

Applying a Target Zero Motivational Safety System

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Overview

The design and implementation of the nine core elements of the Jacobs ESTS Group's Target Zero Motivational Safety System in support of the NASA's Marshall Space Flight Center (MSFC) Engineering, Science and Technical Services (ESTS) contract has resulted in 5 million work hours since January 2001 without a lost time accident, as of February 23, 2007. NASA has recognized each one million hour mark with their coveted NASA Safety Award.

Programmatically, the transition from a safety dominated/controlled safety program to a program with strong employee ownership/motivation/buy-in is the result of the focused commitment to implement the nine core elements each day. The nine core elements are: **Management Leadership and Involvement; Teamwork; Safety Leadership and Professional Development; Positive Recognition and Praise; Ownership and Commitment; Education and Administration; Effective Communication; Creative Motivation and Sharing the Bottom Line; and Focus on Improvement.** These core elements provide the structure that drives the Motivational Safety System toward world-class safety status.

The implementation of this Target Zero Motivational Safety System has not only created good safety metrics, which have enhanced the profits and productivity of the Jacobs ESTS Group, it has more importantly created the culture change that promotes a positive personal attitude towards safety at home as well as at work, which ultimately reduces incidents and injuries.

Success is measured by the employees' enthusiasm and willingness to share stories of how they have changed their personal habits and encouraged friends and loved ones to do the same. Employees exhibit enthusiasm, energy, and pride in their work through the Target Zero Motivational Safety System and they are further recognized by our NASA customer, who notes, "Your safety enthusiasm is contagious."

Presentation

As safety professionals, what can we do to protect our co-workers as well as the property and products of our workgroup or organization? The bottom line is that safety is a leadership issue. As leaders, we must hold ourselves accountable for creating a positive safety environment and a workplace culture that focuses on “Target Zero” incidents. We should lead by example and through management encouragement.

But the most successful safety system isn't one that is dominated by safety professionals. Long-term safety system success comes instead through employees who are motivated and encouraged to buy into the system for their own safety and health and that of their coworkers. Motivation produces far-reaching results by having every single person take responsibility for safety, not just the Safety Professional. Unlike traditional and other safety systems which produce short-term results by focusing on behavior training alone, the Target Zero Motivational Safety System provides individuals with an understanding of the value of safety and gives them real-world options to choose from in assuming personal responsibility for their safety and the safety of others.

To transition from a safety dominated/controlled safety program to a system with strong employee ownership/motivation/buy-in requires a daily commitment to implement the nine core elements of a Motivational Safety System. The nine core elements are: **Management Leadership and Involvement; Teamwork; Safety Leadership and Professional Development; Positive Recognition and Praise; Ownership and Commitment; Education and Administration; Effective Communication; Creative Motivation and Sharing the Bottom Line; and Focus on Improvement.** These core elements provide the structure that drives the Motivational Safety System toward world-class safety status.

This system was designed by the Jacobs ESTS Group based on the personal experiences of the company's Safety & Quality Manager and Safety & Mission Assurance Team Lead, who were further challenged by the parent corporation's zero incident safety goals and philosophy. A prime contractor to NASA's Marshall Space Flight Center (MSFC) in Huntsville, Alabama, the Jacobs ESTS Group includes six teammate companies: All Points Logistics, ERC Inc., ICRC, Qualis Corporation, Snyder Technical Services and Triumph Aerospace. Work performed by this group covers engineering design, analysis, fabrication, science, machining, business services, and technical services. Employees support customer activities in more than 20 buildings on the campus of the NASA MSFC, including machine shops and science laboratories.

In 2000 the organization's safety program was operating at the “OK level”. Initiated partly due to NASA's strong emphasis on safety, the Jacobs ESTS Group decided to restructure its own safety commitment by developing a Target Zero Motivational Safety System. Since implementing the system in January 2001, Jacobs ESTS Group has objective evidence that the Motivational Safety System produces results. The now more than 780 employees have achieved over 5 million work hours without a Lost Time Accident and more than 47 months and 3.3 million hours without an OSHA recordable incident, as of February 23, 2007.

At each one million hour mark, the Jacobs ESTS Group has received the coveted NASA Safety Award. In 2004 and 2005, Jacobs ESTS Group was awarded the Jacobs Engineering corporate Zero Accident Award and received the Jacobs Engineering President's Health, Safety and

Environment Award in 2004 and 2005 as well. This marked the first time that a single operational contract in the 44,000-employee parent corporation had received these awards consecutively.

