

# Foremen Training Program

## Preface

Hanna Consulting Group (HCG) is please to provide comprehensive Foremen Training Program for specialty contractors' sub-foremen, foremen, and superintendent. We pledge our utmost effort in serving your needs in an efficient, professional and timely manner. We propose 10 modules, four hours per module. Detailed outlines and contents are provided below, however, we will be glad to address any special needs as suggested by your company's top management. The training will be conducted by highly qualified instructors lead by Dr. who trained over 10,000 people in the last 15 years.

## The Instruction Team

Courses Content Developer, team leader and Instructor	<b>Awad S. Hanna</b> Professor & President of Hanna Consulting Group Inc.
Leadership Development, Job Management and Productivity	<b>Norm Doll</b> Management Consultant, Hanna Consulting Group Inc.
Productivity, Safety and Job Tracking	<b>William Edwards</b> Director of Quality, Safety and Productivity Hanna Consulting Group Inc.
Estimating, job costing, change order management	<b>Vincent Cannistraro</b> Senior Consultant, Hanna Consulting Group

## ***The Team and Your Main Instructor and Coordinator***

A team of highly qualified individuals who are affiliated with and/or are working for Hanna Consulting Group Inc will provide this proposed training. The main instructor will be Dr. Awad Hanna, president of Hanna Consulting Group Inc. and Chair of The Construction Engineering and Management Program at the University of Wisconsin – Madison since 1993. Dr. Hanna and Hanna Consulting Group staff has provided more than 1000 seminars in variety of topics including productivity improvement, pre-planning, change order negotiation and management, claim analysis and management, and project estimating and scheduling.

- \* Instructors provide turnkey training solutions for your organization
- \* Professionally designed visual aids lend a 21st-century approach to the learning.

Awad S. Hanna, PhD, PE, is a professor and chair of the construction engineering and management program at the University of Wisconsin-Madison. Dr. Hanna earned MS and Ph.D. degrees from Penn State University, all in civil engineering with a construction management emphasis. His research and teaching interests are in project management and project controls. He has served as Principal Investigator for many research projects for the Construction Industry Institute, MCAA, NECA, and SMACNA where he is spearheading major benchmarking studies of project management practices. In addition, Dr. Hanna has extensive experience in professional engineering positions and is a registered professional Engineer in Wisconsin. He has consulted on a variety of project management issues for companies all over the world.

## **Course Materials**

### ***Study Guide***

Foremen Training Study Guide, by Awad S. Hanna

This study guide provides over 400 pages of slides and additional explanation of course content. It also contains references to relevant resources.

### ***Reading Materials***

Reading materials will be provided at the end of each module to allow more discussion on the subject matter. Short homework assignment will be also assigned after

## **Introduction to the Training**

Foremen are on the frontline of every company's success. Foremen typically start as journeymen then are promoted based on their technical skills. A typical foreman is highly qualified technically but less qualified in management. It is ironic that it takes five years of education for an individual to be a journeyman but no training is required to be a foreman. This training is designed specifically to meet the needs of electrical, mechanical, sheet metal and other specialty contractors. The proposed program consists of 10 comprehensive courses that focus on the knowledge and skills that every foreman/supervisor must master to be an effective manager of people, time, equipment, and materials.

## Why Foreman Training is needed

### *1. To improve supervisory skills.*

Each day, every decision made by foremen and superintendents are crucial to the success or failure of every construction project. You make your money in the field, and the proposed training program can help you improve your organization's bottom line.

### *2. To create sense of affiliation to your company.*

Most foremen tend to have a stronger sense of belonging to their union and not to their company. When foremen recognize that their company is spending money to enhance their career, their sense of affiliation with the company will increase dramatically.

### *3. To provide a mechanism for wage increase.*

Successful completion of training along with pre-established performance evaluation and a performance-based incentive program will provide a mechanism for paying higher wages than what is established by local union agreements.

## Proposed Modules

We are proposing 10 modules that enhance foreman skills. Every training Module is activity-based with discussions, case histories, problems, and exercises. They are based on many years of training and research experience and are constantly being revised to reflect state-of-the-art construction practices and to make the learning process more effective. To provide continuity, reading assignment will be provided and individuals will be asked to provide feedback. The sequence of the 10 modules is shown below.

