Achieving the Vision: HSE&F... An Integrated Business Partner

Submitted by:
Honeywell Aerospace

Attention
The information contained in this material is for educational use only; it may not be modified, copied, published, disclosed, distributed, displayed or exhibited, in either electronic or printed formats without written authorization from the National Safety Council. By downloading this document you further agree to the Terms and Conditions of the Campbell Award/Campbell Institute website.
Achieving the Vision: HSE&F…An Integrated Business Partner

Honeywell Aerospace
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>I</td>
<td>Business Profile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business Description</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HSE and Business Challenges</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Leadership</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational Leadership</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment to Goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational Climate / Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citizenship</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Integrated Management System</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Policies, Goals, and Objectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational Communications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Audits and Continuous Improvement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hazard Recognition and Risk Reduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prevention through Design Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational HSE Programs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management of Change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workforce Empowerment, Improvement and Motivation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workforce Training and Competency Building</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impact of HSE on Workforce On and Off the Job</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Performance Measurements &amp; Information Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Systemic use of Key Leading and Lagging Indicators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality and Appropriateness of Measurements and Data Collection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data Analysis and Evaluation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accessibility and Use of Information Generated from Performance Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparability</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Results</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstration of Continuous HSE Performance Improvement</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>Linkage to Business Performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration of HSE and Business Management Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evidence of Added Value or Cost Reduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous and Systematic HSE Business Performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstration of Improvement in Operational Performance through HSE</td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td>Lessons Learned &amp; Path Forward</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lessons Learned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Path Forward</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HSE Challenge</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Honeywell 2014 Fact Sheet</td>
</tr>
<tr>
<td>2</td>
<td>Aerospace Overview 2015</td>
</tr>
<tr>
<td>3</td>
<td>Honeywell Aerospace Organizational Structure</td>
</tr>
<tr>
<td>4</td>
<td>ISC Vision, Mission and Strategies</td>
</tr>
<tr>
<td>5</td>
<td>Site Standard Operating Sheet Example</td>
</tr>
<tr>
<td>6</td>
<td>Standard Work for Leaders Example</td>
</tr>
<tr>
<td>7</td>
<td>Aerospace HSEF Strategic Plan</td>
</tr>
<tr>
<td>8</td>
<td>Aerospace HSEF Annual Operating Plan</td>
</tr>
<tr>
<td>9</td>
<td>HSE Performance Index</td>
</tr>
<tr>
<td>10</td>
<td>Aerospace HSEF X-matrix</td>
</tr>
<tr>
<td>11</td>
<td>Management System Conformance</td>
</tr>
<tr>
<td>12</td>
<td>Assurance Letter</td>
</tr>
<tr>
<td>13</td>
<td>Data Snapshot</td>
</tr>
</tbody>
</table>
Executive Summary

Honeywell invents and manufactures technologies to address some of the world’s toughest challenges initiated by revolutionary macrotrends in science, technology and society. A Fortune 100 diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; turbochargers; and performance materials. (Appendix 1 – Honeywell 2014 Fact Sheet)

Honeywell Aerospace technologies, products and services are found on virtually every commercial, defense and space aircraft and its turbochargers are used by nearly every automaker and truck manufacturer around the world. The Aerospace business develops innovative solutions for more efficient automobiles and airplanes, more direct and on-time flights, safer flying and runway traffic, along with aircraft engines, cockpit and cabin electronics, wireless connectivity services, logistics, and more. The business delivers safer, faster, and more efficient and comfortable transportation-related experiences worldwide.

By integrating health, safety and environmental considerations into all aspects of our business, we protect our employees, our communities and the environment, achieve sustainable growth and accelerated productivity, drive compliance with all applicable regulations and develop technologies that expand the sustainable capacity of our world. Our health, safety and environmental management systems (HSEMS) reflect our values and help us meet our business objectives.

The Honeywell International Corporate HSE policy is endorsed by The CEO, Aerospace President and each Site Leader. Employees are actively involved in planning and executing activities related to specific elements of the HSEMS. It is each location’s responsibility to ensure that these provisions have been communicated to all employees and those working on its behalf. The policy provides the central theme for the HSEMS and their provisions are consistently reflected in supporting procedures.

Honeywell Aerospace Health, Safety, Environment, and Facilities (HSEF) Vision and Mission:

**Vision**
Integrated Business partner providing unparalleled HSE&F value and uncompromising commitment to employee health and safety and environmental stewardship.

**Mission**
Protect people and the environment through the capabilities of our global talent and the strength of our HSE&F Management Systems.

Safety, or Health, Safety and Environment (HSE), is who we are…it’s a core value that is integrated into all business aspects. This is demonstrated by the complete integration of HSE into the Honeywell Operating System (HOS), the organization’s overarching business system.

HOS is a comprehensive, integrated business approach to drive sustained exceptional performance in safety, quality, delivery, inventory, and productivity. It is a broad application of Lean and Six Sigma tools against a construct of standardized work, rapid problem solving, continuous improvement and knowledge sharing. Organization design enables and perpetuates the system through specific roles and responsibilities for leaders, high-performance management systems, and a supportive structure.
All Honeywell operations function as tightly integrated value streams from suppliers to customers where:

- Our customer’s wants are met or exceeded, leading to achievement of Honeywell’s objectives for growth and overall performance
- All employees are fully engaged and Safety and Quality are built into every process
- All processes are documented and standardized as a basis for continuous improvement in pursuit of perfection
- The workplace is organized and clean
- Visual management systems are installed with clear protocols for rapid problem solving and waste elimination

We are committed to provide the resources and tools, including systems, processes and procedures that promote a positive and proactive safety culture and safe working environment. With approximately 42,000 employees operating in a variety of complex and highly technical sites with varying degrees of risk, a 2014 lost-time injury rate of 0.13 and total recordable case rate of 0.44 are significant accomplishments. The 2014 lost-time injury rate is 96 percent better than the 2013 industry average for the Transportation Equipment Manufacturing sector and the total recordable case rate is 92 percent better than the average for the same sector.

Honeywell Aerospace is committed to creating a culture of continuous improvement, as such, in addition to trailing indicators like lost-time injury rate and total recordable case rate, the organization tracks proactive metrics that will support this endeavor, activities such as: Regulatory Engagement; On-time Corrective Action Closure; HSE Steering Committee Meetings; HSE Calendar and Permit Reviews; HSE Gemba for Leaders; HSE Layered Audits. A balanced scorecard shifts the focus away from the reactive metrics and supports sustained exceptional performance.

As noted by our Vision and Mission, we strive to provide unparalleled HSE&F value and we maintain an uncompromising commitment to employee health and safety and environmental stewardship. As such, in 2012, Honeywell Aerospace was recognized as one of “Americas Safest Companies” by EHS Today (Safety is fully Integrated at Honeywell Aerospace) and has been named a recipient of the National Safety Council’s Occupational Excellence Achievement Award. Aerospace has also been recognized by its peers as the winner of the 2013 Aerospace Industries Association (AIA) Worker Safety Excellence Awards. Also in 2013, Scott Harczynski, Vice President of HSE&F for Aerospace, was named as one of the 50 People Who Most Influenced EHS in 2012-13 by EHS Today. For a complete overview of company recognition please consult the Honeywell website.
Section I: Business Profile

Business Description

Honeywell Aerospace technologies, products and services are found on virtually every commercial, defense and space aircraft and its turbochargers are used by nearly every automaker and truck manufacturer around the world. The Aerospace business develops innovative solutions for more efficient automobiles and airplanes, more direct and on-time flights, safer flying and runway traffic, along with aircraft engines, cockpit and cabin electronics, wireless connectivity services, logistics, and more. The business delivers safer, faster, and more efficient and comfortable transportation-related experiences worldwide.

Honeywell Transportation Systems (TS) is a leading provider of world-class technologies and solutions to automakers, their suppliers, and consumers. Transportation Systems’ fuel-saving and emission-reducing turbocharger technologies enhance the efficiency and performance of passenger and commercial vehicles worldwide. Transportation Systems is part of Honeywell Aerospace, one of the Corporation’s three reported business groups.

Aerospace Facts (Appendix 2 – Aerospace Overview 2015)
- Headquartered in Phoenix, Ariz. and Rolle, Switzerland
- Approximately 42,000 employees
- Nearly 110 worldwide manufacturing and service sites (Appendix 2 – Aerospace Overview 2015, note Aerospace Global Footprint)
- Total Revenue of $15.8 billion in 2014
- Represented NAICS:
  - 336412 – Aircraft Engine and Engine Parts Manufacturing (15%)
  - 336413 – Other Aircraft Parts and Auxiliary Equipment Manufacturing (14%)
  - 336419 – Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing (6%)
  - 334511 – Search, Detection, Navigation, Guidance, Aeronautical and Nautical System and Instrument Manufacturing (22%)
  - 541614 – Process, Physical Distribution, and Logistics Consulting Services (23%)
  - 336310 – Motor Vehicle Gasoline Engine and Engine Parts Manufacturing (20%)

Strengths
- Global leader in the aviation industry
- Developing innovative safety products
- Driving modernization of global air traffic management
- Revolutionizing combat technology
- Committed to improving operational efficiencies
- Serving All Major Automotive Original Equipment Manufacturers (OEMs) Worldwide

Aerospace Organization

A detailed overview of the organizational structure for Honeywell Aerospace can be found in Appendix 3.
HSE and Business Challenges

The challenge for most organizations when it comes to HSE is understanding how to best integrate HSE into the fabric of the culture, understanding that HSE is about more than compliance, that it’s critical to success. When done correctly, full integration of HSE affords a competitive advantage beyond injuries and/or penalties.

