

# Safety Trained Supervisor Certification Program

HOW TO USE STS IN YOUR COMPANY



SECOND EDITION | OCTOBER 2011

**BCSP** | Board of Certified  
Safety Professionals

Advancing the Safety, Health and Environmental  
Profession Since 1969

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Champaign, IL 61821 USA





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# 1.

## Introduction

### **The Safety Trained Supervisor (STS) Certification**

Thank you for your support and acknowledgment of the value of certification. This booklet is a direct result of requests from safety practitioners around the country. We salute trade organizations which support the concept of managers and supervisors owning safety performance just as they own production, quality and cost.

### **Purpose of This Booklet**

The purpose of this booklet is to walk you through the process of setting up a Safety Trained Supervisor (STS) Certification program within your company. You have already taken the first step by using this booklet to help you achieve the maximum benefits of implementing your STS program.

### **How to Use This Booklet**

This booklet will give you instructions and examples, schedules, budgets, and references tools needed to make your STS program successful. You will be able to follow a proven success plan and incorporate it into your environment and/or work structure.

You will also need a copy of the *STS Candidate Handbook* when using this planning guide. The Candidate Handbook provides information for individuals seeking the STS certification. You can download a copy from the BCSP website at [www.bcsp.org](http://www.bcsp.org).

# 2.

## Summary of the STS Certification

### Overview of the STS Certification

The Safety Trained Supervisor (STS) certification program is intended for companies who have individuals who:

- Are managers at all levels.
- Are first line supervisors of work groups or organization units.
- Have a safety responsibility for a work group that is part of other work duties.

Safety Trained Supervisors are not safety specialists or safety practitioners. Typical candidates have a safety responsibility that is adjunct, collateral or ancillary to their job duties. Their main job duties are in a craft or trade, in leadership, supervision or management, or in a technical specialty.

The typical certified STS helps their employer implement safety programs at the worker level through supervisory, safety committee or similar safety and health leadership roles. Safety tasks often include monitoring for job hazards, helping ensure regulatory compliance, training employees in safety practices, performing safety record keeping tasks, coordinating corrections for safety problems within or among work groups, and communicating with safety specialists or management.

The STS safety responsibility is a part-time responsibility, usually less than 1/3 of the total job duties. If safety responsibilities involve a greater portion of job duties, the role is more likely to be that of a safety technician/technologist or safety professional.

The STS certification establishes a minimum competency in general safety practices. To achieve the certification, candidates must meet minimum safety training and work experience and demonstrate knowledge of safety fundamentals and standards by examination. Those holding the STS certification must renew it annually and meet recertification requirements every five years.

The Safety Trained Supervisor certification holds national accreditation from the National Commission for Certifying Agencies (NCCA), Washington, DC. Additionally, OSHA recognizes the STS-Construction credential. OSHA compliance safety and health officers consider it a factor in deciding on a focused inspection.

### How the STS Certification Process Works

The STS certification process can seem complex but if you can visualize the different parties involved (see Figure 1) it is quite simple. This next section will summarize each phase (preparation, apply/qualify, examination, and certified) of the certification process.

### Features and Benefits

Your supervisors, managers, safety committee members, foremen, crew chiefs, and other work group leaders play very important roles in making work safe. Safe work practices add to productivity and profit and reduce work interruptions and rework.

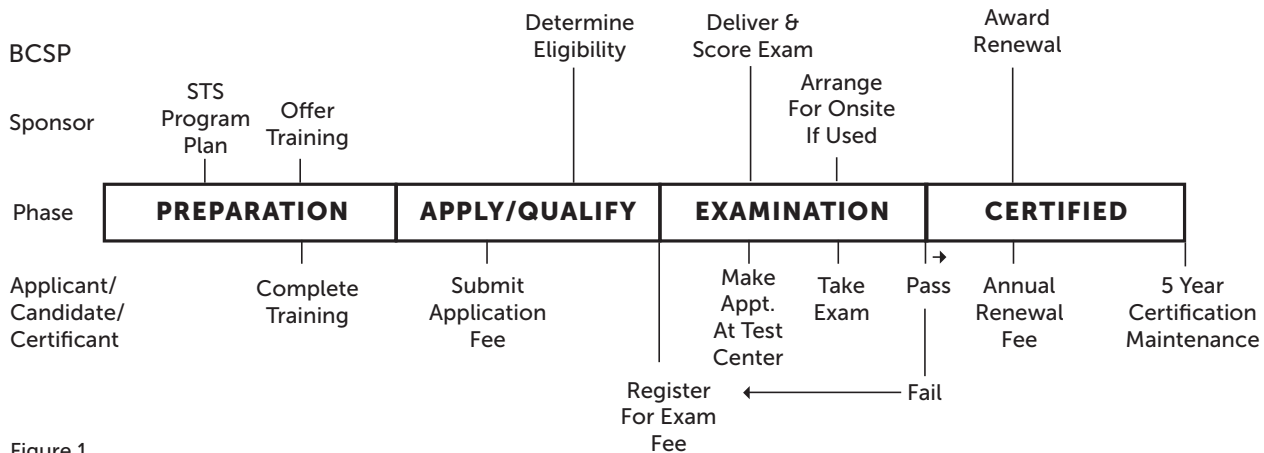


Figure 1



### **Features of the STS Certification**

- A simple application and examination process.
- Convenient testing every business day at testing centers located throughout North America.
- Computer-based testing with immediate pass-fail results.
- Distinctive wallet card and certificate.
- STS stickers for display.
- A national database of STS certificants available to employers.
- A recertification program that helps to ensure that certificants are current in safety and health matters.

### **Benefits for Employers and Owners**

The overall benefits of the STS certification program include the following:

- Evaluation of its employees fundamental safety knowledge.
- Demonstrated competency of its employees by examination.
- Increased safety awareness among employees.
- Improved safety culture.
- Reduced workers compensation claims and reduced insurance premiums through improved leadership skills.
- Reduced need for safety professionals on smaller projects or assignments.
- Improved productivity with better communication among work groups.
- Higher confidence of individuals within work groups.
- Higher profits from safe work.
- Recognition by having employees who hold a nationally-accredited credential.

### **Benefits for Employees**

Benefits for employees includes the following:

- Demonstrated knowledge of fundamental safety practices.
- Opportunities for increased job responsibilities or employment.
- Increased value to an employer.
- Recognition for safety leadership from an employer or other employees.
- Increased confidence when dealing with safety and health matters.
- Recognition by holding a nationally-recognized and accredited credential.

### **Official STS Candidate Qualifications**

For your employees to gain eligibility for the STS examination, they must be of good moral character and meet the following three requirements:

1. Have two years of experience in any industry or in the industry related to the version of the STS examination to be taken.
2. Have one year of experience as a supervisor or safety leader of a work group. Examples are manager, foreman, crew chief, superintendent, or member of a safety committee. This experience can be concurrent with Requirement #1.
- 2a. Candidates that are training to become a supervisor or safety leader and do not have the one year of experience in such roles, can substitute two additional years of industry experience in Requirement #1.
3. Have completed 30 hours of formal safety training through a single course or multiple training courses.

## Application and Examination Information

BCSP evaluates applicants and candidates objectively without regard to age, gender, race, religion, national origin, marital status, disability, or sexual orientation. After applications are received and verified all qualifications are met, BCSP will declare those eligible to sit for the STS examination. It is good for one year from the date BCSP established the eligibility. Within that year, all qualified candidates must pass the STS examination. If eligibility expires, a new application must be submitted.

After BCSP sends the notice of eligibility to sit for an STS examination, candidates may register with BCSP to take an examination at any time within the time limits. After they purchase the examination authorization, 120 days will be given to take the examination. If additional time is needed beyond the 120-day examination authorization period, BCSP allows a one-time 60-day examination authorization extension to be purchased.

Please encourage all of your eligible staff to make an appointment eight or more weeks in advance of their preferred testing date to ensure an available appointment time. The testing centers handle many other examinations beside the STS examinations.

An annual fee applies to those who pass BCSP examinations and earn credentials. The fee is pro-rated the first year after passing the examination.

Applicants and examination candidates have the right to appeal decisions affecting their eligibility or the results of examinations. They should send appeals in writing to the attention of the BCSP Executive Director. The letter must detail the appeal and present information to support the position or consideration sought.

## Recertification

For your staff to retain their STS certification, they must recertify every five years. The purpose of Recertification is to help ensure certificants remain knowledgeable in safety and health practices applicable to managers, supervisors, and work group safety leaders. National accreditation standards for certification programs require recertification.

The first Recertification cycle begins on the date an individual passes the STS examination and achieves the STS certification. It officially begins on January 1 of the year following this date and ends on December 31 of the fifth full year. The first Recertification cycle may be longer than five years because it includes the partial year after passing an STS examination.

Near the end of the five-year Recertification cycle, BCSP will notify the certificant that they must meet recertification requirements to retain certification into another cycle.