This successful Target Zero Motivational Safety System is evidence that a commitment to safety at the highest level of long-range planning activities can be achieved through a prioritization of efforts. Responsibility for safety starts with top management and flows down through the management team to the employees. The Safety & Quality Manager position is a direct report to the Group's General Manager, with a position equal to all other managers rather than being a support function within another department.

Safety is one of three key criteria in NASA's evaluation of the Jacobs ESTS Group's annual performance, along with contract management and cost. At the heart of the system is a commitment from management to create a climate that communicates, expects and rewards safe behavior among employees. Each manager is responsible for safety in his organization, and ultimately, the employees are responsible for safe work habits on a daily basis, at home as well as at work.

What follows are the nine core elements and principles of the Jacobs ESTS Group Target Zero Motivational Safety System. These core elements can be applied by any Safety Professional in any field to achieve a motivational system that begins with management, but ultimately encourages employee "buy-in" and safety ownership at all levels.

Core Element 1: Management Leadership and Involvement

Managers must display their commitment to safety on a daily basis. Positive leadership of this nature shapes and influences a safety culture. Management actions create a climate that communicates, expects, and rewards safe behavior among employees. A first-rate leader demonstrates support, incorporates new safety ideas, and promotes excellence in employees' safe performance. Methods such as the "Five to One Rule" rule motivate leaders to participate and interface in a consistent and positive manner with all employees to increase safety system success.

The "Five to One Rule" is where leaders strive to identify five positive safety accomplishments per each safety concern they find during routine safety visits with employees, leaving an overall positive impression rather than a punitive one. The "Five to One Rule" allows constructive criticism to be given to employees. This positive encouragement technique creates an environment of open communication where employees, managers, and customers alike are able to initiate an exchange of safety information and increase safety knowledge.

Within the Jacobs ESTS Group, examples of management leadership includes a half-day safety culture training seminar as part of new employee orientation and each employee's safety performance is evaluated as part of his or her annual employment review, which motivates employees to infuse the safety culture into their daily work routines. Managers demonstrate their support by opening each meeting with a Safety Moment; sharing lessons learned from within the organization and other operating centers; openly assessing each individual's work area for safety concerns; formally driving corrective actions for safety issues, and rewarding safe behavior.

Core Element 2: Teamwork

Management's motivation should encourage the creation of an Employee Safety Committee with equal representation from all teammate companies or employee divisions. This committee is then tasked with establishing teamwork ideas to encourage open, interactive communication in every aspect of the safety system. Promoting teamwork helps develop positive working relationships among all employees and ensures a strong safety buy-in from every employee. As individuals feel valuable to the team, a sense of ownership and conformity to shared safety goals becomes a part of the team's values. The safety committee feels empowered to bring about positive changes in the safety culture by developing new safety projects, which encourage employee participation and affect the safety maturity of the company as a whole.

Within the Jacobs ESTS Group, the safety committee created an on-going monthly "Safety Star" program where employees nominate their peers for safe actions they've observed on the job. The winners are honored during the General Managers management staff meeting, presented with a company padfolio and gift certificate, recognized in the monthly employee newsletter and have their photo posted to the company's intranet awards page. The employee safety committee also initiated a "Teaming for Safety" challenge program in which all employees participated in workgroup teams to answer monthly safety questions and initiate safety visits, earning points to participate in a final Safety Challenge gathering of the entire company.

All 27 teams on the contract participated and were awarded with a luncheon. A "Health Challenge" also created a friendly competition between teams to earn the monthly Heart Award, presented to the workgroup whose members participated in health education programs and individual exercise. A monthly Popeye Award was also given for most improved exercise score over the previous month.

Core Element 3: Safety Leadership and Professional Development

Management recognizes, mentors, and grooms safety leaders at all levels to promote leadership growth by creating a climate of empowerment to change personal safety attitudes. This in turn drives consistent safety behavior as an organizational norm. It is critical to develop credible safety leadership that promotes respect and mutual trust.

Safety cannot be administrated effectively throughout the group from a single box on an organizational chart. Instead, the implementation of a Target Zero Motivational Safety System ensures equal employee/management involvement in the safety process and encourages buy-in at all levels. This creates a progression from the Dependent Phase, where safety is driven by a dominating safety professional, to the Independent Phase, where individuals take responsibility for their own safety (Figure 1).