As noted by the title of this global application, Achieving the Vision: HSE&F…An Integrated Business Partner, HSE at Honeywell is viewed as a critical business driver. HSE is how we work; it’s the cornerstone of a culture of continuous improvement. HSE is incorporated into daily work, which includes daily tiered accountability meetings, safety messages, continuous improvement ideas, 5S, layered audits and gemba activity, standard work and work instructions, standard work for leaders, coaching, recognition, and much more.

A global organization is constantly challenged and faced with change, changes to regulations and in the regulatory environment, business and people transitions, the global economy, etc. The opportunity and where Honeywell Aerospace has succeeded is by having a robust HSE management system that’s integrated into the organizations operating practices via the overarching business operating system, commonly referred to as the Honeywell Operating System (HOS).

The Honeywell Operating System is an operational excellence initiative designed to improve the capabilities of our manufacturing sites. It is an integrated system built on a strong Six Sigma foundation to drive sustainable safety, quality, delivery, inventory, and productivity improvements that will ultimately give us a 20-year competitive advantage. HOS includes a focus on standardized work, rapid problem solving, continuous improvement, and knowledge sharing across Honeywell.

Continuous improvement is at the core of our operating system. The concept is that today has to be better than yesterday, and tomorrow has to be better than today. Standardized work is how leaders and employees operate. It is the foundation for continuous improvement.

These principles translate to several key HOS metrics in our manufacturing environments:

- Health, Safety and Environmental management systems assessment scores – continuous improvement in comprehensive audit scores.
- Defects in Parts per Million (PPM) – reducing the number of defects that occur in the product or delivery.
- On Time To Request (OTTR) – decreasing the amount of time between the point of order and delivery of finished goods to a customer.

As depicted by Figure 1, the integration of HSE within HOS has enabled year-over-year maturity resulting in the lowest injury rates in the organization’s history, along with the highest HSE self assessment and audit scores to date. According to Scott Harczynski, Aerospace Vice President of Health, Safety, Environment and Facilities (HSE&F), “HSE at Honeywell is not separate from its business operations.”

“Strong leadership commitment, fantastic employee engagement and a strong management system that is truly integrated into the Honeywell Operating System are at the core of our success.” “We are able to connect our strategic elements (vision, mission and strategy) to a daily management system, including standard work, which ensures the constancy of our HS&E commitment.”
Section II: Leadership

Organizational Leadership

Honeywell International’s commitment to HSE excellence starts with the Chairman and Chief Executive Officer (CEO), Dave Cote, who notes “The only acceptable goal is a workplace free of injuries and hazards to the environment.” This commitment to HSE is evidenced by Mr. Cote’s endorsement of the Sustainable Opportunity Policy – Honeywell’s Commitment to Health, Safety and the Environment, which is cascaded throughout the organization globally.

The Aerospace Integrated Supply Chain’s (ISC) Vision, Mission and Strategies perpetuate a culture of continuous improvement with HSE deeply rooted as a key strategy. (Appendix 4 – ISC Vision, Mission and Strategies)

As noted by the Aerospace HSEF Vision and Mission, we maintain an uncompromising commitment to employee health and safety and environmental stewardship. We do this through the capabilities of our global talent and the strength of our HSE&F Management Systems.

There is an uncompromising commitment to HSE, which starts at the highest levels within the organization and is evidenced by the routine behaviors and practices demonstrated by all employees daily. HSE is integrated into the fabric of our operations, for example, HSE must be fully integrated into Standard Operating Sheets (SOS): (Appendix 5 – Site Standard Operating Sheet Example)
Key HSE points must be listed on the SOS and identified with the universal “green cross” symbol.
• The SOS must identify all task related personal protective equipment (PPE).
• Each SOS which is related to operations, maintenance or other HSE critical tasks must include an HSE signature.
• The HSE signature must demonstrate that the HSE professional agrees that HSE has been properly integrated into the SOS.

Additionally, HSE activities must be included in the Standardized Work for all members of the Site Leadership Team, including Managers, Supervisors and Team Leaders. (Appendix 6 – Standard Work for Leaders Example)

Key Leadership HSE roles and responsibilities include:
• Establishing vision, setting strategy, and deploying goals
• Driving the appropriate HSE behaviors through coaching and mentoring
• Supporting the deployment and maturity of the HSE Management System
• Participating, supporting, and providing oversight of HSE activities
• Understanding the site and functional level risk assessments
• Allocating resources necessary for compliance (funding and staff)
• Holding employees accountable for their actions

Key functional HSEF responsibilities include:
• Responsible for deploying consistent HSE management systems across all sites.
• Leads self-assessment activities and champions world-class safety and environmental performance.
• Drives systemic improvements and process adherence to regulatory requirements.
• Facilities is an enabler to support all business functions by delivering and maintaining safe, efficient and reliable systems and work environments.
• Collaborates across functions to ensure product regulatory compliance and proactively identify environmentally friendly replacements.
• Drives sustainability practices into the organization to encompass Aero-wide participation.

Honeywell Aerospace ensures the availability and resources essential to establish, implement, maintain and improve the Aerospace HSE management system (HSEMS).

Honeywell Aerospace identifies and provides the human, financial and other resources essential to implement the HSEMS. Resources necessary for the effective implementation of the HSEMS have been included in the business unit’s operating budget. HSE performance, including conformance with HSE objectives and targets, is considered in the appraisal of employees, whenever appropriate.

The business group, as a whole, is responsible for:
• Defining global requirements to protect human health and the environment and supporting compliance with applicable laws and regulations;
• Assessing compliance and performance relative to health, safety, and environmental requirements and objectives on a regular basis;
• Promptly sharing information about significant hazards of its products and operations with all relevant stakeholders;
• Ensuring that Honeywell Aerospace Business level HSE documentation fulfills all requirements of the Honeywell International Corporate level HSE system;
• Selecting and monitoring commercial partners’ HSE performance;
• Providing stakeholders with product stewardship support, including product risk assessment, customer HSE information or training, and technical support, as needed;
• Proactively addressing emerging regulations that may impact the business following the three step process adapted from the Department of Defense process for assessing emerging requirements: Scan-Watch-Act;
• Strengthening the foundation of sustainability across all functions within the Aerospace business group of Honeywell.

The setting of HSE objectives and targets is a part of the overall business planning process (including strategic plans and annual operating plans), and is consistent with the Honeywell International Corporate HSE Policy. There are several critical phases of the Honeywell planning cycle:

• Each year, the business groups prepare a Strategic Plan (STRAP). The STRAP lays out the business strategies and major activities required to carry out the strategy over the following three to five years. (Appendix 7 – Aerospace HSEF Strategic Plan)
• Following STRAP, the Strategy Deployment Process (SDP) is initiated. SDP is an iterative process that follows the development and cascading of the STRAP. Strategic breakthrough objectives derive from the STRAP and along with AOP goals are then cascaded through the various leadership levels and assigned to sites to execute on their contribution to the business breakthrough objectives. (Appendix 10 – Aerospace HSEF X-matrix)
• Based on the direction and goals set in the STRAP and SDP, the business units then prepare an Annual Operating Plan (AOP) (Appendix 8 – Aerospace HSEF Annual Operating Plan), generally by August-September of each year. The AOP includes key objectives and budgets for sites as well as program initiatives for the following year. The AOP is reviewed with senior corporate management, generally in October, and finalized at that point.
• Aerospace HSEF prepares the HSE Performance Index (HSEPI) (Appendix 9 – HSE Performance Index), other performance metrics (e.g. sustainability) and strategic initiatives as input to the AOP.
• Aerospace, Regional, Business Center, and site strategic plans are developed to align site activities with the Honeywell Operating System.

Both the STRAP process and AOP process integrate the locations’ and Aerospace’s HSE management system in the following ways:

• STRAP may include new business opportunities – products, services, and activities – that may have significant HSE interactions. The management system ensures that these interactions are taken into account during the planning process in order to avoid increases in HSE risk, whenever possible, and to avoid potentially costly unanticipated occurrences during the execution phase.
• HSE opportunities can be identified during the STRAP process. Pollution prevention and hazard/liability reduction activities are often integrated into new products, services and activities as they are being rolled out.
• The planning for the resources necessary to support the HSEMS is an integral part of the AOP process. Significant investments or projects needed to implement the HSEMS initiatives are included in the objectives and budgets set in the AOP.

Additional examples of management leadership and employee involvement include:

• Employee involvement during the daily tiered meeting structure
• Submittal of continuous improvement ideas
• Involvement in Rapid Problem Solving and incident investigations
• Behavior observation or peer-to-peer assessments
• Machine, cell, and site-level risk assessments
• Employee committees
• HSE Kaizen events
Commitment to Goals

To visibly demonstrate the organization’s HSE commitment the Aerospace HSEF Leadership Team has fully implemented the requirements and expectations of the HSEMS, just as sites are expected to. The full complement of standards, including annual self assessment via the Self Assessment Tool (SAT) create a robust, systematic approach to managing HSEF at the leadership level.

HSEMS alignment isn’t the only way the team leads by example; embracing HOS to drive HSEMS continual improvement is another clear indication that standards and requirements for leadership are comparable to those at other levels. This commitment is made clear by the excerpt below:

As previously mentioned, the setting of HSE objectives and targets is a part of the overall business planning process (including strategic plans and annual operating plans), and consists of several critical phases:

- Each year, the business groups prepare a Strategic Plan (STRAP). The STRAP lays out the business strategies and major activities required to carry out the strategy over the following three to five years. (Appendix 7 – Aerospace HSEF Strategic Plan)
- Following STRAP, the Strategy Deployment Process (SDP) is initiated. SDP is an iterative process that follows the development and cascading of the STRAP. Strategic breakthrough objectives derive from the STRAP and along with AOP goals are then cascaded through the various leadership levels and assigned to sites to execute on their contribution to the business breakthrough objectives. (Appendix 10 – Aerospace HSEF X-matrix)
• Based on the direction and goals set in the STRAP and SDP, the business units then prepare an Annual Operating Plan (AOP) (Appendix 8 – Aerospace HSEF Annual Operating Plan), generally by August-September of each year. The AOP includes key objectives and budgets for sites as well as program initiatives for the following year. The AOP is reviewed with senior corporate management, generally in October, and finalized at that point. Aerospace HSEF prepares the HSE Performance Index (HSEPI) (Appendix 9 – HSE Performance Index), other performance metrics (e.g. sustainability) and strategic initiatives as input to the AOP.