There are several options for recertifying. The options include:

1. Taking and passing any STS examination.
2. Achieving the Construction Health and Safety Technician® (CHST®) or Occupational Health and Safety Technologist® (OHST®)/Certified Loss Control Specialist (CLCS®) certification from BCSP during the Recertification cycle.
3. Completing 30 hours of additional safety and health training or teaching during the five-year cycle.
  - Training must be formal, documented courses in any format, such as live, video, CD-ROM, Internet, or conference (local, regional, national, or within a company). Routine work area or tool-box talks are not included.
  - Teaching includes any safety and health courses, excluding routine work area or tool-box talks. Count repeated courses only once, unless the course is changed significantly between offerings. You or the offering organization must document the course, dates, topic, and participation of the individual or verify the participation for safety and health training and teaching. If recertification requirements are not met, the STS certification will become invalid.

# 3. Planning Your STS Program

## Overview

Planning and management commitment is needed in order to make effective use of the STS certification and gain desired results. For example, you will need to identify which groups and individuals will be part of the initiative, locate training to help people pass an STS examination, establish metrics for assessing participation and success, create a schedule for implementation, structure program administration, determine how administration will work and create a budget.

This chapter will help you prepare for each of these steps. You may complete the steps in a different order than the order in which they are discussed.

### Step 1. Create the Program Schedule

In planning your STS program, you will need to work on scheduling. There are at least two aspects to consider. One is estimating how long it takes to move a group through the entire process. The second is to identify the overall schedule for organizational units to participate in the STS program, most likely by quarter or year.

1. Preplanning with individual organizational unit (Notice to managers, notice to participants, and coordination of availability of individuals for training, introduce process to participants, group coordinator selection, etc.)	4 weeks
2. Conduct training course	1 week
3. Allow for personal preparation for STS examination; Apply for STS and determine eligibility	4-8 weeks
4. Register and sit for examination	1-4 months
5. If examination is passed, achieve certification	2 weeks
6. Recognition	1 week
7. If examination is failed, additional preparation and registration	
Total process time	15-31 weeks

## Create a Typical Group Process Schedule

How long does it take to get a group through the STS certification process? In part, it depends on the rules and procedures established for your pilot program. See the list of tasks and a general estimate of time for each task.

You can minimize the total process time with tight schedule management. With a more relaxed process, the process time will be longer.

The greatest influence on the process time is testing. With the normal use of Pearson VUE testing centers, BCSP authorizes individuals 120 days from the registration date to make and complete a testing appointment. Should you choose to arrange for onsite testing, the testing date will be a fixed date for all candidates scheduled on that date.

## Create the Program Schedule

The program schedule defines how long it would take to process all groups through the STS certification. It should be based on starting a new group periodically. The rate of new groups is largely limited by the ability to complete training. An additional factor is the rate at which you can handle training of group coordinators. You will have to determine your capacity in establishing how quickly you can move several groups through your process. The training delivery method can also impact the overall schedule.

### Step 2. Who Will Potentially Participate?

The objective in this step is to estimate the total number of individuals who will participate in the STS program. This step helps to establish the potential scope of your STS program. Only those who meet STS qualifications can participate.

In order to establish who will participate, you will have to define a few rules to determine who is potentially included in the program. You will have to identify what organizational units will participate and estimate how many participants there will be within each organizational unit.

**Define Participation Rules**

Since the STS certification is intended for work group leaders who are not safety specialists, many companies using the certification have included managers, work group leaders and even senior

executives in their STS program. Some have started with certain business units or projects. An example for a participation rule is the following:

The STS program for (name of company) will include individuals working in (name of business unit or

**Example Table 1. List of Business and Organizational Units in the STS Program**

Business Unit	Organizational Unit	No. Participants
<b>Healthcare Product Unit</b>		<b>TOTAL=54</b>
Design Division	Engineering Branch	2
	Support Services Branch	1
	Customer Liaison Branch	1
		<u>4</u>
Production Division A	Supplies and Parts	2
	Preassembly Group 1	5
	Preassembly Group 2	5
	Final Assembly Group	7
	Packaging Group	2
	Shipping Group	2
	Administrative Support Group	1
		<u>24</u>
Production Division B	Purchasing	1
	Contractor Coordination Group	1
	Inventory Warehouse Group	2
	Product Assembly Group	4
	Packaging Group	2
	Shipping Group	1
	Administrative Support Group	1
	<u>12</u>	
Transportation Group	Dispatching Group	2
	Scheduling Group	1
	Vehicle Maintenance Shop	2
	Drive Support Services	2
	Over-the-Road Group	1
	<u>8</u>	
Divisions Management	Executive Group	2
	HR Group	1
	Accounting Group	1
	Training Group	2
	<u>6</u>	



name of project) who are managers of divisions, branches, and departments, individuals who supervise others in a work group and individuals with major project responsibility or those that oversee work of contractors or subcontractors.

You can tailor the rule to fit your organization or the scope of your STS program. After some experience with the STS certification, some companies have expanded internal participation rules to include work group leaders of contractors or subcontractors.

### **Define Business and Organizational Unit Participation**

In defining participation, you will need to identify which business or organizational units will be included in your STS program. Knowing that will help in creating your participation rules. Table 1 gives an example of how an organization coordinated participation in their company's STS program. The first two columns outline a breakdown between Divisions and Subunits.

If you have major organizational units within the company, you may want to prepare a separate table for each major unit.

### **Estimate the Number of Participants in Each Business and Organizational Unit**

You will want to obtain information on the work group structure and positions. In many cases the information is available in the Human Resource Department of your company. You will also need to know if there are different shifts. The same work group structure may occur in different shifts and you need to make sure that you do not overlook the work group leaders in each shift. Record the number of potential staff to be included in your program for each organizational unit and calculate the total in each area or the entire organization. In Table 1, the counts are listed in the third column.

Note that individuals who actually apply for the STS certification must have the qualifications listed. Because a few individuals in your original estimate may not meet these qualifications, your estimate of participants may be reduced when you actually implement your STS program. The qualifications include:

- Two years of experience in your industry.

- One year of experience as a supervisor.  
(Note: Individuals who are preparing to be supervisors may substitute two additional years of work experience in your industry.)
- Completing 30 hours of safety training through one or more courses.

### **Step 3. Define the Benefits**

Appendix A "The Alchemy of Mettle: Factors in STS Certification Effectiveness" contains a summary article that reports feedback from companies using the STS certification. Overall, the STS certification seems to facilitate ways in which people seek to improve safety performance. The article outlines these factors.

The article also lists benefits that employers have reported. One key benefit has been reduced injury rates. Some have reported as much as an 80% reduction in injuries. Another key benefit is reduction in workers' compensation premiums. Again, the rate of reduction has been as much as 80%.

### **Listing Potential Benefits**

You will want to review Appendix A and identify potential benefits for your STS program. Below is a list of reported benefits by STS companies that have already implemented an STS program.

- Reduced lost time injury/illness rates
- Reduced workers' compensation premiums
- Improved business/safety culture
- Productivity increases in work groups
- Timely resolution of identified safety problems
- Reduced dependency on full-time safety specialists

### **Estimating Potential Benefits**

If you are looking at reducing your injury rate, you may want to make a graph of potential reductions. Figure 2 is an example graph. The graph assumes that a company currently experiences 30 lost time injuries per year. The graph shows the reduction of injuries as a percent of the current number.

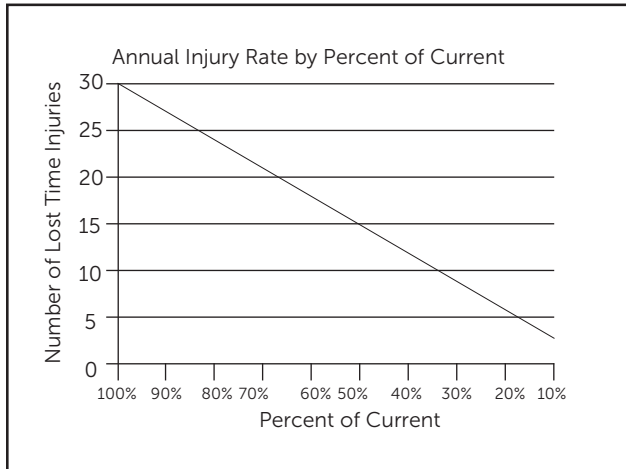


Figure 2

You can estimate the cost savings that result from reductions in recordable injury rates. You can multiply the reduction in the number of injuries by the average cost per lost-time case for your company to determine the potential cost savings. For example, suppose the STS program were to reduce the injury rate in Figure 2 by 30% from 30 to 21 per year. Also, suppose the average direct cost per lost time injury is \$20,000. Then the benefit would be  $9 \times \$20,000 = \$180,000$ .

Users of the STS program have also identified reductions in workers' compensation premiums as a key benefit. Some have experienced as much as an 80% reduction. You can estimate the premium reduction and visualize the impact. Figure 3 illustrates the reduction in cost per million dollars of premium based on the percent reduction.

Using Figure 3, a 20% reduction in premiums would be \$200,000 for each \$1,000,000 originally being paid.

Suppose a company pays an average of \$4.00 per \$100 of pay for workers' compensation. Also, assume that the company has 2,000 employees and the average pay is \$30,000, which results in an annual payroll of \$60,000,000. The workers' compensation premiums would be \$2,400,000 annually.