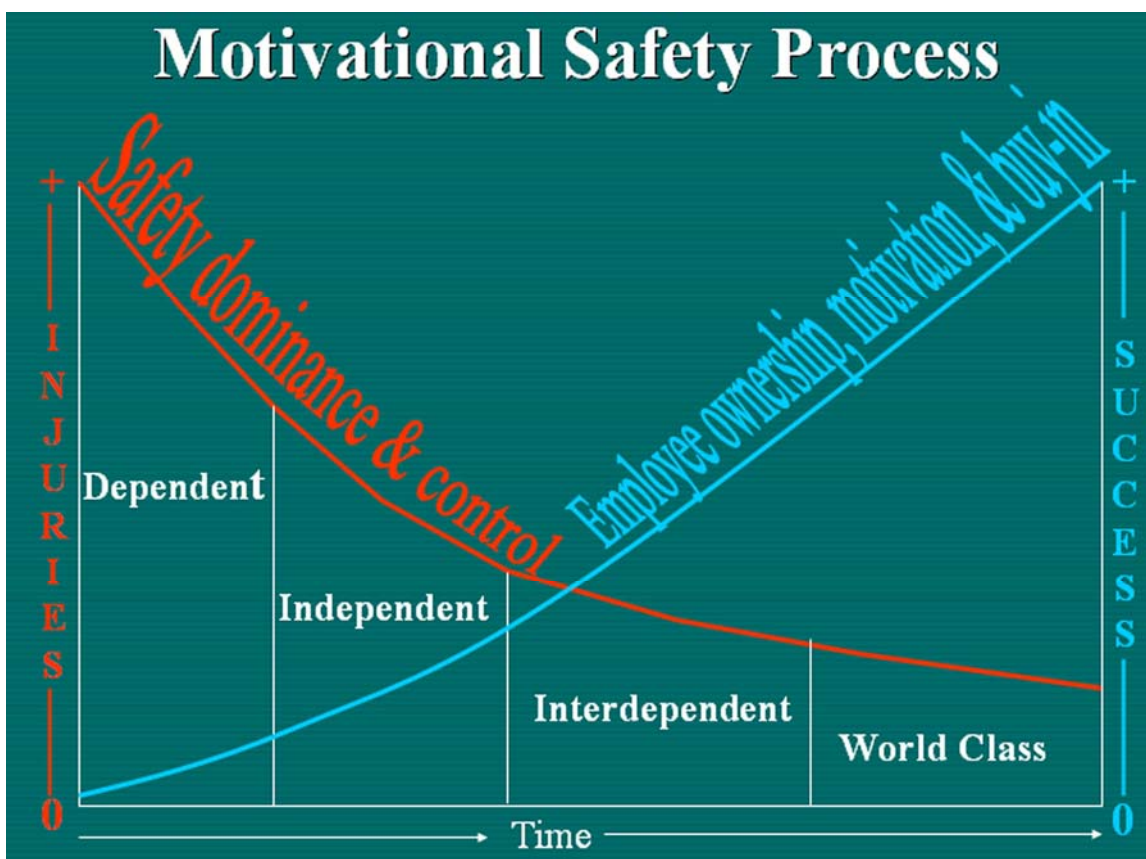


Figure 1. The Jacobs Motivational Safety Process moves employees from dependency on a dominating safety professional to employee ownership and buy-in of the safety process. Attaining a World Class safety program requires managers and employees all taking equal responsibility for the team's overall safety.

If applied correctly, the Target Zero Motivational Safety System can then progress to the Interdependent or Team Process Phase, where employees, managers and safety professionals take equal responsibility for the overall safety of the team. Continued focus on the Target Zero Motivational Safety System's core elements ultimately leads to "world-class" safety status. A safety professional under this system should be a professional whose actions and words reflect the core values that guide an effective safety system.

Within the Jacobs ESTS Group, examples of grooming safety leaders can be found in the Employee Safety Committee's safety challenges. In the Teaming for Safety and Health Challenge activities, employees volunteered to serve as team captains from within their workgroups who motivated their peers to succeed. These captains shared presentations and materials across workgroups to help educate the entire workforce on safety topics. In some instances, being a safety team captain has elevated an individual within their workgroup, as they are now recognized for leadership skills not otherwise identified. Individuals have also volunteered to serve on the NASA customer's safety committees and several employees have been selected as Building Managers. In addition, the Jacobs ESTS Group managers rotate on a monthly basis to

deliver the NASA safety topic presentation as part of the customer's safety meetings requirements.

Core Element 4: Positive Recognition and Praise

Through recognition and praise, safety professionals develop a Win-Win safety culture that strives to reward good safety behavior, attitudes, and performance. Generating positive feelings about safety will increase the general comfort level among the workforce. Recognition for a job well done is always appreciated, but the emphasis here is on "real" appreciation. A heartfelt thank you from a fellow employee or supervisors can be quite motivating and rewarding. Frequent visits to the work area by the President, General Manager or other upper management to recognize employees' safety efforts are inexpensive endeavors with inspiring rewards.