• Aerospace, Regional, Business Center, and site strategic plans are developed to align site activities with the Honeywell Operating System.

• Additional objectives may be developed following regulatory or operational changes that have the potential to introduce new requirements, hazards or risks to the organization.

Action plans or A3s for the objectives detail the responsibilities, timeframes or Targets to Improve (TTIs), milestones or Key Improvement Priorities (KIPs), and resources necessary for the achievement of each objective. KIPs and TTIs that support the overall objective are detailed in A3s. The programs are maintained with current information and the progress of each program is reviewed during Monthly Operating Review meetings (MOR). Prioritization of objectives, i.e., Strategy Deployment (SDP) can be located in the position closest to the “X” on the X-matrix (Appendix 10 – Aerospace HSEF X-matrix). HSEPI weighting is another mechanism used to prioritize metric importance. Corrective and/or preventive action is taken as appropriate when action plans fail to achieve their defined targets and/or objectives.

The results of any internal audits, Risk Assessments, compliance assurance activities, HSE performance, capital project execution and Special Emphasis Program (SEP) are used to judge the effectiveness of the Aerospace HSEMS implementation. This information is reviewed during regularly scheduled HSEF Tier Meetings, Monthly Operating Reviews (MOR), and other operational reviews. The results of these reviews are presented to Honeywell Aerospace Leadership Team at the Management Review meeting, along with any recommendations for improvement. Results are used to formulate action plans and to assist the business in development of AOP and performance objectives (HPD).

Organizational Climate / Culture

Honeywell believes that having an engaged and motivated workforce is key to our business success. We have a responsibility to treat our employees with respect and dignity, be fair and consistent, and create a work environment that is positive and productive.

Promoting and sustaining Positive Employee Relations (PER) is critical. The annual PER survey process provides us with the opportunity to capture candid and honest employee feedback that will help us understand how management is perceived from a trust and respect standpoint.

An annual PER survey is administered with all Honeywell employees to take the pulse of employee engagement within our businesses. The purpose of the survey is to collect feedback and ideas to improve the work experience for employees as well as to drive quality and delivery to our customers. There are 21 key areas we focus on including everything from safety to communication to job security.

Employee engagement is a primary differentiator on how well Honeywell succeeds as a business. The annual PER survey provides us with a snapshot in time of how employees feel about working at Honeywell. It helps us to understand where we are effective as leaders, how our prior year’s actions have positively impacted our workforce, and where we still have opportunity to improve. The survey serves as an important calibration to learn where we are excelling; these will be areas that we will want to ensure we maintain throughout the year. It also provides us with specific areas where we need to focus our energy on improving.
In 2014, specific to the Safe Environment question, overall favorability was at 91.64%, well above the 70% favorability target and the highest scoring question of the 21 key focus areas. Response to HSE issues was another very favorable category, with overall favorability at 88.52%. Positive employee response in these areas demonstrates that the workforce is knowledgeable and proactively engaged in the area of HSE.

Stakeholder engagement and functional collaboration is another key element of building trust and creating employee and leadership engagement. As such, in 2014 the Integrated Supply Chain (ISC) launched a Standards and Value Assessment to assess the level of trust, collaboration, and cross-functional integration within the ISC and between each functional group. From this survey, peer functional groups defined HSEF as the top group for collaborating well, a group that demonstrates strong collaboration with other functions to make the best possible decisions for the business.

Workplace behaviors differentiate levels of performance at Honeywell. Those who embody and develop them personally and in others drive personal and business success. The 12 Honeywell Behaviors consist of:

- Growth and Customer Focus
- Leadership Impact
- Gets Results
- Makes People Better
- Champions Change
- Fosters Teamwork and Diversity
- Global Mindset
- Intelligent Risk Taking
- Self-Aware / Learner
- Effective Communicator
- Integrative Thinker
- Technical or Functional Excellence

Contractors who work routinely with Honeywell especially long-term, on-site work, have adopted Honeywell’s culture and follow our lead, participating in HOS meetings, coordinating corrective actions, and developing robust HSE programs.

Citizenship

Honeywell Aerospace is committed to improving the world we live in by creating, supporting, and nurturing programs and initiatives that serve a global community. Our solutions and technologies expand sustainable capacity and improve the efficiency of products and processes, fostering "Sustainable Opportunity." See the 2014 Honeywell Corporate Citizenship Report for additional details.

By integrating health, safety, and environmental considerations into all aspects of our business, we protect our employees, our communities, and the environment; achieve sustainable growth and accelerated productivity; drive compliance with all applicable regulations; and develop technologies that expand the sustainable capacity of our world. Our health, safety, and environmental management system reflects our values and helps us meet our business objectives.

Honeywell’s Sustainable Opportunity Policy is aligned with our Health, Safety and Environment (HSE) Management System, which is integrated into the Honeywell Operating System. Health, safety, and environmental functions at Honeywell are not separate from business operations. Strong leadership support, employee engagement, and management system principles are integrated into the Honeywell Operating System (HOS). HOS is a comprehensive, integrated business approach that drives sustainable improvements in safety, the environment, quality, delivery, cost, and inventory.
Honeywell Aerospace

Our Product Stewardship New Product Introduction Process requires the organization to consider eco-efficiency criteria throughout the product lifecycle during new product development. Criteria to consider include:

- Reduction of natural resources during manufacture and distribution;
- Increased energy – efficiency of the product itself or because of its use;
- Reduction in waste production;
- Product reuse or recycling opportunities;
- Opportunities for use of recycled or renewable production materials;
- Reduction or elimination of classified toxic or hazardous materials;
- Reduction in packaging.

An example of Aerospace’s stewardship activities aimed at reducing our environmental footprint is the 2014 Aerospace Energy Week. In October 2014 Aerospace kicked-off its third annual energy week event, which included participation from each global region (Americas, Asia Pacific, and Europe). The theme, “Going Global” increased the scope beyond energy and focused on increasing employee and site acumen around controlling and reducing the quantity of materials received at our sites, improving the utilization of process materials, and reducing waste and increasing recycling practices.

Multiple sites globally participated in the weeklong event, which consisted of topics related to sustainability, energy consumption, and recycling. Training materials, posters, videos and instructions were provided to assist with the event. During the event sites were asked to compile energy reduction suggestions and share them with site and Aerospace leadership. Suggestions included a variety of low-or no-cost solutions and quick wins, examples included:

- Automated lighting controls
- Infrared scans for the identification of energy loss
- Low flow water fixtures
- Compressed air leak detection
- Lighting updates and turning off outdoor lights during daytime hours

**Two Energy Week Kaizens Selected as Regional Winners**

Nearly $33,000 USD in annual savings – and significant energy reductions – will be realized by kaizens suggested by Ladislav Chmela and Andrew Watton during Energy Week. That’s why their ideas were selected as the best of all the employee kaizens from the annual event, with the two employees recognized by EMEAI President James Bryson during his Town Hall Webcast, live from Rolle on 10 February, 2015.

Chmela, a Maintenance Engineer at Aerospace-Olomouc, suggested a new operating mode to reduce electric energy for cooling oil in the oil recovery system used by three Computer Numeric Control grinder machines. The solution readjusts oil cooling from 8.5 to 15 degrees C in accordance with grinding technological requirements. It results in a 39 percent reduction in energy usage and saves nearly 6,000 USD a year.

Andrew Watton, Senior Advanced Product Design Engineer in Aerospace-Bournemouth, suggested using a bleed valve rather than furnace bleed to warm the pipe work and test unit faster. It cuts energy usage by 50 percent and saves 27,000 USD a year. The solution reduces the required warm-up time from one hour to 30 minutes and eliminates the need to vent the furnace bleed to the atmosphere. Watton’s Energy Week idea was also recognized following Energy Week in 2013. That, plus his involvement in many kaizen activities over the past years, also earned him the Global Repair and Overhaul Engineering (GROE) Award in April 2013.
All Energy Week kaizens were considered at the site level, with the best low-or no-cost ideas forwarded to the next round. Projects had to be in place and loaded to PEERS (Portfolio Energy and Environmental Reporting System) with only two projects submitted for regional recognition.

Transformation Leader Rachael White, who leads the Energy Week initiative, said, “We’ve been celebrating Energy Week for three years in a row, and our improvement ideas have become stronger, more sophisticated, more targeted. These two ideas deserve regional recognition. It’s great that people are moving beyond simply thinking or talking about saving energy. Andrew and Ladislav came up with good, practical ideas. That’s a great outcome for this annual event.”

Energy Week encourages all employees to consider ways to reduce energy usage both at work and at home, with an emphasis on simple ideas that are cost-effective to implement.

Honeywell Aerospace has a history of community support and outreach, notable examples include:

- **2011 Fukushima Japan Nuclear Disaster** – In March 2011, Aerospace-Albuquerque and the T-Hawk (Unmanned Aerial Vehicle- UAV) programs were requested to deploy T-Hawks and their pilots to Fukushima, Japan in 3-5 days from notice. The T-Hawks were used to safely view and assess damage to the nuclear reactors caused by the tsunami. The Albuquerque HSEF team was responsible for expediting seven T-Hawk pilot’s safety training, medical surveillance examinations, and immunizations. The HSEF team worked with corporate medical staff to research and locate Potassium Iodine tabs (recommended for those exposed to high levels of radiation) and the radiation badges to monitor potential exposures for those being deployed.