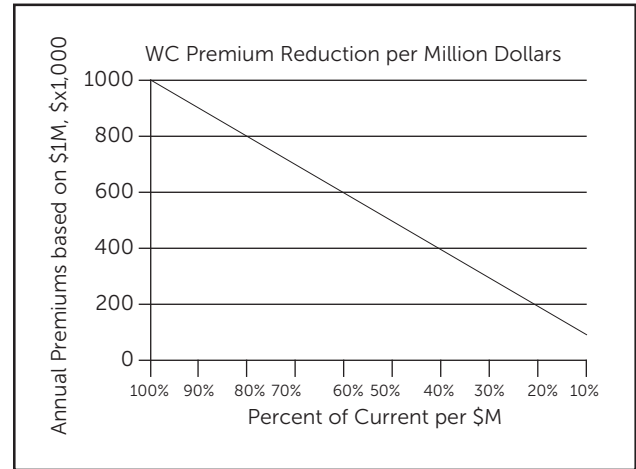


Figure 3

Consider an example in which implementing an STS program produces a 20% reduction in premiums. Figure 3 shows a 20% reduction to 80% per million dollars equals \$200,000 per year. The cost reduction would be  $\$200,000 \times 2.4 \text{ million} = \$480,000$ . The total premium cost would be  $\$2.4 \text{ million} \times 0.8 = \$1,920,000$ .

You may want to compute the potential return on investment (ROI) in financial terms. In that case, you can use the estimates of reduced costs in comparison to the cost to implement the STS program. For example, if you assume that the three year cost to operate the STS program (see Table 3) is \$269,500 and you assume that the workers' compensation reduction in the previous example is for the same company and \$480,000 annually. Then the ROI would be  $(\$480,000 \times 3\text{yrs}) / \$269,500/\text{yrs} = 4.9$ . In other words, the benefit for implementing the STS program for three years would result in \$4.90 saved for every \$1.00 spent.

Some other key benefits cannot be measured directly or effectively in financial terms. An example is achieving a safety culture. Nearly every company using the STS certification reports that their safety culture has improved. Indirectly, the culture improvement may impact employee satisfaction and retention.

Other benefits may be important for your organization. You will want to identify the potential benefits of greatest importance for your company.



## Step 4. Define the Budget

### Identifying Costs

It is important to identify the cost to complete the STS program per individual and to use that information to project the cost for participation by organizational units and the entire company.

Table 2 is a list of potential costs. The costs in your STS program can vary depending on how you set up some of the details.

### Creating an Annual Budget

Once you have established the approximate per-person cost for participation in your STS certification

program, you can develop an annual budget based on the number of participants in each year, the schedule of courses in a year and the cost per person.

You may want to make a projection for two to three years, depending on the rate at which you can move groups through the process. Consider the number of potential participants (Table 1 is an example), the schedule of courses, the cost per participant (Table 2 is an example) and the rate of participation projected in Step 1. Table 3 is an example of a summary budget for an STS program.

**Table 2. Sample STS Program Costs per Person**

#### Direct Costs - Achieving the Certification

##### Training

Course delivery	Derived from the course delivery method you select
Course materials	Determined for your STS program

##### Certification Process

Application Fee	\$105 <sup>a</sup>
Examination Fee	\$165 <sup>a,b</sup>
On-site Examination fee	\$2,495 <sup>a,c</sup>

Incentive	Determined for individual STS program
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#### Potential Indirect Costs - Achieving the Certification

Group coordinator training	
Group coordinator and administrator time to manage process	
Time away from position for participants	
- For training	
- For testing	

#### Potential Costs to Retain the Certification

STS Annual Renewal Fee	\$50 <sup>a</sup>
Support for Recertification	
-Tool Box/Tailgate talk materials	Determined for your STS Program
-Additional training courses and/or materials	Determined for your STS program

<sup>a</sup> Subject to change by BCSP

<sup>b</sup> for exam delivery at Pearson VUE test center

<sup>c</sup> for up to 20 individuals; site provides facility meeting quality requirements of BCSP

**Table 3. Example Budget for an STS Program**

(Costs shown are for illustration purposes only and may not reflect your STS program costs)

Year	No. of Participants	Training	Application Fees	Exam Fees	Renewal Annual Fees & CM	Incentives	Admin & Misc.	TOTAL
1	50	\$10,000	\$5,250	\$8,250	\$5,000	\$5,000	\$5,000	\$38,500
2	150	\$30,000	\$15,750	\$24,750	\$15,000	\$15,000	\$15,000	\$115,500
3	150	\$30,000	\$15,750	\$24,750	\$15,000	\$15,000	\$15,000	\$115,500

### Step 5. Create the STS Program Plan

Once you have thought through the details of your STS certification program, you will want to capture your work into an overall document. You may want to keep your detailed plans and supporting information separate. At this point, your goal is to create a summary that you can use to explain to others how you want to operate the program and why it will be of benefit for your company.

In summary, a plan should address the three key elements of management:

- What you want to do.
- What it will cost/save.
- What is the schedule for completion?

### Program Documentation

Typical elements of an STS Program Plan include the following:

- Executive summary
- Introduction/Purpose
- Overview of STS certification
- Who will participate
- What it will cost
- What are the financial and organizational benefits
- How it will be operated for specific organizational units
- What is the proposed schedule

### Example STS Program Plan

Figure 4, on the following page, is a sample executive summary for an STS certification program. You can use it for guidance when you create your own for your STS program.

The complete STS Program Plan is an expansion of the information in the Executive Summary. The backup details are the analysis you completed in Steps 1 through 9.



### **Sample STS Program Executive summary**

XYZ Company  
Summary of Safety Trained Supervisor Certification Program  
for  
Company Workgroup Leader

#### **Objective**

The purpose for introducing use of the Safety Trained Supervisor (STS) certification as part of the XYZ Company safety effort is to increase our safety performance and profitability and improve the safety culture.

#### **Approach**

The STS Program will be implemented through a phased effort. The program will begin with a pilot program for one company division and then expand to the remaining divisions. The phased approach will assist in developing experience to ensure success of the program. It is estimated that the phased approach will require three years to implement across the company. After that, the program will move to a sustained level.

#### **Justification**

Based on success of other companies, we have estimated that we can at least reduce our injury rate by 30% over three years. As a result, we are likely to see a similar rate of reduction in our workers' compensations premiums. Overall, our analysis shows that the ROI will create a savings of \$5.00 for each \$1.00 invested. In addition, we are likely to gain a significant improvement in our safety and company culture and may also gain some improvements in productivity that we have not anticipated.

#### **Schedule**

We wish to begin implementation of the STS program on January 1, 20xx. Phase I is the pilot program covering the first year. In Phase 2 during the second and third years, we intend to expand across the company. In Phase 3, which is a maintenance phase, we will continue to support the certification requirements and add new work group leaders who did not participate in Phases 1 and 2. We will also support retention of STS through additional safety training activities.

#### **Costs**

Attached is a summary budget sheet showing total STS program costs.

Figure 4

## Step 6. Gain Management Support

The final step is selling your STS program to senior management and getting support and funding to implement it. At this point, you are not trying to explain to program participants the details of how it will be implemented. That activity is addressed in Chapter 4.

### Preparing Your Presentation

You will want to be well prepared to present your case in order to achieve support for your approach to improving safety performance. You may wish to have a slide show along with handouts.

It is likely you will have to explain the STS program several times to slightly different audiences. As a minimum you will need to present your plans to the following:

- Your immediate supervisor.
- Senior management.
- Business unit and other managers at various levels who need to support your initiative.

There may be a need for slightly different slide presentation and different versions of the plan for use at different levels.

### Presenting to Your Immediate Supervisor

You will want to discuss the STS program concept with your immediate supervisor. A major goal at this level is to get feedback on your plan. The feedback will allow you to improve on your initial planning work and address general or specific issues within your company. Your plan may tie into other initiatives which are ongoing within the company.

Your supervisor may also want to participate in the other presentations. You may want to practice your presentation with your supervisor or pilot test it with colleagues or close associates.

### Presenting to Senior Management

In this presentation, your goal is to gain full support for your STS program. You will need a presentation that gives the overall picture along with projected results and costs. Your handouts should be short and to the point. You can always provide the details you may use in presentations with other levels. You may

need to have information in specific formats used by the company.

### Presenting to Business Unit Managers

There are two potential kinds of presentations to Business Unit Managers. In one case, they may be part of the approval process to initiate your STS program. They may need to endorse the concept as being good for their business unit. In another case, you will focus on how you will implement the program in general within their business unit.

Depending on the goal for presentations at this level, you may need to adjust your slide presentation to address important questions. You may also need to have the STS Program Plan as a handout in addition to the Executive Summary document.

## Step 7. Arrange for Training

In this step, you will need to understand what training is required for STS applicants, what training is most effective for STS success, where to locate training materials, and how best to deliver training for your organization. You will want to ensure safety training leads to passing the STS examination.

### Training Required

Each candidate for the STS certification must present 30 hours of safety training when their application is submitted. The employer must confirm applicants have met the requirement.

### What Training to Use

While the required training for applicant qualifications can be derived from a collection of training courses over time, some companies establish their own training program specifically for the STS program. In order to increase the likelihood that STS applicants will pass their examination, the training should cover the subject matter included on the examination blueprints to be used by your company.