Don't turn your efforts into an "Employee of the Month" or a photo on a bulletin board; keep your efforts fresh and authentic. Like a counter-balance, rewarding individuals and groups as a positive consequence of their successful safety performance will reduce or eliminate negative, punitive actions. Simply said, it's better to visit employees and thank them for doing a good job of being safe than filling out accident reports and managing worker compensation issues. In reality, a happy, appreciated, and productive workforce is conducive to a healthy profit margin.

An example of positive recognition within the Jacobs ESTS Group is the Safety Dollar Program where managers receive five gold Sacagawea dollar coins each month from the Safety & Quality manager to present spontaneously to anyone they observe performing a safety effort above and beyond normal efforts. This can be employees, other managers or even NASA customers and positive efforts can be as simple as observing an individual wiping up observed spilled coffee in the hallway. Instant recognition for being unconditionally safe brings not only immediate reward but also reinforcement of the safety culture that each individual should be conscious of every day. The Safety Dollar Program motivates everyone from top management down to think safety first in even the smallest of activities, promoting a true Target Zero attitude.

Core Element 5: Ownership and Commitment

Employees who take ownership (personal pride) in all aspects of the safety system develop individual initiatives to demonstrate their commitment to the success, which leads to the development of team initiatives and ownership of their group's safety system and performance (team pride). A dominant safety professional cannot attempt to be the safety blanket for the entire team. Therefore, safety dominance and control as represented by other types of safety programs should be replaced by employee ownership, motivation, and buy-in to produce a Target Zero Motivational Safety System.

A healthy safety system is where the safety professional is the consultant, teacher, and coach, motivating and promoting management and employee ownership of the safety system in a teaming manner. They serve as a technical advisor to the management staff and not as the enforcement authority.

Jacobs ESTS Group employees are responsible for their own safety and the safety of their peers. By motivating individuals to think safety at all times, a safety culture is developed in which each person feels empowered to protect others. An example of actions within this safety culture is a situation where four MSFC Group employees standing in line at a coffee kiosk, observed the vendor spill steamed milk on her arm and leg. Immediately, two of the employees not only

insisted that the vendor seek medical attention, but personally drove her to the on-site medical clinic. Since that meant leaving the kiosk unattended, the other two employees agreed to contact the vendor's employer and stay at the kiosk until the unit could be properly shut down.

Core Element 6: Education and Administration

Every accident has a cause and in most cases it is clearly preventable. By identifying key Target Zero tools and techniques (i.e.: understanding the effects of injuries; observing and recognizing unsafe conditions and unsafe acts; knowing, understanding and developing corrective action steps; encouraging and promoting positive safety attitudes and behaviors in yourself and others), safety professionals can take proactive steps to reduce loss. They can promote safety knowledge and competence through interactive training methods and the use of safety tools that enable the workforce to think ahead and look for **WHAT** can happen, the **EFFECTS** of accidents, and **HOW** to minimize or prevent occurrence.

Teaching Target Zero Motivational Safety techniques enables every employee to proactively participate in the safety system and incident reduction process. Each employee then becomes a safety partner, taking responsibility for their own personal safety and looking out for the safety of others. Communication, Coordination, and Cooperation (the Three Cs) are essential to the implementation of safety and training tools. System elements must be organized and administered in a professional manner with timely feedback provided. By following the general rule of thumb, "Keep it Simple," management won't overwhelm the first line supervisor while making sure that value-added tools are promoted.

The Jacobs ESTS Group's safety training includes a "situational awareness" program that presents a safety issue and invites employees to give examples of what they would do in a given situation. In formulating answers, employees draw from their personal safety knowledge, the safety culture training provided at orientation and through monthly safety meetings, and their awareness of the NASA customer's safety reporting procedures.

The Teaming for Safety initiative was a prime example of situational awareness where teams were given a hypothetical safety question and asked to formulate their response. The "winning" response was then communicated to all employees through the employee newsletter, helping to educate others by using peer examples. In this manner, the Safety & Quality Manager created a framework wherein the employees were responsible for seeking and communicating safety scenarios instead of relying on the safety professional to provide a single answer.

Core Element 7: Effective Communication

Communication is critical for a successful safety system. Whether you are communicating an accident, teaching lessons learned, or sharing success stories, it is important to make sure that everyone is united in their efforts and hearing the same message. In order to make this happen safety must become "a part of the job", rather than a passing initiative or a program that slowly fades away. Communication must be timely in order to be effective.