- **2012 Colorado Wildfires** – During the Waldo Canyon Wildfires of 2012 32,000 people were evacuated and more than 300 homes were lost due to the wildfires near Colorado Springs, Colo. Unfortunately, one Honeywell employee lost his home and 60 were displaced.

When a natural disaster strikes, Honeywell Hometown Solutions – through donations from Honeywell employees and a company match – responds by delivering direct assistance to affected employees and communities from its Honeywell Humanitarian Relief Fund (HHRF). Following the HHRF motto, “Do the right work and do it right now,” the Fund provided cash assistance to all affected employees.

“I want to say thank you to the Honeywell Humanitarian Relief Fund,” said Carl Rust, Quality Engineer, Honeywell Technology Solutions Inc. “The support is much appreciated. It is very gratifying to work for a company that really takes care of their own.”

The Rust’s were ordered to evacuate from their homes but returned safely days later. The generous contributions from employees around the world and the company match raised more than $200,000, reflecting an inspirational and gratifying response that demonstrates a commitment to helping their colleagues in need.

Honeywell employees from around the world made generous donations through the Honeywell Humanitarian Relief Fund (HHRF) to support the Colorado Springs community in the aftermath of the Waldo Canyon Wildfires of 2012 and the Black Forest Wildfires of 2013. Donations of $255,000 in Honeywell personal protective equipment, including Honeywell gloves, boots and hoods as well as Honeywell’s Morning Pride turnout gear and helmets, went to three Waldo Canyon Volunteer fire departments and three Black Forest Volunteer fire departments. Direct cash donations were made to six additional Waldo Canyon volunteer fire companies.
Section III: Integrated Management System

Honeywell’s Sustainable Opportunity Policy is deliberately and directly embedded into our company-wide Honeywell Operating System. The policy is endorsed by Honeywell’s CEO and senior leadership. The policy is posted in every facility and communicated to all employees and contractors.

The company utilizes a comprehensive HSE Management System based on recognized third-party-certified standards, including ISO 14001 and OHSAS 18001, and industry best practices. The system is fully integrated into the Honeywell Operating System (HOS), the company’s blueprint for continuous, sustainable operational improvement.

Compliance with standards and regulatory requirements is monitored through a company-wide, Corporate-led audit process. The timely development and implementation of process improvements and corrective action plans are closely monitored.

Honeywell Aerospace’s HSE Management System is based on 13 core standards that require operating entities to identify HSE legal requirements and goals, to set clear objectives for improvement, and to maintain programs designed to achieve those objectives. The Aerospace HSEMS is comprised of the following core standards:

- Aerospace Procedure for Health, Safety and Environment Policy
- Risk Assessment
- Legal and Other Requirements
- Structure and Responsibility
- Document Control and Records
- Operational Control
- Management of Change
- Training
- Communications
- Corrective and Preventive Action
- Monitoring, Measurement and Self-Assessment
- Objectives Targets Management Plans
- Management Review

In 2014, based on the results of a review performed by DNV GL Business Assurance USA, Inc., the Honeywell Aerospace Health, Safety and Environmental Management System (HSEMS) was deemed to meet the intent and conforms to the requirements of ISO 14001:2004 / OHSAS 18001:2007 standards (Appendix 11 – Management System Conformance).

Policies, Goals, and Objectives

In addition to the aforementioned Sustainable Opportunity Policy, the Aerospace HSEMS and related strategic plans are governed by several key policies, goals, and objectives. The Honeywell Aerospace Health, Safety, Environment, and Facilities (HSEF) Vision and Mission are at the core of what we do and how we operate. As an integrated business partner we have an uncompromising commitment to employee health and safety and environmental stewardship.

To assure that we protect our people and the environment through the capabilities of our global talent and the strength of our HSEF Management Systems, Honeywell Aerospace sets aggressive targets managed via a robust management operating system (MOS). Figure 3 depicts the interconnectivity of goals and objectives.
As previously noted, each year Aerospace prepares a Strategic Plan (STRAP). The STRAP lays out the business strategies and major activities required to carry out the strategy over the following three to five years.

(Appendix 7 – Aerospace HSEF Strategic Plan)

In addition to STRAP, strategy deployment (SDP) is used as a comprehensive process to integrate the traditional elements of STRAP (long-term business objectives), breakthrough objectives, cascaded goal deployment (AOP), daily management and rigorous management operating review processes.

As previously mentioned SDP is an iterative process that follows the development and cascading of the STRAP. Strategic breakthrough objectives derive from the STRAP and along with AOP goals are then cascaded through the various leadership levels and assigned to sites to execute on their contribution to the business breakthrough objectives. The critical few breakthrough objectives (Achieve 100% Regulatory Compliance and Enable HOS Gold Enterprises by All Plants Achieving SAT ≥85%) are developed at the highest possible levels of leadership and are required to be a significant stretch that operationalizes STRAP long-term objectives.

![HSEF Strategy Deployment & Daily Management](image)

Strategy Connects to Standard Work, Improving HOS-HSEMS Maturity

Each function must then align their goals to match the strategic business objectives. For example, at the site level, the critical few breakthrough objectives must be either directly or indirectly linked to the top metrics of safety, quality, delivery, inventory, and productivity. When sites execute well on these key levers, they are able to positively impact the business.

Based on the direction and goals set in the STRAP, the business units then prepare an Annual Operating Plan (AOP) (Appendix 8 – Aerospace HSEF Annual Operating Plan). The AOP includes key objectives and budgets for sites as well as program initiatives for the following year. Aerospace HSEF prepares the HSE Performance Index (HSEPI) (Appendix 9 – HSE Performance Index), other performance metrics (e.g. sustainability) and strategic initiatives as input to the AOP.
Organizational Communications

The Aerospace HSE Communication Plan includes expectations for periodic internal communication from business and functional Leadership. The communication plan leverages leadership messaging via newsletters, town hall meetings, quarterly business reviews and other forums to ensure continual awareness of HSE issues and performance. The HSE Communication Plan is enhanced by the Honeywell Operating System, which sets expectations at all levels of the organization to be involved in coaching, observing and communicating HSE issues.

HSEF messaging is communicated through a variety of vehicles, including:
- One-Way: e-mail, articles, newsletters, video, the intranet, etc.
- Two-Way: All-Hands meetings, Manager toolkits/talking points, employee roundtables/meetings, virtual meetings, face-to-face presentations, management operating reviews (MORs), Q&As, etc.

Integration of HSEF messaging is encouraged through business, region or location-specific processes or tools such as MORs, newsletters, HSEF-specific stand-downs, and internal and external HSEF bulletins or alerts. Internationally and nationally recognized observances also provide a forum for wide-reaching communications and activities for specific HSEF topics.

Specific Aerospace HSEF examples include:
- Weekly Tiered Accountability Meetings
- Monthly Aerospace HSEF Message
- Monthly Product Stewardship and Sustainability Horizon Report
- Monthly Aerospace HSEF Pride and Recognition Video
- Quarterly HSEF Global Town Hall Meeting
- Quarterly HSEF ISC Leadership Council Meeting
- Semi-Annual HSEMS Management Review Meeting
- Annual Regional HSEF Conference
- HSE Alerts
- Subject Matter Expert (SME) Committee Meetings
- Webinars

Audits and Continuous Improvement

Honeywell and Honeywell Aerospace maintain very robust governance and audit processes. The Corporate Health, Safety, Environment, Product Stewardship and Sustainability (HSEPS) organization oversees the annual site self assessment process or SAT, along with the corporate audit process and Assurance Letter process. Aerospace operates an SBG-specific compliance assurance program that assures compliance with legal and other requirements and includes regularly scheduled compliance audits and verifications, reviews of the assurance letter process using the corporate Self Assessment Tool, and internal management systems audits. Additionally, Aerospace employs compliance verifications on an as-needed basis, these include third-party compliance audits at sites selected based on relevant risk assessment criteria.

The assessment of a site’s HSE maturity against corporate standards, SBG specific processes, and all applicable regulatory requirements is performed by the site annually. Corporate HSEPS deploys an online SAT at the beginning of each calendar year, which is based on all applicable corporate standards, SBG specific processes, and applicable regulatory requirements. All operating facilities complete the SAT within a specified timeframe.
Once the SAT is completed and submitted by the facility, the SBG Business or Regional / Multi-site Functional HSE leader reviews the content and approves the SAT. The business HSE leader is responsible for approving the SAT of every participating facility in their respective business. The approved SAT is added as an event in the corporate Event Tracking System (ETS) and all identified deficiencies noted in the SAT must be added as corrective actions to the same system.

Following the completion of the annual self assessment, the Assurance Letter process is initiated. Each site that completes the SAT must have the Assurance Letter signed by the site leader (Appendix 12 – Assurance Letter). Site leadership signs their Assurance Letter and submits it along with any open corrective actions and the SAT to their business and HSE Leaders for roll-up.

At each level above the site, the corresponding HSE leader promotes corrective actions that meet the defined promotion criteria to the next level. SBG HSE Leaders, in consultation with counsel, develop a prioritized aggregated response for their Business Presidents. Honeywell General Counsel and the VP HSEPS review all SBG-level items with each SBG HSE leader. This review shall also address SBG-wide issues that have been identified to apply across the SBG. HSE items from recent acquisitions, impending divestitures/closures are also discussed during this review.

Business Presidents sign and submit the Assurance Letter with priority corrective actions (also called Assurance Letter items) to the Honeywell Chairman and CEO via the VP Corporate HSEPS. Corporate presents the assessment to senior management and the Corporate Responsibility Committee.

