/20		
5. The course was well paced.	1/20	2720		16/20	07/1	a little to fast in non-familiar topics (locks, containers)
6. Sufficient time was allocated to each segment (PO)		07/1	02/1	02/51	3/20	more time to proper a proper act of Security Orders. PO 401 too long. SA SAA to abort
7. Commonts and criticism made by staff were helpful and constructive.		02/1	07/1	12/20	6/20	excellent use of practical examples
8. I feel confident that I can apply this material successfully.				16/20	4720	
9. The material presented was relevant to any finite role as Unit Security Supervisor		07/1		9/20	10/20	

Although course contain was well covered, certain antijects relevant to security were not relevant in practice. More day to day issues should have been the subject of lecture for example types of security and overseas trips could have been subjects covered more briefly.

### USS COURSE INSTRUCTOR MANUAL

### PART III

### OPEN-ENDED QUESTIONS

- 1. Please indicate your reactions and provide comments to the following events and/or activities. Give sufficient information to allow clear understanding of your views:
  - a. Introduction to the course:

effective, fige, nil, good(XS), very dry & uninteresting, well presented(X2), very good(X2), well done, too fast, 1st incture unclear and add brief information about the students [name, unit, etc](X2).

b. Video tapes:

good(X5), very good(X5), very good considering age of tapes(X3), good (especially walker[X4], interesting(X2), interesting & informative and very beneficial.

- C. Home assignment: 404: Unit Security Orders: insufficient time capecially for large achool many companies & buildings(X2), waste of time, good-not enough time to properly make up SO(X4), good experience in arranging particular units' security orders, good(X5), good way to develop security orders for unit, excellent(X2), labour intensive but informative, work sogether usedful.
- d. Lessons on ADP Introduction to Computers: sufficient, nil, very lightly covered-time restraints, well presented, interesting, well worth the effort, very good, good(X3), too far into computers, lost with computers, good for those who understand computers, was hoping for much more information(X2), too fast for people with no computer experience, useful if instructor had more knowledge about computers.
- e. ADP Home assignment:

excellent, no problem, good(X6), good despite condition & set up of publications, missing pages in ADP 300, adequate but of little value, over my head-would enjoy more at lower level, well done, informative, useful in cross ref-did not learn anything.

- f. Enabling Check: EC 401.01/.02/402.01: well done, OK, no problem, good/C/O), very good-broad range of questions, good-clear, mend more BCs to become familiar with Security manual, open book-good idea, good, but more time to do exam, not enough time/(2), useful but did not learn saything.
- g. Performance Check: PC 403 PSCQ: no problem, good/X6), good experience-time & practice will help, good-locked for faults that weren't there, useful, informative-handout beneficial too, very good for future work, very interesting, excellent & very useful, well done, there is a guide use it, well done, fast paced.

### PART III CONT'D

- 2. What topics/activities would you like to see expanded or presented in more detail?

  unit security education programme, some(X11), security lock-up datics/responsibilities, isvestigating violations of all kind, the criminal threat, sny & all topics dealing with ADP, include a timeframe to conduct a security survey, proparing security orders-day to day security problems that occur in support field, each lesson was well explained & with 4-1/2 days I learned a lot, ADP security, ADP-some education tips & handouts-more handouts-SA & SAA definitely physical security & ADP security, ADP, more complasts on what could happen to the average guy-Pilms & examples were given of people in high places-makes people lost in that direction-wrong doings by Military People.
- 3. What topics would you like to see reduced in emphasis or time?

  acce(X5), almost all of this course could be administered as a reading assignment, actual accurity survey, overseas travel ferrige action control(X2), ADP accurity, courser measures/threats, drugs, classification-handling-packaging, storing of classified documents, well known by most persons attending course through experience.
- 4. What topics gave you the most difficulty in understanding? What are you suggestions to ease understanding of those topics?

  PSCQ-taken at alower pace, PSCQ-more hands on maybe homework assignments, no topics harder than others, no problem in understanding (X11), consumptions ADP 300, security orders, ADP, security violation handling/disposal of classified matter, classification of material, PSCQX3), physical security, reliability checks, handling custody in C/D material, PSCQ & ADP, physical security-security orders-PSCQ-security information(transmission, handling & storage of classified material), safeguarding of material & PSCQ.
- 5. What did you find particularly valuable?

  A-SI-100-001/AA-000, all aspects of the case-mainly responsibilities of the unit security offers, reliability checks, gained some knowledge in each class, information given was new & helpful, all(X2), PSCQ practice exercise(X2), security orders-ADP-security violation handling/disposal of classified matter-classification of material, PSCQ(x2), physical security, safeguarding of material & PSCQ.
- 6. What suggestions do you have for improving the COURSE? abould be a correspondence course & if not whole thing should be not more than 2 days in duration, more videos, OHP stancils(spelling erroralk foundation for course is very solid). I can never receive enough information & would like to stand more in days. of follow up course, less direct reading especially reliability check handout & security check handout, introduce time for a security survey in pre-selected pages, more information on what USO will encounter in the area, some OHPs could be review and modified so all students could read thou, fine the way it is, more easy guide handouts, advise the students of the references before to follow vice to keep up, standardize lesson to match A-JS-100, instructors would probably benefit form TDC course, ail.
- 7. Please add any comments and/or suggestions you feel would help improve the course is conducted again instructors should execute instructional Technique since almost the entire course was good from a book the instruction/content should be sport feeding the illiterate, onjoyed course-got lots of new knowledge-maybe guest speakers or a topic of interest perhaps terrorists, general course cuttine & content very good, instructors were good-need more open convernation to discous problem will encounter at the high level-instructors did a fine job with such a day subject, space up the first 1/2 of day one, coffee in the afternoons after 1400, course was very well run and the instructors made good use of practical examples to help assimilate "drive" staff, instructors are truly knowledgeable & deserve out thanks for putting together a course with so little actice, course was well presented.

### PART III CONT'D

### 8. Please comment on any aspect of course administration.

N/A, good(X11), nobody seemed to know about out of town/Base persons attending, well done, overall course was good and learned a lot, course was good and informative-the after check work should take more time and realize that information can be found in more than one place-a quick look in the book at reference given by a number of students would be a good idea, course well done as assistant USO I find it valuable to me dealing with this area of responsibility, no problems, very good-most helpful in a lot of aspects-should have had this 5 years ago-instruction was clear & concise by all the three-except-Cpl Darroch read too much on the lessons she wasn't too familiar with. Well done to all, OK, there was very little admin but we were well looked after-thanks.

## END 14-04-94

#