### Contents

Module 1: Oral and Written Communication

Module 2: Planning and Scheduling

Module 3: Field Productivity Improvement

Module 4: Contract Document and Construction Law

Module 5: Leadership and Motivation

Module 6: Pricing change orders and project cost awareness

Module 7: Site Safety and Accident Prevention

Module 8: Managing the Project: The Foreman's Role

Module 9: Problem Solving and Decision Making

## Module 10: Pre-Construction Planning

### Module 1: Oral and Written Communication

- \* Types and Forms of communication
- \* Problems from poor communication
- \* Effective listening skills
- \* Components of conversation
- \* Communicating with your crew, and your client
- \* Good and clear writing skills and habits
- \* Facilitating and participating in meeting
- \* Verbal and written communication
- \* Key project information to be recorded

### Module 2: Planning and Scheduling

- \* Preparing the project plan
- \* Developing and using bar chart and two-weeks look ahead
- \* The critical path and interpretation of key terms including float
- \* Computerized scheduling
- \* Using the schedule on the job site
- \* Updating the construction schedule
- \* The schedule as documentation
- \* Analyzing change order and its impact on the schedule
- \* Job Tracking and schedule tracking
- \* Manpower loading chart and key characteristics
- \* Trapezoidal manpower loading

### Module 3: Field Productivity Improvement

- \* Benchmarking construction productivity
- \* Improving productivity through materials handling & management
- \* Tools management
- \* Jobsite productivity, planning and scheduling
- \* Managing subcontractors
- \* Quantifying lost productivity
- \* Productivity tracking and record keeping
- \* Improving information flow and pre-task meeting

### Module 4: Contract Documents and Construction Law

- \* Introduction to contract documents and construction law
- \* Employment laws, sexual harassment and discrimination

- \* Contractual relationships
- \* Contract forms and documents
- \* Managing general conditions
- \* Good documentation practices
- \* Changes
- \* Differing site conditions
- \* Time impacts

### Module 5: Leadership and Motivation

- \* Leadership styles (Benefit and drawback of each)
- \* Personality profile (DISC) and project characteristics
- \* Analyzing individual needs and behaviors
- \* Positive influences on work attitudes and team building
- \* Improving Leadership skills
- \* The leader gets commitment
- \* Effective leadership style

### Module 6: Pricing change orders and project cost awareness

- \* Understanding and Managing change order
- \* Construction estimates and cost breakdown
- \* Impact of workers' compensation and EMR ratio
- \* Reporting and analyzing actual costs
- \* Planning for cost control
- \* Labor cost control and simplified earned value analysis
- \* Controlling subcontractors
- \* Risk and Cost control strategies
- \* Post-project evaluation and calculations of Labor Factor

### Module 7: Site Safety and Accident Prevention

- \* The high price of accidents
- \* Safety communication and motivation
- \* Best safety practices
- \* Using reference material and advisory sources
- \* Project security and traffic control
- \* Using the project schedule to prevent losses
- \* Selecting methods and equipment to prevent losses
- \* Experience modification factor (EMR)
- \* Common construction hazards (trenches, cranes, and falling)
- \* Government regulations and inspections

## Module 8: Managing the Project: The Foreman's Role

- \* Understanding Project Delivery Systems
- \* Managing Information
- \* Managing Risk
- \* Planning the Work (pre-task meeting and RFI)
- \* Managing Methods and Materials
- \* Understanding Finances
- \* Working with Project Partners
- \* Understanding People
- \* Understanding Company Policies/Procedures

## Module 9: Problem Solving and Decision Making

- \* Problem prevention and anticipation
- \* Identifying problems
- \* How to solve scheduling and technical problems
- \* Strategies for solving human performance problems
- \* Creative problem solving
- \* Barriers to developing creative solutions
- \* Establishing a problem solving atmosphere
- \* Developing follow-up systems

## Module 10: Pre-Construction Planning

- \* Types of pre-planning
- \* Turnover meeting
- \* Condition for success
- \* Pre-construction planning steps (50 steps)
- \* Reasons for good projects
- \* Reasons for bad projects