The corporate HSE performance audit is a management tool for monitoring and verifying the effective implementation of the HSEMS at a facility. The audit process is based on all applicable corporate standards, SBG specific processes, and applicable regulatory requirements. All sites are categorized based on their risk profile and are subsequently placed in a 2, 3, or 4 year audit cycle. The audit program is intended to:

- Provide Honeywell Leadership assurance regarding the maturity and performance of the HSE management system
- Provide Honeywell Leadership assurance regarding effective and proactive control of HSE risks and maintenance of regulatory compliance
- Continuously improve the organization’s understanding and effectiveness of the HSE Management System by verifying the site’s SAT

Each audit team member must be trained to the corporate audit requirements in order to participate in the audit program. The exception may be consultants hired to perform a specific audit topic or audit members that provide limited support.

Hazard Recognition and Risk Reduction

The Aerospace business deploys several processes to identify the HSE aspects of its processes, operations, products, and services including phase gate risk assessments for products, process safety startup reviews for operations, process hazard analyses, hazard recognition techniques, exposure assessment and monitoring programs, HSE review for capital expenditures, and other methodologies to assess third-party risk.

These processes are utilized by the Aerospace SBG as applicable to determine whether they have, or could potentially have significant impact on the environment, employee health and safety, or the community in which it operates. Significant HSE aspects are those that result or could result in significant positive or negative security, environmental, or health and safety impacts. They include both internal (e.g., employee safety and
process safety) and external (e.g., community and environmental) impacts. Annually, each site conducts a Risk Assessment utilizing a common tool.

To effectively manage HSE responsibilities, locations must identify operational hazards and understand current and potential risks associated with those hazards. The Aerospace risk assessment process provides a systematic process to identify, assess and prioritize HSE hazards such that a location, business, or region can assure risks are trended, controlled or targeted for control. An additional and important activity in this process is defining the location’s operational scope and assuring that all leadership levels are aware and understanding of the hazards and risks within their respective spans of control. This activity is critical not only to identify all significant HSE hazards, but also to help ensure the entire location’s HSE Management System is appropriate for its operations.

The adequacy of the controls associated with identified significant HSE aspects are evaluated and documented within the HSE management system. The significant aspects and the control of risks associated with them are given special consideration throughout the planning and implementation of the HSEMS.

The development of common HSE aspects for Aerospace is identified via review of outputs from the Risk Assessment Processes, Self Assessment Tool (SAT), and Assurance Letter. Additionally, HSE aspects are reviewed annually as part of the Management Review Process.

The identification of common or highly significant aspects drives management decisions regarding necessary controls and monitoring and measurement activities across the Aerospace business. Action plans to address identified significant aspects are developed as part of the business planning process and may include actions such as strategic initiatives, inclusion in HSE performance metrics, or focused audits.

Prevention through Design and Engineering

An organization’s decision to develop a new product, use an existing product in a new way, or utilize a new process may entail HSE-related risks. It is essential that these risks are identified and that proposed controls are evaluated before an organization’s decision is made. New information about an existing product or process may identify new HSE risks that require action or control. Absence of a Product Stewardship system exposes Aerospace to potential non-compliance with direct and indirect requirements from environmental regulators, customers and industry committees, which present the risk of:

- Contractual and Regulatory Penalties
- Late product introductions
- Supply chain interruptions
- Inability to operate globally
- Exclusion from bids
- Waste

As such, Honeywell Aerospace has specific requirements to ensure that HSE-related risks associated with product or material changes or introductions are evaluated by the appropriate Honeywell personnel.

Honeywell Aerospace has established a Product Stewardship team, within the Health, Safety and Environment organization. Product Stewardship has the responsibility to monitor emerging environmental product regulations as well as stay aware of customer hazardous material requirements, access their impact on Honeywell Aerospace products and its supply chain, as well as work with cross-functional teams to manage and minimize the impact of these regulations.
A Product Stewardship Council has been formed, with senior leadership representing various organizations, such as legal, marketing, program management, strategic sourcing, engineering, and customer and product support, with the goal to proactively address emerging issues with the necessary cross functional support.

**Operational HSE Programs**

Beyond compliance through external stakeholder engagement, that’s the intent of Honeywell Aerospace’s Regulatory Engagement Plan. The purpose of this plan is to create a strategy for building successful regulatory agency relationships in the areas where we have operations through proactive engagement planning. There are four focus areas applicable to sites that conduct an annual SAT, which are used to drive regulatory engagement planning:

- **Relationship Building**
  The aim of relationship building is to developing a tangible, consulting rather than enforcing relationship with regulators. We will achieve this through professional, proper and appropriate interaction with our regulators. A key site-specific goal that will build relationships is to know your inspectors.

- **Enforcement Focus**
  By understanding and having a plan or process that addresses key regulatory agency enforcement focus areas sites will maintain preparedness for inspections. Knowing what these focus areas are can be done through engagement; typically, outside of inspections. Engagement opportunities will simplify and clarify the regulatory requirements. As a first step, each site should have access to the regulatory agency calendar or events, newsletter or other mechanism that provides enforcement focus, activity or knowledge sharing.

- **Participation**
  Participation in regulatory workshops, conferences, seminars or training (with the regulators) will lead to better understanding of focus areas and opportunities to build relationships. Clearer understanding and firmer relationships will lead to better overall inspection results.

- **Recognition**
  Actively pursuing an award and recognition from regulatory agencies will build a pool-of-goodwill and will tend to lead to a less rigid and less punitive inspection outcome. Doing so demonstrates we strive to go beyond compliance and improve the quality and sustainment our HSE programs. As a first step, sites should determine the feasibility of applying for and getting an agency sponsored award or recognition. If it is currently deemed not feasible, sites should plan for and work to execute a strategy to achieve recognition.

Each site that conducts an annual SAT is expected to use a process that improves the level of regulatory agency interaction and/or engagement beyond compliance inspections. Sites that do this tend to have much better relationships and outcomes with regulatory agencies. Sites without engagement plans tend only to see and learn from agencies during inspections. These sites may have a more strained working relationship with the regulators and may not even know their regulators. This tends to place these sites more at risk of understanding regulatory compliance than sites that have engagement plans.

Our sites will be required to document the following key areas of engagement:

- Identify the Agency Name that is key to the site associated with the following Regulatory Media: Air, Waste Water, Safety, Stormwater (if applicable), Other
- Key regulatory agencies, by name the site engages
- Regulatory agency primary point of contact email address and phone
• The primary relationship person and a backup
• Regulatory agency focus areas
• Planned regulatory agency engagement opportunities and documented date of attendance
• Regulatory agency award opportunities to pursue
• Sharing and learning opportunities from engagement

Management of Change

Management of change (MOC) processes have been implemented at each site for new or modified processes, materials or equipment in order to evaluate and control significant HSE aspects.

MOC programs are intended to sustain or enhance the level of HSE within the operating unit by identifying and controlling hazards and risks associated with change prior to implementation. This is accomplished by addressing technical and administrative basis for change and the impact on health, safety and the environment; documenting internal and/or external authorizations/notifications/permits; updating HSE information and operating procedures; training affected employees; completing pre-startup HSE reviews; and managing corrective and preventive actions.

The Product Stewardship function manages the systems in place to generate information which is used to communicate risk information to a number of stakeholders. The Product Stewardship Director interacts with commercial, procurement, and technology groups, as well as individual sites, to ensure that accurate risk information is available to appropriate stakeholders. The Product Stewardship function resides within HSEF and interacts to support the HSEMS through sponsorship of the Product Stewardship Council. The Product Stewardship Council is responsible for The Risk Assessment Committee (TRAC) notifications and Integrated Product Development and Support (IPDS) reviews related to new products or changes to existing products which do or could have HSE impact.

Product changes are managed via the Integrated Product Delivery and Support (IPDS) process. Changes in materials that include the use of hazardous materials as are to be reviewed by the Product Stewardship Council and presented to the Corporate TRAC (The Risk Assessment Committee), as required.

When changes are made to process chemistry or to raw chemical materials, a review mechanism must be in place to evaluate any potential hazards that the new chemical or process may present. A robust new chemical approval procedure is required to evaluate new and/or changed chemicals, both in the process and chemicals used for raw materials.

For changes that involve how the chemical is used in the process (process chemistry) or process changes that affects the chemical, (higher temperature, more pressure, etc.) the Management of Change process is used. This will ensure attention is drawn to the change and the evaluation of its effects can be reviewed.

Sites must consider that changes in vendors for chemicals needs to be managed from a Hazard Communications standpoint – (i.e. a Safety Data Sheet (SDS) from each vendor required, even if the product is the same). The MOC process can be used by sites as a way to mange this requirement if no other management system exists.

Changes to facilities that can alter previous practices, create new hazards, and are not replacement in kind, must be reviewed before implementation. The following items must be considered before changes are made:

• Impact of change on safety, health, and environmental issues.
• Revise operating procedures as necessary and ensure that personnel are trained in any changes prior to implementation of the modification.
• Utility usage (i.e., electricity, water, natural gas, etc.).
• Effects on Wastewater Treatment systems.
• Environmental permitting concerns.
• Equipment or process closure/disposition.
• Transition-related activity.
• Prime contractor changes.
• Post emergency recovery actions.

At the Aerospace HSEF headquarters level, a robust change management process has been established to account for various forms of change that impact the headquarters HSEF team and the broader Aerospace HSEF organization. An element of the headquarters MOC process includes a Clearinghouse Request Process, where Aerospace-level requests for information or flow-down actions directed at the sites is reviewed and vetted to assure linearity in the schedule in an effort to balance the work and not overload the HSEF teams.