The examination subject outlines are called examination blueprints. The outlines list the contents and the portion of the examination items devoted to each major subject area. Each examination has 100 multiple-choice items structured to meet the published examination blueprint. The examination blueprints are available on the BCSP website.



Note: There are currently four different STS examinations, plus one under development. The choices may expand for specific industry groups. The current examinations are:

- STS Construction
- STS General Industry (applicable to a wide range of industry groups)
- STS Petro-Chemical (a variation of STS-General Industry)
- STS Mining

Always remember there are two approaches to preparing people for an STS examination. You can conduct a training course or people can study on their own or in small groups. Both may be important. As part of self-preparation, you may want to provide participants with STS practice examinations. Remember, your major goal is to prepare people sufficiently to pass the STS examination.

Table 4 is a list of known training materials for the STS examinations. Not all providers have materials for all examinations. You may want to preview these materials before making a purchase decision.

#### Table 4. Sources of Training Materials.

The training available for STS from various sources continues to grow. The following organizations have produced training and practice examination materials for the STS Construction examination:

- **National Center for Construction Education and Research (NCCER)**  
3600 NW 43rd Street  
Building G  
Gainesville, FL 32606  
[www.nccer.org](http://www.nccer.org)  
P: +1 352-334-0911  
  
NCCER offers a *Safety Technology* program in the Contren Learning Series. There is both a *Participant Guide* and an *Annotated Instructor Guide*.
- **ClickSafety, Inc.**  
333 Camille Ave., Suite 100  
Alamo, CA 94507  
[www.clicksafety.com](http://www.clicksafety.com)  
P: +1 925-855-7233  
  
ClickSafety produces an online training program called *STS Construction Exam Preparation*.
- **Datachem Software, Inc.**  
69 Milk Street, Suite 300  
Westboro, MA 01581  
[www.datachemsoftware.com](http://www.datachemsoftware.com)  
P: +1 508-366-5277  
  
Datachem Software produces practice examination questions for the STS Construction examination.

- **Kaplan EduNeering**  
202 Carnegie Center  
Suite 301  
Princeton, NJ 08540  
[www.kaplaneduneering.com](http://www.kaplaneduneering.com)  
P: +1 609-627-5300  
F: +1 609-627-5330  
  
Kaplan EduNeering's STS program provides supervisors with training in subject areas including regulatory compliance, workplace safety and worker protections.
- **BCSP**  
2301 W. Bradley Avenue  
Champaign, IL 61821  
[www.bcsp.org](http://www.bcsp.org)  
P: +1 217-359-9263  
  
BCSP offers a Self Assessment Examination booklet for each STS examination.

Table 5 is a list of publications covering significant topics on the STS examinations. These may be resources for developing a training course. They can also become a reference library for those who want to study on their own or in addition to a training course. You may also visit the BCSP website and the BCSP Library of Safety Practice page (<http://www.bcsp.org/safetypracticelibrary>) for additional volumes.

**Table 5. List of Publications Providing Information Relating to STS Examinations**

Publication	Applicable Exam			
	C	GI	PC	M
C=Construction, GI=General Industry, PC=Petrochemical, M=Mining				
<i>Accident Prevention Manual, Administration &amp; Programs</i> , 13 <sup>th</sup> Edition, National Safety Council, Itasca, IL, 2008.	•	•	•	•
<i>Accident Prevention Manual, Engineering and Technology</i> , 13 <sup>th</sup> Edition, National Safety Council, Itasca, IL, 2008.	•	•	•	•
<i>Construction Safety Handbook</i> , 2 <sup>nd</sup> Edition, Mark McGuire Moran, Government Institutes, Ind., Rockville, MD, 2003.	•			
<i>Manual of Accident Prevention for Construction</i> , 8 <sup>th</sup> Edition, Associated General Contractors of America, Arlington, VA, 2003.	•			
<i>Occupational Health &amp; Safety</i> , 3 <sup>rd</sup> Edition, National Safety Council, Itasca, IL, 2000.		•	•	•
<i>Official OSHA Construction Safety Handbook</i> , 5 <sup>th</sup> Edition, J.J. Keller & Associates, Inc., Neenah, WI, 2005.	•			
<i>Safety Supervision</i> , 2 <sup>nd</sup> Edition, Dan Peterson, American Society of Safety Engineers, Des Plaines, IL, 1999.	•	•	•	•
<i>Safety Technology, Participant Guide</i> , National Center for Construction Education and Research, Gainesville, FL, 2003.	•			•
<i>Supervisors' Safety Manual</i> , 9 <sup>th</sup> Edition, National Safety Council Itasca, IL, 1997.	•	•	•	•
<i>You've Just Been Made the Supervisor...Now What?</i> Onion and O'Toole, National Safety Council, Itasca, IL, 2003.	•	•	•	•
<b>Government Standards</b>				
Code of Federal Regulation. Title 29 (Labor)				
Part 1904, Recording and Reporting Occupational injuries and illnesses.		•	•	
Part 1910, Occupational Safety and Health Standards.		•	•	
Part 1910, Process safety management of highly hazardous chemicals.		•	•	



## Planning Your Training

You will need to define how you will handle training for your STS program. You will need to decide on at least the following items:

- **Training Materials:**
  - Will you use purchased training materials? If so, which ones?
  - Will you use an internally developed training course?
  - Will you have a reference library? If so, how will it be administered?
  - Will you have self-assessment or practice examinations?
- **Training Delivery:**
  - Will you use computer-delivered or online training?
  - Will you use live training?
  - With an in-house trainer?
  - With a contracted trainer?
  - How large is the class size?
- **Training Frequency and Schedule**
  - How many times will you need to offer the course? (Refer to your list of STS participants and the class size and step 7, create a program schedule.)
  - What is the schedule for the course offerings?
  - Will you use a concentrated schedule or spread course offerings over several weeks/months?

Table 6 is an example training plan and schedule.

<b>Table 6. Example Training Plan and Schedule</b>	
Course Name:	STS Preparation
Length of Course:	30 hours
Delivery:	Live
Instructor:	Robert Smith, Corporate Safety Department
Other Resources:	Reference Library for each company division  Self-Assessment examination for each candidate
Schedule:	July 20-24 August 3-7 August 17-21 August 31-September 4 (makeup session)

Table 7 is an example of a training course outline.

Hour	Content
1	Introduction to STS Program and Process  Introduction to course and course materials  Examination preparation strategies and support
2-3	Basic safety and health principles for workgroup leaders
4-5	Hazard communication
6-7	Personal protective equipment
8-9	Safety in the work area
10-11	Machine and tool safety
12-13	Ladders, scaffolds and elevated work
14-15	Walking and working surfaces
16-17	Lifting, materials handling and ergonomics
18-19	Forklift and vehicle safety
20-21	Fire protection and prevention
22-23	Other job hazards and controls
24-25	Work planning and job hazard analysis
26-27	Written safety procedures
28-29	Effective safety cultures
30	Summary of training and STS Program

## Step 8. Manage the Certification Process

### Overview of the Certification Process

Chapter 2 discussed the STS certification process. To recap, you need to attend to the following key elements of the process for each group that you work with:

- 1) Make sure each individual is qualified.
  - Have they completed the required training?
  - Have management sign off or submit documentation of training.
- 2) Have each individual complete the STS application.
  - Collect them.
  - Make sure they are complete.
  - Make sure applicants sign them.
  - Identify how you will administer the applications.
- 3) Submit the applications.
  - Contact BCSP to explain you are submitting a group of applications.
  - Prepare and pay the STS Application Fee for each person in the group in one payment.
  - Submit the applications as a group to BCSP.
- 4) Receive eligibility evaluations from BCSP.
  - The BCSP evaluation results will establish whether each application is accepted and the applicant is eligible for an STS examination.
  - Follow up with BCSP to close any deficiencies or rejected applications.
- 5) When the group is ready, submit registration requests with fees for each person.
- 6) Help participants to be good test takers.
  - Review how the examination and items work.
  - Explain the detailed rules for testing at a Pearson VUE test center.
  - Explain which test center to use for the STS examination.
  - Go over strategies for using time well



and making good guesses on items you don't know.

- 7) Track whether participants are completing examinations.
  - Determine whether testing appointments were made and completed.
  - If necessary, file for test authorization extensions with BCSP.
- 8) Collect results (and potentially score reports) from each test taker.
- 9) Make sure those who passed received their certificate.
- 10) Help those who failed the exam to identify their weaknesses and how to become successful.
- 11) Present recognitions to successful candidates.
- 12) Provide performance metrics to appropriate managers.
- 13) Prepare for support for annual fees and Recertification.

### Choosing Testing Delivery

There are two options for testing delivery. One requires each candidate to test at a Pearson VUE testing center using computer-based testing. The other option is to arrange for test delivery at a specific facility or location using paper-and-pencil tests. BCSP recommends use of Pearson VUE testing centers if at all possible.

The advantages for using Pearson VUE testing centers include:

- It is less expensive for examination fees.
- Official results from examinations are available in about one week. Candidates receive preliminary results as soon as they complete their examination at a testing center.
- The testing environment is highly controlled.
- Examinations at Pearson VUE testing centers are available every business day.
- Appointments for examinations are made online.