First, the safety professional needs to share with employees the big picture by clearly pointing out the safety system's intent and primary challenge. Second, they need to provide each employee with general or specific step-by-step information on how they can participate as a key person in support of the big picture. Third, appreciation should always be communicated for past efforts while displaying confidence in the employees' continued support of the system.

For more effective communication, Safety Professionals must use their people skills and “lighten up” on the dominating technical-only approach of spouting code. Humanizing or personalizing safety communications encourages individuals to think safety on their own rather than waiting for a safety professional to point out common safety issues or procedures.

The intent of a Target Zero Motivational Safety System is to instill in every individual the need to act responsibly and to consider safety as an element of every action. At the Jacobs ESTS Group, employees at every level understand the value of safe actions in terms of their personal safety as well as for operating in a safe work environment. Personalizing safety communications occurs when individual employees are asked by managers to present the Safety Moment, a required element to begin any meeting. Often their choice of topic is a safety incident from home, describing an activity that many others have experienced. Sharing safety recommendations by describing a personal action is far more effective and acceptable than having a safety professional select a topic from a standard list of safety issues.

Core Element 8: Creative Motivation and Sharing the Bottom Line

Setting goals, conducting friendly safety competitions in a healthy environment, striving to improve upon past performance, and doing our best is admirable, but instilling the Target Zero Motivational Safety System concept is the key to enabling the workforce to develop the “can do” safety attitude at work and at home. This attitude only comes from employees who are excited and motivated to be safe.

While being proud of safety metrics, it’s the program and how it is implemented every day by every single person that counts. Motivating all employees to engage in an effective safety culture will produce zero incidents, recognition, and good metrics, but most importantly, it will prevent injuries. The timeliness and creativity of effective safety incentive systems can promote excitement, a competitive challenge, and create the momentum for a sustaining safety system. The Bottom Line: safety and protection of the workforce is the moral thing to do.

The Jacobs ESTS Target Zero Motivational Safety System extends beyond the more traditional behavioral-focused safety systems. Under those systems, safety professionals typically use a checklist to identify work hazards and assess correct/incorrect worker behavior, which produces a safety program dominated by the safety professional mandating employee involvement for data collection purposes. Safety lists imply the need for obedience to a rigid system, which is punitive-based rather than motivational. The Jacobs ESTS Group’s Target Zero system is fully structured to motivate employees to take ownership of their safety program, to clearly recognize why safety is important both at home and at work, and to understand the true value of working safely. When employees take responsibility for their own actions, they’re empowered to take initiatives to correct unsafe situations.

An example of the Jacobs ESTS Group safety culture carrying beyond the workplace is an employee who smelled gas in a school being used for an after-hours meeting. At first he assumed that someone else had already reported the gas leak and didn’t want to impose, since he had no responsibility for the building. But rather than leaving the problem for someone else to correct, he decided it wouldn’t matter if more than one person reported the problem. It turns out the fire department had ignored the school’s first call because excess scent had been added to the gas lines earlier, producing several false reports. After the Jacobs ESTS Group employee’s call to

911, the fire department did respond, investigated and found a gas oven leaking in the school's cafeteria. If the employee had not taken personal responsibility for the incident, and acted persistently according to the safety culture expectations he'd learned at work, the building and possibly lives could have been lost.

Core Element 9: Focus on Improvement

The company's core values should guide leadership and maintain focus as you implement a true Target Zero Motivational Safety System in your pursuit of excellence. Strong leadership and commitment by employees and managers throughout the group promotes safety as a core value. By establishing methods to permit individuals to openly report unsafe acts, even anonymously, you can simultaneously encourage improvements to your safety system and empower your employees to view safety as a shared responsibility. By improving the processes and choosing to make safety a core value, you can broaden the effectiveness of any safety initiative.

The Jacobs ESTS Group Target Zero Motivational Safety System turns all employees into safety advocates and encourages them to initiate ways to improve their daily safety processes. From the top down, safety is demonstrated as a core value within the entire organization.

Conclusion

A successful safety system systematically implements the nine core elements: Management Leadership and Involvement; Teamwork; Safety Leadership and Professional Development; Positive Recognition and Praise; Employee Ownership and Commitment; Education and Administration; Effective Communication; Creative Motivation and Sharing the Bottom Line; and Focus on Improvement.

Just as important, all employees should play a role in protecting the assets of the company by caring for the well-being of each other and actively advocating safety within the workplace. Although it is admittedly difficult to claim improved safety results in better company performance and profitability, it is imminently clear that these factors can easily co-exist with world-class safety performance. A Target Zero Motivational Safety System is the bridge that can make it happen.