Workforce Empowerment, Improvement and Motivation

Many organizations implement lean manufacturing principles and explore the importance of a lean culture, but few organizations recognize that culture is not something to target in your change efforts. Culture is created by an individual’s experiences within the organization; therefore, to change culture you must change the experiences people have.

The most significant experience an individual has within an organization is the environment created through leadership behaviors. While many things can influence leadership behaviors, one of the most significant is the management system. The Honeywell Operating System (HOS) defines expectations of leaders, their role and responsibilities within the organization, and details specific accountability and standard work.

Examples of Honeywell’s cooperative approach to management leadership and employee involvement, which are designed to create a culture of continuous improvement, include the following elements:

• Employee involvement during the daily tiered accountability meeting structure
• Submittal of continuous improvement ideas
• Involvement in Rapid Problem Solving and incident investigations
• Behavior observation or peer-to-peer assessments
• Machine, cell, and site-level risk assessments
• Employee committees
• HSE Kaizen events
• Management Review
• Leadership Safety Observations

Specific reward and recognition programs that enhance the HSE cultural experience include:

HSE Excellence Awards

Recognizing sites that have achieved exemplary HSE performance through alignment with Honeywell’s five key initiatives and year-over-year improvement in health, safety and environmental management system maturity. That’s the purpose of the HSE Excellence Award(s); it recognizes Aerospace sites with exceptional HSE processes and where employee and leadership engagement is clearly demonstrated. It provides site recognition to employees who have demonstrated HSE and business success by leveraging the strength of our HSE Management System and the integration of the Honeywell Operating System (HOS) resulting in
sustainable HSE performance. These awards acknowledge employee involvement and leadership behavior that supports the Aerospace HSE Vision of, “An Integrated Business partner providing unparalleled HSE&F value and uncompromising commitment to employee health and safety and environmental stewardship.”

**HSE Process Excellence Awards**

Recognizes any Aerospace site that deployed a process improvement where employee and leadership engagement was clearly demonstrated. The HSE Process Excellence Award is open to all sites where an improved process has been implemented over the previous year, which:

- significantly improved an HSE process
- reduced organizational risk
- Improved the HSE Management system

**Milestone Recognition Program**

The HSE Milestone Award program recognizes that a safety culture grows out of an awareness of performance around both lagging (injuries) and leading indicators (desired behavior). The Milestone Award was designed with this in mind and recognizes sites who have achieved a perfect HSE Performance Index (HSEPI) score for either 12 or 24 months. The program measures a site’s monthly performance against the HSE performance index, which includes a mixture of lagging and leading indicators each with a weight of 50%. Endorsed by the Aerospace leadership team, the program affords an equal participation opportunity for all sites.

**Monthly Aerospace HSEF Pride and Recognition Video**

Late in 2014, in response to functional PER feedback, Aerospace HSE began to create a monthly video series highlighting some of the great things that are occurring with our colleagues across the globe. The videos focus on the HSE successes with our HSE employees and at plant locations.

Honeywell Aerospace wouldn’t be able to achieve superior results without having great success in the businesses and regions in which we operate. The following are a few select accomplishments from 2014:

- **Honeywell FM&T Kansas City and Nanjing, China** won the 2014 Aerospace HSE Excellence Awards.
- **Anniston, AL** received the “Alabama Workplace Safety Award of Superior Achievement” for continuous operation without a lost time injury from the Alabama Department of Labor.
- The **Greer, SC** site was recognized with “Commendation of Excellence” award for their Lost Workday Case performance.
- **Mexicali, Mexico** for the second year in a row was awarded the Baja California Award of Energy Efficiency for their efforts specific to energy utilization and energy savings.
- The Puerto Rico Manufacturers Association honored **Honeywell Aerospace-Puerto Rico** with the 2014 Bronze Environ-mental Excellence Award.
- **Honeywell HTSI Blount Island** received the Secretary of the Navy Safety Excellence Award for the Ashore, Industrial, Category A.
- **Honeywell HTSI’s Space Contract** was awarded the Johnson Space Center Contractors Safety Forum (CSF) “Super Nova” Award for Safety and Health Excellence, the highest honor given by the CSF.
- **Honeywell HTSI SCNC Contract in Colorado Springs** was recognized with the "Decade of Excellence" Award from the Occupational Safety and Health Administration's Voluntary Protection Program for leading the way to a better and proactive work environment through VPP.
• **Honeywell FM&T Kansas City** was the runner up for the National Safety Council’s Robert W. Campbell Award and received both the National Safety Council’s “Perfect Record Award” and the National Safety Council’s “Significant Improvement Award” for the site’s safety performance.

• **Basingstoke, UK** has been awarded the GOLD Award for Occupational Health & Safety by the Royal Society for the Prevention of Accidents.

• **Olomouc, Czech Republic** was recognized as the “Best Company in Czech Republic for Safety Culture” and was awarded the HSE Excellence Process Improvement Award.

• **Waterford, Ireland** received a “Distinction” award at the National Irish Safety Organization Occupational Safety Awards.

• **Bintan, Indonesia** attained Gold certification, one of the most prestigious safety and health awards from the Republic of Indonesia Government, in recognition of the site’s strong safety and health management system implementation.

• **Singapore Loyang** received a Silver HSE performance award from the Ministry of Manpower of Singapore for excellence in HSE management system maturity.

• **Xiamen, China** was recognized for performance in their Workplace Safety Standardization Audit, resulting in a #2 ranking in the entire district.

These results, along with others too numerous to mention, would not have been possible without strong employee engagement, dedication, and commitment to HSE.

**Workforce Training and Competency Building**

Training is a necessary and fundamental component of an effective HSEMS, shaping employee behaviors and organizational culture. The systematic identification and delivery of HSE training will assure legal and other requirements are met and that employees are qualified to perform work in a safe manner. The organization’s scope of operations, risks, hazards, controls and legal and other requirements serve as the foundation for the identification of training needs.

Employees at all levels, and those working on Honeywell’s behalf, have been made aware of the potential significant HSE impacts that may be associated with their work, HSEMS roles and responsibilities, the importance of conformance with policies and procedures, the potential consequences of departure from specified operating procedures, and safe work practices.

Each site performs a training needs assessment based on the organization’s scope, Risk Assessment, Legal and Other Requirements and training requirements derived from the organization’s current or anticipated Operational Controls. The matrix shall at a minimum identify:

- Titles of the jobs or job classifications covered by the organization’s scope, including Honeywell employees and non-Honeywell employees covered by the risk assessment;
- Competencies required to effectively carry out assigned job responsibilities;
- Training programs required for each job or job classification; and, Training and testing frequency.

Each site develops and executes an annual HSE Training Plan based on the requirements identified in the HSE Training Needs Assessment Matrix and is required to assure the following:

- Training programs are appropriate for the intended audience and adequately address organizational levels, risks, ability, literacy and language skills;
- Training programs are specific to the workplace, activities or operations;
Honeywell Aerospace

- Where required by legal and other requirements or by Honeywell HSER Standards, training programs identify expected competency level and implement methods to assess competency;
- Training on specific HSE Management System roles and responsibilities;
- Training on hazards, risks and controls applicable to each job or job classification; and
- Training on emergency awareness for employees and contractors, including emergency response training for individuals with assigned response duties.

Impact of HSE on Workforce On and Off the Job

Honeywell stresses employee safety at home as well as in the workplace. Employees are provided health screening tools, medical consultation and referral services, an Employee Assistance Program, and health services cost and quality comparison tools.

The Employee Assistance Program (EAP) plays an integral part in providing Honeywell Employee's with a satisfying, safe and healthy working environment. This program is designed to provide support for employees experiencing personal or work related problems. LifeLine is a confidential and external professional service available to all Honeywell employees and their household members, even if you are not covered by a Honeywell health plan.

Daily safety message topics that are applicable to both an employee’s work and home environment are communicated during site Tier meetings and through various other HSE messages. Many Aerospace locations provide subsidies for employee access to wellness/fitness centers, as do they provide regular wellness activities, such as smoking cessation and weight loss programs. Other programs include:

- Recycling events that permit employees to dispose of household waste
- CPR and first aid classes
- Family days and other events that open the site to employees and family members
- Fire extinguisher training

Section IV: Performance Measurements & Information Management

Systemic use of Key Leading and Lagging Indicators

Honeywell Aerospace employs a balanced scorecard for measuring performance; the scorecard is comprised of a mix of leading and lagging indicators. The balanced scorecard, more commonly referred to as the HSE Performance Index (HSEPI) was established in 2008 and includes specific leading and lagging indicators designed to advance HSE maturity and HOS integration, maintain a safe workplace, and sustain the environment. Year-over-year the mix of indicators is evaluated to assure that the appropriate level of focus is applied to areas where continued maturity is warranted. The 2015 HSEPI includes the following leading and lagging indicators (Appendix 9 – HSE Performance Index):

Leading Indicators (50%):
- HSEMS Steering Committee Meetings
- HSE Gembas for Leaders
- HSE Calendar / Permit Reviews
- HSE Layered Reviews
Lagging Indicators:
• Total Recordable Case Rate (5%)
• Lost Workday Case Away Rate (5%)
• Primary Regulatory Inspections without Findings (15%)
• On-time Corrective Action Closure (10%)
• Sustainability: Energy Efficiency (7.5%)
• Hazardous Waste Efficiency (7.5%)

The components are weighted with the highest potential HSEPI score totaling 2.00, see rating for each indicator next to the leading and lagging elements noted above. Each month, all Aerospace sites globally enter required tracking data into the Corporate ETS, which is used to generate progress reports. Additional targets tracked include:

• HSE Audit Score
• Average Days to Close Corrective Actions
• Corrective Actions >180 Days
• All Regulatory Inspections without Findings
• Waste Diversion Rate

Quality and Appropriateness of Measurements and Data Collection

HSE measurements are selected based on business and regulatory drivers and applied globally across Aerospace. As noted, Honeywell Aerospace utilizes the Honeywell Corporate Event Tracking System (ETS), a web-based HSE data management system that utilizes a suite of HSE modules, which includes Compliance Tools (SAT and Risk Assessment, HSE Calendar, HSE Audit Tool); HSE Management Tools (Event Reporting, Corrective Action Monitoring and Tracking, and Root Cause Analysis (RCA)); Data Mining Tools (Performance Monitoring and Trending).