The disadvantages for on-site testing may include:

- On-site testing using a BCSP approved proctor is more expensive than at a Pearson VUE testing center.
- Depending on your location, the tradeoff between the work time to travel to a center and return to regular work plus the travel costs may offset the additional costs for on-site testing.
- Results are not available for a few weeks after testing is completed. There are no preliminary results.
- Testing must be arranged through BCSP.
- Test facilities must be approved by BCSP.

### Planning for Annual Renewal and Recertification

It is important to recognize the STS certification extends beyond achieving the certification. There is an annual renewal fee. Refer to the BCSP website for the current fee. There are also recertification requirements. Chapter 5 addresses more details in helping certificants handle this requirement.

### Structuring the Administration

You will need to anticipate how you will administer your overall STS program. We refer to this role as the program administrator. Depending on the scale of your program, it could extend from a collateral duty responsibility to a larger part-time role.

You will need to define how you want to operate your STS program. You will need to identify how you will track records of participants, their progress and certification status.

You may eventually establish a basic record keeping system in a general use database system. You may want to incorporate reports for each organizational unit on participation and be able to generate metrics for Step 9. You could adapt your existing record keeping systems to handle this for you.

Before implementing your STS program, you will want to craft basic operating procedures for the program in general, for the program administrator, group coordinators and for participants.

## Setting up Record Keeping

The list below provides examples of the kind of data that you will want to track:

- Participant name
- Department/organization unit
- Phone
- In-house mail address or email
- Status regarding participation
  - Signed up for training
  - Completed training
  - Application submitted
  - Application accepted/rejected/incomplete
  - Registered for examination
  - Examination scheduled
  - Examination completed
  - Examination passed/failed
  - Annual renewal for (year) paid and certification renewed
  - Recertification completed for 5-year cycle
- Key dates, such as
  - Date application submitted
  - Date eligibility accepted by BCSP
  - Date examination registration completed
  - Date examination scheduled
  - Date examination completed
  - Date certification awarded
  - Date annual renewal paid
  - Date Recertification cycle ends
- Other data
  - Recognition awarded and date

## Making Certification Materials Available

When planning your STS program, you need to obtain a copy of each STS publication that may help you. The STS publications are available on the BCSP web site: [www.bcsp.org](http://www.bcsp.org).

As you work toward implementation, you will need to provide individuals with the *STS Candidate Handbook*. Copies are available electronically as PDFs from the BCSP website.

## Identifying Group Coordinators

A group coordinator is defined in this publication as a person within an organizational unit who assists participants through the STS process. Group coordinators also work with the program administrator.

If you are going to process groups of candidates in your STS program, you will want to identify who will coordinate the people within each group and who will coordinate your STS program with BCSP as groups move through the certification process.

There are likely to be several options within your organizational structure for handling such details. Some organizations assign management of groups within an organizational unit to a single group coordinator.

You will want to identify who the group coordinator(s) will be and establish an outline of responsibilities for them. You will want to train them in those responsibilities and explain how they will work with the STS program administrator. You will need to provide contact information for the administrator, group coordinators to BCSP.

## Coordination and Training of Group Coordinators

As noted previously, you may have identified group coordinators to assist with getting people in their organizational unit through the STS certification process. In addition to making a list of the group coordinators, you will want to define their roles and instruct them on how to complete their duties.

In planning, you will need to craft some instructions for your group coordinators and you will want to train them. During implementation, you will likely need to establish periodic meetings in which you obtain feedback on what is working well and what is not. This information will help you improve your STS certification program administration.



## Administering Recognition

A role you may assign to group coordinators is tracking the recognitions awarded as part of the STS program. Step 10 outlines options for recognition.

## Tracking Program Progress

The STS program administrator will have the task of periodically, on a defined schedule (semi-annual or annual); compiling reports of the key metrics you have chosen. Group coordinators will need to supply current data in order for the administrator to construct the reports.

### Step 9. Structure Program Metrics

There are a number of ways to track the progress and benefits of an STS program. One can use both leading indicators and trailing indicators. Metrics help management to assess the STS program achievements and effectiveness.

#### Leading Indicators

One approach is to measure the rate of participation from among those eligible to participate. Using data in Table 1 for an example, suppose there were two people in the Design Division, eight in Production Division A, and one in the Transportation Division who had achieved the STS certification. Then, the Design Division would have a 50% participation rate, Production Division A would have a 33% rate and the Transportation Division would have a 13% rate.

Once an STS program is underway, one can track the rate of participation at any level of an organizational unit.

Another approach is to track a rate of progress in moving people through the STS process. Using Table 1 for an example once again, suppose the first training course had been completed and 15 people completed the entire course. Then 15 of the 54 potentially eligible people for the Healthcare Products Unit would represent a 28% rate of completion for the training phase. Similarly, suppose 10 of the 15 people had applied with BCSP for the STS and been declared eligible for the STS examination. The rate of completion through this phase of the program would be 19%. In addition, if five of those eligible for an STS examination had passed the examination and achieved the STS, the overall rate of completion for achieving the program would be 2%.

The STS program does not end with achieving the STS certification. There is an annual renewal fee to retain it and certificants must meet Recertification requirements every five years. One could setup leading indicators of retention for this part of the STS program. For example, assume that all 54 people identified in Table 1 had achieved the STS and after two years, only 48 still held it. That would be an 89% retention rate at the end of two years. In another example, assume the 54 people had retained the STS and had to demonstrate compliance with the Recertification requirement after five years. If 45 met the recertification requirement and the remainder did not, that would be an 83% retention rate.

#### Trailing Indicators

A major justification for using the STS program is that it contributes to driving down the company injury rate and ultimately the premiums for workers' compensation insurance.

You can monitor the injury rate each year compared to the rate prior to introducing an STS program. The injury rate itself and the rate of reduction can be trailing indicators of the impact of the STS program.

Similarly, you should record the total workers' compensation premiums prior to introducing the STS program and what it is for each year following. Because many workers' compensation premiums are derived from a three year history of claims, it will take a while to be able to gain a full measure of the impact of the STS program.

### Step 10. Create Recognition for Participants

Achieving the STS certification by itself provides a mark of distinction for those who achieve it. A number of companies using the STS certification have introduced other recognitions and incentives associated with their STS programs. Incentives can help make the STS program more effective.

#### Identifying Recognition Choices

To add value and recognition for those who achieve the STS certification, there are a number of approaches you can use. The following list provides some ways others have established the importance of preparing for and achieving the STS certification. You may have other methods you would like to use.

- Provide STS stickers for hard hats of construction workers.
- Assign a different color to the hard hat of individuals who have achieved STS.
- Publish the photo of those who have achieved STS on the company intranet.
- Publish the photo of those who have achieved STS in the company newsletter.
- Create an honor roll plaque for each department listing those achieving STS.
- Withhold use of a company vehicle until achieving STS.
- Establish a page on the company web site listing those achieving STS.
- Provide desk or door name plates to STS certificate holders which feature the BCSP approved STS logo.
- Award a watch with the company logo on the face and STS achievement date on the back.

### Selecting Recognition

Clearly, cost is one consideration for recognition to denote having achieved the STS certification. Compared to the overall investment in the certification and the overall benefits the employer receives in reduced injury rates, workers' compensation premiums, and improved safety culture, the cost for added recognition is generally low.

Another consideration is visibility of the program and publicity for the program. Some incentives provide visibility and help promote participation. The visibility adds peer pressure, which helps ensure participation.

BCSP runs a recognition program for STS sponsoring companies. If a sponsoring company has 25 successful applications within a given year, BCSP will send a beautiful plaque to hang on your wall. Every 5 years you will receive a plate to be mounted on the plaque listing the number of successful STS you have had over that five year period.

### Step 11. Scale Up the Program

Most organizations start the STS certification program on a limited basis with one organizational unit or project. Rather than implementing their STS program with several groups, starting on a small scale helps work out the details. In planning your STS program, you will want to identify a means for starting slowly and then incorporating additional business units.

### Getting Started

To get started you will want to select the organizational unit for your pilot program. You will want to put your STS program design into use to ensure that each aspect of the certification process works well. You are likely to find that some details in your program can be improved. As you move through the process, you will want to make notes and adjust your program as you identify opportunities for improvement.

For example, make sure that your pilot program simulates your program process. Assign one individual to serve as the program administrator and others to be group coordinators for applicants and candidates. In accordance with your planning, make sure the group coordinators lead the groups through the training courses and testing process, such as registering, making appointments for examination times, and receiving results.

### Evaluating Initial Success

One important approach for the pilot program is to collect feedback from individual participants. You may want to get feedback in small increments or conduct a brief survey after they achieve certification. You can get course evaluation feedback at the end of a training course. You also can get comments on the certification application and examination process, the examination and the test delivery. You can compile comments on the overall STS program and calculate the value of the STS to the participants and/or your company. You will want to use the feedback collected to revise your implementation procedures and documents.

Another part of your pilot program is to evaluate the effectiveness. There are several aspects in assessing success. One approach is to compute the leading indicators, planned in Step 9. Because there may be time delays in being able to compute some trailing



indicators, you will not be able to compile them immediately.

### **Launching the Next Step**

After incorporating the lessons learned from your pilot program, you will want to expand participation. You will engage new organizational units, their management team, train group coordinators, explain where to get assistance with the STS program details, and address numerous other details.

Some companies have expanded their STS program in increments after completing the pilot program. You may want to work with top management to establish a participation schedule for various organizational units. The expansion schedule may be limited by funds, people to manage the overall STS program details and other factors.

### **Expanding to Contractors and Subcontractors**

After you have implemented your STS program within your company, you may want to explore the potential benefits of requiring contractors or subcontracts to participate.

In construction, for example, a general contractor may be able to earn additional savings through wrap-up insurance plans for a project. A general contractor or owner may require contractors and subcontractors to participate in the STS program as a means for increasing fundamental safety knowledge and reducing injury rates among all companies working on the project. The result is a discount or rebate in insurance premiums at the end of the project.

# 4. Implementing Your STS Program

The overall goal is to improve safety performance through use of the STS certification. So far in this workbook, you have gained an understanding of how the STS certification works, why it might be helpful in improving safety performance, how to plan your STS program and gain management approval and funding to move ahead. The final task is to actually put your STS program into use. This chapter will provide some guidelines for making implementation go smoothly.

## Overview

This chapter assumes you have gained approval and funding to get your STS program underway. At this stage we explore identifying how to get started and how to manage the implementation.

To be ready for implementation, you will need to have

- program materials
- an introductory presentation on how the STS program works
- a schedule of activities for STS participants
- record keeping arranged
- a program administrator, group coordinators, trainers and other potential personnel in place and trained in their roles
- communication channels established

## Program Materials

You will need to have program materials in hand for participants. The materials include at least the following:

- Copies of the STS Candidate Handbook for each candidate
- Training course materials, handouts, and completion certificates
- Recognition items for STS certifications
- Operating procedures for administrative support personnel

## Group Charts and Schedules for Training and Testing

In preparing to announce your STS program to participants, you will need a chart of potential participants. You may want to have separate charts for each organizational unit. That way, each participant can see who else will be involved with them. The individuals may want to work together on preparing for their STS examination and exchange notes along the process.

## Record Keeping and Tracking Groups

You will need to set up a way to manage the STS program records. You may need a database application or spreadsheet application. Your systems group may be able to help.

## Certification Applications and Payments

You will need to work out procedure for submitting applications to BCSP and learning whether BCSP approves eligibility for participants. You may assign a portion of that process to coordinators within organizational units. If you involve the coordinators, you will need a way to communicate progress for individual participants to the program administrator handling central record keeping.

You will need to work with your finance department on how best to handle payment of application fees. BCSP can work with coordinators for group payment in order to minimize the number of financial transactions. However, it is essential to tie any payment to an exact list of individuals to be covered by that payment and coordinate the list with BCSP. If a payment is off by only one person, there will be a need for extra administrative work which can delay the process for everyone else on the list.



## **Examination Registrations and Examination Completion**

You will need to establish procedures for registering participants for their STS examination with BCSP. You will want to track whether all participants have actually taken their examination and what their pass-fail results are. This may be a task to be assigned to coordinators within organizational units. Again, the central record keeping contact will need to know certain data from the examination process.

You will need to work out how to help anyone who fails to upgrade their knowledge in order to pass and help them re-register for an additional examination attempt after completing additional preparation.

You will need to include in your process who has passed in order to be able to implement any recognition activities that you have planned.

## **Results and Notifications**

There are several ways to manage examination results. On the STS application form, applicants authorize release of their application and examination results information to their employer/sponsor. Otherwise, in accordance with national accreditation standards, BCSP must assume personal information and examination results are confidential information between BCSP and the individual pursuing certification.

You will need to track who has completed an examination and the examination results. Those who pass will receive notice they have achieved the STS certification. BCSP will also make that information available to the employer/sponsor identified on the application. You will need to establish procedures for this information flow and whether results go to the coordinator of a group or some other person involved in managing your STS program records.

## **Recognizing Completion**

As noted earlier, finding ways to recognize the individuals participating in the STS program is a good way to gain publicity and support. You will want to define what process will be followed for recognizing those who successfully achieve the STS certification. The recognition process may involve any of the following:

- A brief ceremony at a staff meeting of the work group or organization unit of which it is a part. The ceremony may include presenting the STS certificate and any recognition item(s) to the individuals.
- Maintaining an honor roll chart of those achieving the STS. This might appear in the company newsletter, on a company intranet, on a display in the company lunch room, on an honor roll plaque or through other means.
- Sending the individual a letter of congratulations from top management.

## **Tracking Costs and Results**

In preparing for implementation, you will want to establish procedures for tracking costs incurred with your STS program and the monetary value of any results. That way you will be able to show the financial impact of implementation. This would provide actual numbers and not rely on projections of financial success.

You will want to develop reports which capture leading indicators and trailing indicators you have defined for your STS program. You will need to define how often you need to compile the information and publish any reports. You will need to identify who should receive the reports and where results should be posted.

You will need to have established how you will handle annual renewal fees. The STS is valid through the end of each calendar year and must be renewed annually. BCSP normally bills for annual renewal fees near the end of the previous year. During the first partial year, BCSP bills on a prorated bases for the portion of the year the STS is held. You will need to have procedures for handling the payment of the annual renewals, both for the initial partial year and then annually.

## **Recertification**

Chapter 5 addresses how to plan for recertification. Anyone holding the STS must recertify every five years.

## **Training Coordinators**

In order to have effective administration of your STS program, it may be necessary to engage program coordinators within significantly large organizational units. These individuals can help participants with the details of the process and work with BCSP in tracking participation in specific steps. The coordinators may work with the person who is handling the overall administration of the program and tracking records, costs, and accomplishments.

You will need to define instructional materials for coordinators that defines their specific responsibilities. You will need to provide each coordinator with a list of potential participants within their organizational units and how they may be assigned to a group moving through training and other steps together. The coordinator will need a schedule for the participation of each group in the program. The coordinator will need contact data for people who can help with the process and contact data for the STS program participants they will be supporting.

## **Announcing the Program**

The individuals who are selected to participate in safety leadership development through the STS program need to learn what to expect. It is important to build enthusiasm for the program and gain a commitment from participants.

You need to develop an orientation session for each group that will go through training and then the STS certification. You will need materials for announcing the program to them. You will need information about the schedule for the entire process so participants can plan ahead to ensure their availability.

You will need to decide how best to communicate to the individual participants through email, company newsletter, written materials, and presentation briefings. You may want to establish a consistent image for your materials and establish a name for the STS program. You may want to identify the best way to announce participation and work with senior managers to engage them in announcing the STS program to people within their organization.

# 5.

## Follow Up After Achieving Certification

Certification is not like a training course where participants spend a few hours in a classroom and walk away with a photocopied completion certificate. Achieving the STS certification means continuous learning and maintaining a level of professionalism and expertise in the field. To meet this obligation, STS certificate holders must recertify and pay an annual fee.

Recertification for the Safety Trained Supervisor is a requirement to maintain STS status. National accreditation standards for certification programs require recertification. There is no fee for STS Recertification, which happens every five years. However, this is different from the annual renewal.

### Annual Renewal

An annual renewal fee is required to retain the STS designation. The designation becomes invalid if the fee is not paid. After an individual has passed the STS examination, the fee is prorated for the remaining portion of the year.

Individuals or employers may pay the annual renewal fees. BCSP accepts payments in checks, money orders, and credit cards. Please be aware, checks and money orders must be drawn on a U.S. bank and made payable to BCSP.

The annual renewal fee is due at the beginning of each calendar year. A late fee will be added if payment occurs after the published deadline on your statement. Non-sufficient fund (NSF) checks will stop action on the certification process for any candidate or certificate holder covered by the check and any related NSF fees are billed to the check originator.

### Recertification

To keep the STS certification, individuals must recertify every five years. The purpose of recertification is to help ensure that certificants remain knowledgeable in safety and health practices applicable to managers, supervisors, and work group safety leaders.

The Recertification cycle is based on the date a certificant passed the STS examination and achieved the STS certification. It officially begins on January 1 of the year following this date and ends on December 31 of the fifth full year. The first Recertification cycle may be longer than five years because it includes the partial year after passing the STS examination.

Annually and near the end of a five-year Recertification cycle, BCSP notifies holders they must meet recertification requirements to retain their certification. An STS Recertification Activity Log must be received by March 31 of the year following the end of the Recertification cycle. Recertification Activity Logs must be postmarked or received by fax no later than March 31.

### Recertification Activities

There are several specific Recertification activities all STSs can participate in during their five-year cycle in order to keep the STS certification.

***Passing any STS Examination again.*** One option is sitting for and passing any of the available STS examinations (construction, general industry, mining, or petrochemical) anytime during the five-year Recertification cycle.

***Completing Training and/or Teaching Activities.*** Attendance and/or teaching safety and health courses, presentations and tool-box talks are likely avenues for STSs to meet the Recertification requirement. A total of 30 hours of training or teaching is required. The 30 hours can be completed in small increments or through a single course, as long as the 30 hours is completed during the Recertification cycle.