Developed with the Honeywell User Experience (HUE) in mind, in 2015 a new version of the ETS was launched, simplifying data collection, improving reporting capabilities and overall user interface or experience. HUE is an important way for Honeywell to distinguish itself from its competitors; it’s about how you can make a difference in the lives of our customers and employees today. “Honeywell User Experience creates value by understanding the needs of our users, customers, installers, maintainers, channel partners and employees to design intuitive, desirable and differentiated end-to-end experiences.”

With HUE in mind the ETS and all Aerospace-related web-based tools are being redesigned to incorporate HUE and make the user experience:

• More easily understood and communicated
• Attractive and memorable
• Offerings that are intuitive, easy-to-use, easy-to maintain, and easy to get support

Data Analysis and Evaluation

Honeywell Aerospace sets aggressive targets managed via a robust management operating system (MOS). Figure 3 depicts the interconnectivity of goals and objectives. Key Safety, Quality, Deliver, Inventory, and Productivity (SQDIP) metrics are monitored and evaluated daily/weekly. A Monthly Operating Review (MOR) is used to review strategy-related initiatives, performance measures, and other key goals and improvement programs. A triannual Business Decision Week (BDW) is used to assess all STRAP and SDP activities,
progress towards goals and objectives, and overall Aerospace HSE performance. Additionally, a semi-annual HSEMS Management review is used to apprise leadership of overall HSE performance and HSEMS maturity.

Monitoring and Measurement activities support the organization’s need to track its achievement of objectives, commitment to legal compliance, and effectiveness of operational controls. The Aerospace SBG and all Aerospace sites complete an annual self assessment via the Self Assessment Tool (SAT) in an effort to routinely monitor and measure programs and other related activities defined by the HSEMS. In addition to site completion of an annual self assessment other means are utilized to monitor performance, such as surveillance inspections, tracking safety work orders, etc. All sites are required to monitor and report the number of accidents, incidents, and legal non-compliance issues. Corrective Actions are maintained and monitored within the Corporate Event Tracking System (ETS).

Results from the site level SATs are collated and reviewed by Aerospace HSEF leadership to identify significant trends, highlight differences in scores between SAT and corporate audits, track improvements to the HSEMS implementation progress and provide input to Objectives, Targets and Management Plans. In addition, an Aerospace Root Cause Analysis (RCA) process is used to verify that appropriate root cause analysis was conducted for selected events and that appropriate corrective actions were identified and tracked to closure. Any failures are tracked and additional corrective actions identified.

The Honeywell International annual Assurance Letter process is a corporate-level process that requires leadership endorsement and review of the results of a self assessment, with follow-up on all open health, safety and environmental issues. Significant events or corrective actions are promoted to the appropriate management level. Based on the results of the aforementioned assessments, the business unit identifies appropriate measures of HSE performance, tracks those measures and analyzes them for trends, and determines root causes. These elements are included in the HSEPI and other performance metrics as appropriate.

Accessibility and Use of Information Generated from Performance Data

Honeywell employees have access to HSE information via a variety of sources. Information is accessible electronically through the Honeywell and Aerospace intranet sites. Metrics and other key HSE information is visually posted on tier meeting boards and is intended to prompt discussion on current performance, event or issue escalation, HSE events, help needed, etc.

As previously noted, HSE performance is regularly monitored and communicated, example communication vehicles include:

- Triannual HSEF Global Town Hall Meeting
- Triannual HSEF ISC Leadership Council Meeting
- Semi-Annual HSEMS Management Review Meeting
- Annual Regional HSEF Conference
Comparability

Honeywell Aerospace benchmarks internally with other SBGs and externally with industry peers on a biennial basis. Industry peers include key customers, suppliers, and competitors. Honeywell also shares best practices and lessons learned through a variety of forums and industry groups, some of these include:

- Aerospace Industries Association (AIA)
- National Association for Environmental Management (NAEM)
- Manufacturers Alliance for Productivity and Innovation (MAPI)
- Arizona Voluntary Environmental Stewardship Program Advisory Council (VESP)
- General Aviation Manufacturers Association (GAMA)
- Arizona Environmental Strategic Alliance (AESA)

Section V: Results

Demonstration of Continuous HSE Performance Improvement

As depicted by Figure 1, the integration of HSE within HOS has enabled year-over-year maturity resulting in the lowest injury rates in the organization’s history, along with the highest HSE self assessment and audit scores to date. Table 1 below provides a quantitative overview of recent performance as it relates to those indicators described in Section IV:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE Performance Index (HSEPI)</td>
<td>2.00</td>
<td>2.00</td>
<td>1.90</td>
</tr>
<tr>
<td>HSEMS Steering Committee Meetings</td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>HSE Gembas for Leaders</td>
<td>99%</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>HSE Calendar / Permit Reviews</td>
<td>99%</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>HSE Layered Reviews</td>
<td></td>
<td></td>
<td>New in 2014</td>
</tr>
<tr>
<td>Total Recordable Case Rate (5%)</td>
<td>0.52</td>
<td>0.52</td>
<td>0.47</td>
</tr>
<tr>
<td>Aerospace/TS Combined</td>
<td></td>
<td></td>
<td>0.44</td>
</tr>
<tr>
<td>Lost Workday Case Away Rate (5%)</td>
<td>0.15</td>
<td>0.17</td>
<td>0.13</td>
</tr>
<tr>
<td>Aerospace/TS Combined</td>
<td></td>
<td></td>
<td>0.13</td>
</tr>
<tr>
<td>Primary Regulatory Inspections without Findings (15%)</td>
<td>86%</td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>On-time Corrective Action Closure (10%)</td>
<td>97%</td>
<td>97%</td>
<td>95%</td>
</tr>
<tr>
<td>Sustainability: Energy Efficiency (7.5%)</td>
<td>-2.30%</td>
<td>-8.60%</td>
<td>-2.96%</td>
</tr>
<tr>
<td>Hazardous Waste Efficiency (7.5%)</td>
<td>-5.8%</td>
<td>NA</td>
<td>-3.36%</td>
</tr>
<tr>
<td>HSE Audit Score</td>
<td>76</td>
<td>76</td>
<td>80</td>
</tr>
<tr>
<td>Average Days to Close Corrective Actions</td>
<td>64</td>
<td>62</td>
<td>61</td>
</tr>
<tr>
<td>Corrective Actions &gt;180 Days</td>
<td>22.4%</td>
<td>2.07%</td>
<td>0.93%</td>
</tr>
<tr>
<td>All Regulatory Inspections without Findings</td>
<td>75%</td>
<td>80%</td>
<td>82%</td>
</tr>
<tr>
<td>Waste Diversion Rate</td>
<td></td>
<td></td>
<td>54.80%</td>
</tr>
</tbody>
</table>

Table 1, Metrics Comparison
A variety of awards and recognition have been bestowed on Honeywell Aerospace as the result of its pursuit of continuous improvement. Awards and recognition include:

- 2010 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards– Most Improved in Safety
- 2011 Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Honeywell Aerospace set a program record, winning awards in three sectors:
  - 2011 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Engine and Engine Parts
  - 2011 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Space and Missiles
  - 2011 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Guidance and Communications
- 2011 – EHS Today – America’s Safest Companies (Honeywell FM&T)
- 2012 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Space and Missiles
- 2012 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Engine and Engine Parts
- 2012 – EHS Today – America’s Safest Companies (Honeywell Aerospace)
- 2013 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Engine and Engine Parts
- 2013 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Space and Missiles
- 2013 – Aerospace Industries Association (AIA) Worker Safety Excellence Awards – Guidance and Communications
- 2013 – National Safety Council – Occupational Excellence Achievement Award
  The National Safety Council’s Occupational Excellence Achievement Award recognizes companies that have reported injuries and illnesses that involve days away from work equal to or less than 50% of the BLS rating for their 6-digit NAICS code and have had no fatalities during the calendar year. Honeywell Aerospace’s 2012 total lost workday case incidence rate was 0.14 compared to an industry average of:
  - Aircraft engine and engine parts manufacturing – 88% better than industry average
  - Other aircraft parts and auxiliary equipment manufacturing – 93% better than industry average
- 2014 – Based on the results of a review performed by DNV GL Business Assurance USA, Inc., the Honeywell Aerospace Health, Safety and Environmental Management System (HSEMS) was deemed to meet the intent and conforms to the requirements of ISO 14001:2004 / OHSAS 18001:2007 standards (Appendix 11 – Management System Conformance).

See Section III, Workforce Empowerment, Improvement and Motivation for a listing of additional awards and recognition.

Section VI: Linkage to Business Performance

Integration of HSE and Business Management Systems

As discussed in Section III, Honeywell’s Sustainable Opportunity Policy is deliberately and directly embedded into our company-wide Honeywell Operating System. The policy is endorsed by Honeywell’s CEO and senior leadership. The policy is posted in every facility and communicated to all employees and contractors.