***Achieving the OHST/CLCS or CHST Certification.*** In the interest of professional development, an STS can apply and qualify for the OHST/CLCS or CHST certification, pass the applicable examination, and achieve the certification. Visit the BCSP website ([www.bccsp.org](http://www.bccsp.org)) for more information about the OHST/CLCS and CHST certifications.

## **Tracking and Reporting**

STSs must keep track of their own Recertification activities. An exception is passing the STS examination or achieving the OHST/CLCS or CHST certification. BCSP will have records to verify these activities. Otherwise, an official STS Recertification Activity Log must be used. **No other form is accepted.**

## **Advancing Safety Responsibility**

Companies making a commitment to safety through STS certification reap many benefits. Through safety practice at the work group level up through executive management, companies recognize team building, leadership and empowerment for positive change. Professionals at all levels can make a difference.

Safety professionals lead the charge for workplace safety responsibility. Using every available tool from posters to seminars, advocating safety helps reduce injury rates, keeps workers' compensation premiums down and improves morale. It makes for a cleaner, safer and more productive company culture.

It is imperative safety professionals promote safety responsibility at their workplace and beyond.

## **Promoting Professionalism Among Safety Practitioners**

Many who achieve the STS will want additional safety training to become better at their positions by learning more about safety and the role it plays in their environment. The STS has proven to be a stepping stone for many workers who achieve certification and want to grow in safety responsibility, which could lead to greater roles like the OHST or CHST certification.

## **Gathering and Qualifying Feedback**

Once you have implemented a STS program in your company it will not end there. It is always important to have continuous follow-up on how the program is working and how it can be improved upon for the next class.

# References

To help implement an STS program, the following resources are provided. These downloadable PDFs and companies provide detailed information toward creating an active and successful STS program.

## STS Candidate Handbook

Featuring an overview of the STS examinations, sample exam items, exam specifications, ideas for preparing for the exam and application instructions, the STS Candidate Handbook is essential reading for everyone looking to become an STS. It may be found as a downloadable PDF at the BCSP website ([www.bcsp.org](http://www.bcsp.org)).

## STS Recertification Guide

For a detailed look at the STS recertification process, review the STS Recertification Guide. It answers many questions regarding acceptable training courses, Continuing Education Units, leave of absences, extensions and reinstatement. The STS Recertification Guide may be found as a downloadable PDF at the BCSP website ([www.bcsp.org](http://www.bcsp.org)).

## Training Resources

The training available for STS from various sources continues to grow. The following organizations have produced training and practice examination materials for the STS Construction examination:

### National Center for Construction Education and Research (NCCER)

3600 NW 43rd Street  
Building G  
Gainesville, FL 32606

[www.nccer.org](http://www.nccer.org)

Phone: 352-334-0911

NCCER offers a Field Safety program in the Contren Learning Series. There is both a Participant Guide and an Annotated Instructor Guide.

### Click Safety, Inc.

333 Camille Ave., Suite 100  
Alamo, CA 94507

[www.clicksafety.com](http://www.clicksafety.com)

Phone: 925 855-7233

Click Safety produces an online training program called STS Construction Exam Preparation.

### Datachem Software, Inc.

69 Milk Street, Suite 300  
Westboro, MA 01581

[www.datachemsoftware.com](http://www.datachemsoftware.com)

Phone: 508 366-5277

Datachem Software produces practice examination questions for the STS Construction examination.

### BCSP

2301 W. Bradley Avenue  
Champaign, IL 61821

[www.bcsp.org](http://www.bcsp.org)

Phone: 217 359-9263

BCSP offers a self-assessment examination booklet for each STS examination.

### Kaplan EduNeering

202 Carnegie Center  
Suite 301  
Princeton, NJ 08540

[www.kaplaneduneering.com](http://www.kaplaneduneering.com)

609-627-5300

609-627-5330 (Fax)

Kaplan EduNeering's STS program provides supervisors with training in subject areas including regulatory compliance, workplace safety and worker protections.

# Published References Associated with the STS Examinations

These published references provide reasonable coverage of the subject matter associated with all three STS examination blueprints. Examination items are not necessarily taken directly from these sources. Previous or later editions of these or other references available may also present acceptable coverage of the subject matter.

1. Accident Prevention Manual, Administration & Programs, 12th Edition, National Safety Council, Itasca, IL, 2001.
  - STS-Construction
  - STS-General Industry
  - STS-Petrochemical
  - STS-Mining
2. Code of Federal Regulations, Title 29 (Labor), Part 1904 (Recording and Reporting Occupational Injuries and Illness).
  - STS-General Industry
  - STS-Petrochemical
3. Code of Federal Regulations, Title 29 (Labor), Part 1910 (Occupational Safety and Health Standards).
  - STS-General Industry
  - STS-Petrochemical
4. Code of Federal Regulations, Title 29 (Labor), part 1910.119 (Process safety management of highly hazardous chemicals).
  - STS-General Industry (general)
  - STS-Petrochemical (emphasis)
5. Construction Safety Handbook, 2nd Edition, Mark McGuire Moran, Government Institutes, Inc., Rockville, MD, 2003.
  - STS-Construction
6. Field Safety, National Center for Construction Education and Research, Gainesville, FL, 2003.
  - STS-Construction
7. Manual of Accident Prevention for Construction, 8th Edition, Associated General Contractors of America, Arlington, VA, 2003.
  - STS-Construction
  - STS-Mining
8. Occupational Health & Safety, 3rd Edition, National Safety Council, Itasca, IL, 2000.
  - STS-General Industry
  - STS-Petrochemical
9. Official OSHA Construction Safety Handbook, 5th Edition, J.J. Keller & Associates, Inc., Neenah, WI, 2005.
  - STS-Construction
10. Safety Supervision, 2nd Edition, Dan Peterson, American Society of Safety Engineer, Des Plaines, IL, 1999.
  - STS-Construction
  - STS-General Industry
  - STS-Petrochemical
  - STS-Mining
11. Safety Technology, National Center for Construction Education and Research, Gainesville, FL, 2003.
  - STS-Construction
12. Supervisors' Safety Manual, 9th Edition, National Safety Council, Itasca, IL, 1997.
  - STS-Construction
  - STS-General Industry
  - STS-Petrochemical
  - STS-Mining
13. You've Just Been Made the Supervisor...Now What?, Onion and O'Toole, National Safety Council, Itasca, IL, 2003.
  - STS-Construction
  - STS-General Industry
  - STS-Petrochemical
  - STS-Mining

# Appendix A

## THE ALCHEMY OF METTLE: FACTORS IN STS CERTIFICATION EFFECTIVENESS

### Background

Companies using the Safety Trained Supervisor (STS) certification have produced significant improvements in safety performance as measured by injury rates, workers' compensation premiums, productivity, and other metrics. When implemented by managers and supervisors of workgroups at various levels, the STS certification also provides a leading indicator for safety.

What is the STS certification able to do that other tools used to achieve excellence in safety performance cannot? This alchemy of mettle that transforms an average workgroup leader into an STS-certified workgroup leader is as indefinable as it is powerful. What is clear is that the multiplier or catalytic effect that the STS certification process exerts is real. As the familiar saying goes, "The whole is greater than the sum of its parts." The whole of STS certification brings together a number of varying factors often incorporated into safety programs that individually do not achieve the same results.

The STS certification program meets recognized standards for certification quality. It is not a certification awarded simply because someone completes a prescribed course. It includes demonstrated knowledge by examination.

Additional research and analysis are needed to fully understand the resulting changes the STS certification achieves in the reported safety results. The purpose of this review is to outline the likely factors that are involved.

### The Factors

Some of the likely factors brought together through STS certification include:

- Top management commitment to safety
- Contributing to a safety culture
- General safety training
- Measurement of safety knowledge
- Team building/teamwork
- Peer pressure
- Enhanced leadership
- Workgroup involvement in safety
- Workgroup empowerment
- Understanding where to get assistance
- Effective safety communication
- Individual and company incentives and recognition
- Self-esteem and pride
- Providing a leading indicator for safety
- Continuity of safety knowledge
- Ability to compete when certification is specified in contracts

### Understanding the Factors

This section describes each factor listed above and briefly explains what each factor is and how it relates to the STS certification.

**General safety training.** At every level, all employees need safety training to do their jobs. Safety training is also essential for workgroup leaders to understand safety protocols and how they work within and among workgroups.

The STS certification requires candidates to have a minimum of 30 hours of safety and health training.

**Measurement of safety knowledge.** Most training programs do not include a comprehensive examination to assess whether its learning objectives are achieved. The STS certification includes a 100-item, multiple-choice examination. The examination includes an established passing score to show that candidates demonstrate an acceptable level of mastery of the subject matter. The examination is derived from studies of what managers and supervisors need to know in order to perform key safety tasks.

**Team building/teamwork.** Because there is a requirement to achieve a minimum score on the STS certification examination, several people preparing for the examination may work together to ensure that they are adequately prepared. They often form study groups that meet during work, over lunch or after work. Such study activity likely builds relationships and fosters positive work-related communication.

**Peer pressure.** Because there is a need to pass an examination, there are often various forms of peer pressure at work encouraging coworkers to achieve the certification. Coworkers may inquire if others have passed the examination and achieved the certification or if they have completed the training required to qualify for the certification. They may offer assistance in preparing. They may offer congratulations when the examination is passed or the certification has been awarded. Some employers mark STS achievement with ceremonies or awards the use of stickers on hard hats and others means that develop peer pressure.

**Enhanced leadership.** Achieving the certification provides a public way to demonstrate to the workgroup and to other leaders that one has mastered the safety knowledge essential for workgroup leaders.

**Top management commitment to safety.** Use of the STS certification demonstrates top management commitment to safety. In part, this results from the fact that the STS certification requires use of multiple factors for successful certification to occur. Because there are fees and costs involved in the training, operation, examinations, tracking of participation, and retention of the certification, top management of a company must establish a budget to participate in the certification program and in the activities surrounding it. In most cases, this expenditure provides significant returns on investment. Also, because the certification offers a leading indicator of safety performance, top management has a simple way to measure safety participation among business units, departments, and workgroups. No matter how the certification is implemented, its use is likely to be visible to—and receive support from—top management.

**Workgroup involvement in safety.** The training and certification allow workgroup leaders to extend knowledge and implementation of safety practices throughout the workgroups. Those holding the STS certification can initiate safety talks or conduct safety training to earn credit toward recertification while improving the safety knowledge and performance of the workgroup.

**Workgroup empowerment.** As workgroup leaders learn more about hazard recognition, evaluation, and control, workgroups are better able to identify safety problems and to remedy them on their own, often without the involvement of supporting organizations or full-time safety specialists. The workgroup is likely to control its own work and productivity better and be less likely to pass safety issues elsewhere in the organization—potentially delaying solutions.

**Understanding where to get assistance.** Training in safety and its protocols as covered in the STS certification helps workgroups know where to get assistance for safety matters that exceed their knowledge, skills or ability to resolve. By calling upon special support only when needed, the workgroup is seen as being more effective.



**Effective safety communication.** When the STS certification is implemented by an organization, the likely result is better communication on safety matters within and among workgroups and throughout the organization. All workgroup leaders are brought to the same minimum level of competency in safety and are measured in the same way.

**Individual and company incentives and recognition.** Safety programs have relied upon many kinds of recognition and incentives to encourage safety performance. The STS certification offers new forms of recognition and incentives. Here are some examples:

- One company publishes pictures of workgroup leaders who have achieved the STS certification on its website.
- One organization requires those managers eligible for a company car to achieve the STS certification before having a car assigned to them.
- One company recognizes the achievement of STS certification by awarding a gold watch with the company logo on the face and the certification date engraved on the back.
- One company lists individuals holding the STS certification in company publications.
- One company requires the STS certification as a qualification for workgroup leaders to be accepted into a training program intended to prepare them for more advanced job responsibility.

**Self-esteem and pride.** Individuals who have met a company standard for safety competency benefit from increased self-esteem for having achieved that standard. Their workgroups may experience increased pride in their work because its leaders have met that unambiguous company standard for safety. The frequent review of the safety standards while studying for the STS examination leads to a paradigm shift, helping to drive change within a company and positively impacting the safety of its related industry.

**Providing a leading indicator for safety.** Injury rates and claims are trailing indicators that have a time lag after applying one or more safety improvement factors. Conversely, those individuals awarded STS certification help impact injury rates and claims before the fact, thus serving as a leading indicator for safety—easily measured at all levels by management.

**Contributing to a safety culture.** Safety culture has many definitions. In general, it infers some commitment to safety within and among workgroups and regular and effective communication about safety issues and their resolution. It may also include other aspects so that safety becomes part of the way work itself is planned and executed. Because the STS certification provides a public means for assessing participation in a company safety strategy, it strengthens the commitment of workgroup leaders to make safety a critical factor of work planning and execution.

**Continuity of safety knowledge.** The STS certification requires recertification every five years through reexamination or other activities. Certificants can earn credit for completing additional safety training, teaching safety to others or conducting workgroup safety talks. They can also recertify by retaking and passing an STS examination. They must continue to meet minimum requirements to stay current in safety matters—fulfilling their leadership responsibility to their workgroups.

**Ability to compete when certification is specified in contracts.** In an attempt to control losses, more and more owners (e.g., Department of Energy, Corps of Engineers, Naval Facility Command, etc.) specify BCSP certificants to oversee safety and health programs.

## Benefits to the Employer

In addition to their employees, employers receive benefits from the STS certification process, including:

- Improved business/safety culture
- Reduced lost time injury/illness rates
- Reduced workers' compensation premiums
- Productivity increases
- More timely resolution of safety problems
- Reduced dependence on full-time safety specialists for worksite safety problems

**Improved business/safety culture.** Nearly every company using the STS certification has reported that the program has benefitted their safety culture by increasing safety knowledge and participation at the workgroup level.

**Reduced lost time injury/illness rates.** Major employers have explained that implementation of the STS certification and the surrounding training and recertification has resulted in lower injury/illness rates.

**Reduced workers' compensation premiums.** Employers with large reductions in injury/illness rates have experienced rate modifications, leading to reductions in workers' compensation insurance costs. When injury/illness rates fall, companies become more competitive and add more money to the bottom line.

**Productivity increases.** Some employers have documented productivity increases through both formal assessments and informal means. One plant measured a 15% productivity increase concurrent with STS implementation. Another employer with many field units reported that a radio operator supporting the field units received such a reduced number of calls after the workgroup leaders achieved STS certification that the position was nearly eliminated.

**More timely resolution of safety problems.** Employers report that workgroups with leaders holding the STS certification are more effective at detecting hazards and safety problems early and initiating actions to get them resolved more quickly.

**Reduced dependence on full-time safety specialists for worksite safety problems.** Employers have reported that workgroups with STS-certified leaders are often able to identify and resolve safety problems on their own without needing to contact the safety office or a safety professional for assistance. Employers have also reported that knowledge gained from the preparation for the STS certification examination—especially knowledge of safe work procedures, hazard recognition, and proper corrective action—means that work is organized confidently and safely before the job starts.

## Conclusion

Why should companies use, and individuals achieve, the STS certification? After earning STS certification, a certificant has also earned the right to say five things—the first three from competence and the final two from confidence:

1. *I know my safety-related responsibilities.*
2. *Management realizes that I know my safety-related responsibilities.*
3. *I am a much better leader.*
4. *I am willing AND able to carry out my safety-related responsibilities.*
5. *Management supports me AND expects me to carry out my safety-related responsibilities.*

And, in the world of safety, when you can say these five things, you've said it all.



## The Safety Trained Supervisor (STS) Certification

The STS certification began in 1993. It was originally developed by the Council on Certification of Health, Environmental and Safety Technologists (CCHESST) at the request of the construction industry. Today, all CCHESST certifications fall under the Board of Certified Safety Professionals (BCSP). The program was expanded for general industry in 2003, the petrochemical industry in 2004, and mining in 2011. The STS certification holds accreditation from the National Commission for Certifying Agencies ([www.ncca.org/ncca](http://www.ncca.org/ncca)).

The main users of the STS certification are employers committed to moving safety deeper into their organizational structure by getting workgroup leaders trained and certified in their safety responsibility. Most employers plan for use of the program by ensuring that key employees have the necessary training and qualifications before submitting applications for certification.

After meeting supervisory and safety training requirements, candidates can choose any of the STS examinations to qualify for the certification.

After achieving certification, those achieving the STS certification must meet Recertification requirements through additional safety training, by teaching safety to others or by leading safety topics with their workgroups.

For additional details about the STS certification visit the BCSP website at [www.bcsp.org](http://www.bcsp.org) or contact the BCSP office.

## About BCSP

BCSP is recognized as the leader in high-quality credentialing for safety, health, and environmental practitioners. BCSP establishes standards for and verifies competency in professional safety practice and evaluates certificants for compliance with recertification requirements. BCSP also operates technician/technologist/supervisor level certifications that provide additional career paths for safety practitioners.

Since 1969, over 30,000 individuals have achieved a SH&E credential. Currently, over 12,000 hold the CSP and 7,500 retain an OHST, CHST or STS credential. BCSP is an accredited, non-profit corporation chartered in Illinois, with headquarters in Champaign.

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# BCSP Certifications

BCSP offers a full range of certifications for the safety, health and environmental professions.



## Certified Safety Professional®

- has been in operation for more than 40 years with 20,000 plus CSPs certified
- is the premier certification in the safety profession
- covers a wide range of safety, health and environmental practice disciplines
- holds national accreditation from the National Commission for Certifying Agencies

## Occupational Health and Safety Technologists®/ Certified Loss Control Specialist®



- offers a choice of title for technologists and loss control specialists covering the same knowledge of practice
- provides practitioners with partial responsibility in SH&E with a high quality certification
- holds national accreditation from the National Commission for Certifying Agencies



## Construction Health and Safety Technician®

- offers a certification for individuals who work in a construction craft or are construction safety specialists
- holds national accreditation from the National Commission for Certifying Agencies

## Safety Trained Supervisor

- provides a quality certification for work group leaders who are responsible for the safety and health of their workers and who are not safety and health specialists
- is a leading indicator of safety performance
- has led to 80% reductions in injuries and workers' compensation insurance cost and has created productivity gains
- holds national accreditation from the National Commission for Certifying Agencies



**Notes:**



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