The company utilizes a comprehensive HSE Management System based on recognized third-party-certified standards, including ISO 14001 and OHSAS 18001, and industry best practices. The system is fully integrated into the Honeywell Operating System (HOS), the company’s blueprint for continuous, sustainable operational improvement.
Evidence of Added Value or Cost Reduction

Nothing demonstrates added value or the benefit of a proactive safety culture like the 2015 Aerospace HSE Awards recipients. A strong commitment and proactive approach to safety shared by leaders and employees distinguishes this year’s Honeywell Aerospace Health, Safety and Environment (HSE) Excellence Awards recipients.

This commitment is a common theme for site employees and leadership at Aerospace-Anniston in Alabama, winner of the HSE Excellence Award for large sites, and at Federal Manufacturing & Technologies (FM&T) in Albuquerque, N.M., winner in the small site category.

It also helped three sites win HSE Process Excellence Awards. Those recognitions went to Aerospace-Minneapolis for its safety kaizen process, Aerospace-Bournemouth in the United Kingdom for its electronic tier meeting process, and the Honeywell Technology Solutions Inc. (HTSI) APS-3 site in Goose Creek, S.C., for its hazardous waste reduction process.

The awards were presented during scheduled site calls hosted by Mike Owens, Aerospace Vice President of Integrated Supply Chain, and Scott Harczynski, Aerospace Vice President of Health, Safety, Environment and Facilities (HSEF).

The HSE Excellence Awards honor locations whose leadership and engaged employees have strengthened, improved and sustained their HSE processes to achieve extraordinary performance and deliver high-impact business results over the past year.

Among the Anniston site’s accomplishments was closing more than 6,000 safety observations in 2014 and receiving the State of Alabama Certificate of Superior Safety Excellence. Nathan Holmes is Site Leader and Jason Chilton is HSEF Leader.

Chilton said the safety observations were accomplished through an electronic reporting tool. “Tier meetings include daily HSE focus topics,” he said, “and participation in HSE also is encouraged by reward and recognition for the best HSE Observation each month. HSE integration with HOS also has played a key role in enabling the site to succeed. Our HSE performance has shown continual improvement year-over-year directly in line with HOS maturity.”

Honeywell FM&T manages and operates the Department of Energy’s National Security Campus in Kansas City and New Mexico. The New Mexico site recorded zero OSHA Recordable incidents while moving operations from the Kirtland Air Force Base to a new location and was a runner-up for the prestigious Robert W. Campbell Award presented by the National Safety Council. Dean Stoor is Site Leader and Don Fitzpatrick is HSEF Leader.

Stoor said their safety culture is underscored by employees modeling the HSE behaviors and leaders ensuring employees have the resources needed to work safely and protect the environment. “That includes up-down communications through our complete deployment of the Honeywell Operating System Tier meeting structure and tracking HSE issues on problems logs to closure,” he said. “We share lessons learned and celebrate our successes.”

Fitzpatrick also attributed their success to “establishing an environment where continuous improvement and interventions are the norm.”
The sites receiving Process Excellence Awards demonstrated significant improvement in one or more areas of the HSE Management System.

The safety kaizen process recognized at Aerospace-Minneapolis was begun at the Tier 1 level in 2014, piloted in several work cells and has become a site-wide process this year. Ken Fjelstad is the Site Leader and Tom Moibi is the HSE Leader.

“The Safety Kaizen process is a proactive response to unsafe work conditions. It makes safety everyone’s responsibility by driving ownership and accountability,” Fjelstad said.

“It is getting us closer to our ‘zero injury culture’ goal because it is truly employee-owned and driven,” added Moibi. “Through self-managed work teams, employees help identify potential HSE risks and control measures.”

Aerospace-Bournemouth integrated its safety observation card (SOC) database into a site eTier system that uses iPads to track safety observations with notes and photos. Simon Richardson is Site Leader and Craig Parker is HSEF Leader.

“This system promotes daily discussion of HSE issues and improves our safety culture since corrective actions can be driven by the entire leadership team,” said Richardson. Employees support the change because the system “provides employees the opportunity to ensure improvements are completed correctly since the originator is the only person who can close the SOC.”

At HTSI’s Army Prepositioned Stocks (APS)-3 Goose Creek site, improvements to hazardous waste disposal reduced both costs and man-hours spent preparing, storing and transporting materials for disposal. Kent Selby is Site Leader and Tami Altieri is HSE Manager.

Employees, who support Army Strategic Logistics Activity loading and unloading ships, wanted to repurpose materials that remained useful although no longer suitable for onboard demands. Working with Army resources, “batteries and chemical lights were transferred to Joint Base organizations that could use them,” Altieri said, “and engine oil was transferred from a wholesale to retail asset so it could be used for APS-3 vehicle maintenance operations rather than requiring immediate disposal.”

**Continuous and Systematic HSE and Business Performance**

As noted, the integration of HSE within HOS has enabled year-over-year maturity resulting in the lowest injury rates in the organization’s history, along with the highest HSE self assessment and audit scores to date. Through the HSEMS and in conjunction with HOS, continual improvement processes are inherent in the structure of what we do, examples include:

- Monitoring, Measurement and Self-Assessment
- Objectives Targets Management Plans
- Management Review
- Strategy Deployment
- Knowledge Sharing
- Kaizen and Continuous Improvement
- Observation Skills and Waste Identification
- 5S
- Rapid Problem Solving
- Leadership Coaching
- Built in Quality
- Behavior Observation
Aerospace HSEF routinely benchmarks internal and external stakeholders, as do we routinely share best practices and lessons learned to enhance organization efficiency. Examples of external engagement include:

- General Aviation Manufacturers Association (GAMA)
- Presentation on the Regulation of Chemicals in Aerospace: The EU’s REACH Directive, US Legislative Reform of Toxic Substances Control Act (TSCA) and others
- National Association for Environmental Management (NAEM)
- Presentation on Advancing Compliance Assurance and EHS Management Systems
- Arizona Forward Sustainability Conference
- Maricopa County Air Compliance Workshop
- Presentation on Environmental Management Systems

In the spirit of being an integrated business partner, internally Aerospace HSEF routinely shares leading practices with other functional organizations in an effort to continually improve Honeywell and Honeywell Aerospace, examples include:

- Aerospace Quality – sharing Root Cause Analysis and Rapid Problem Solving Processes
- Aerospace IT, Contracts, and HR – sharing HOS deployment overview and lessons learned, Tiered Accountability structure, and various other HOS tools
- Aerospace Advanced Manufacturing Engineering and Procurement – sharing strategy deployment process and Tiered Accountability structure
  - Engineering:
    - Project Leader sent an e-mail: “I love the culture you have created for the team and feel more part of your department than I do mine.”
    - New Project Leader providing feedback verbally: “The team is great to work with, you are very supportive of each other and collaborate well with each other and I have not experienced this with other groups I have worked with.”
  - Procurement:
    - Verbal feedback: “Product Stewardship (PS) runs a great organization, I like working with this group, and you set clear expectations and provide a supportive structure as well as demonstrates a willingness to help.”
- Honeywell Performance Materials and Technologies – sharing Tiered Accountability structure
- Honeywell Corporate HSEPS – sharing HOS deployment overview and lessons learned, STRAP and strategy deployment processes
- Sharing HOS deployment lessons learned and various implementation tools at multiple cross-SBG workshops and seminars

**Demonstration of Improvement in Operational Performance through HSE**

As discussed in Section III, Operational EHS Programs, beyond compliance through external stakeholder engagement is a key element of Honeywell Aerospace’s Regulatory Engagement Plan. The purpose of the Regulatory Engagement Plan is to build successful regulatory agency relationships through proactive engagement planning. As noted, there are four focus areas that are used to drive regulatory engagement planning:

- Relationship Building
- Enforcement Focus
- Participation
- Recognition
Each site is expected to use a process that improves the level of regulatory agency interaction and/or engagement beyond compliance inspections. Sites that do this tend to have much better relationships and outcomes with regulatory agencies. Sites without engagement plans tend only to see and learn from agencies during inspections. These sites may have a more strained working relationship with the regulators and may not even know their regulators. This tends to place these sites more at risk of understanding regulatory compliance than sites that have engagement plans.

Since being implemented in 2011 (first full year in 2012), overall performance (tracked as Regulatory Inspections without Findings) has improved by nearly 40 percent. 2014 performance is as follows:

- 252 regulatory visits globally
- 207 without any findings
- Finding - Any regulatory agency notice requiring action or issues that must be addressed

Inspections by Business / Region:
- Americas - 73%
- APAC – 18%
- EMEA – 5%
- FM&T – 1%
- HTSI - 3%
- Primary Inspections (i.e., Environmental, Safety and Radiation)
  - 90% Agency Visits without Findings
- All Inspections (i.e., Primary plus any additional, such as Food Safety, Facilities, Fire, etc.)
  - 82% Agency Visits without Findings

Section VII: Lessons Learned and Path Forward

Lessons Learned

Since the inception of the HSE Management System in 2005, Honeywell Aerospace has experienced significant improvement in overall HSE maturity. Key performance indicators, such as incident rates and audit scores have improved year-over-year. Incident rates have been reduced by nearly 50-percent, while audit scores have improved by nearly 40-percent.

The integration of the HSEMS into the Honeywell Operating System is a key success factor. The integration of HSE within HOS has enabled year-over-year maturity resulting in the lowest injury rates in the organization’s history, along with the highest HSE self assessment and audit scores to date.

Continuous improvement is at the core of our operating system. As previously mentioned, we believe that today has to be better than yesterday, and tomorrow has to be better than today. As such, Aerospace HSEF has strived to be on the forefront of not only the application of HSE (internally and externally), but functional business integration. Embracing HOS to drive HSEMS continual improvement is a clear indication of this commitment, as is the fact that the HSEF team became the first functional organization within Honeywell to achieve HOS Bronze certification.

Through HOS alignment and business integration, HSEF has learned to develop value added processes and tools that not only mature HSE, but support business needs. Creating a balanced scorecard, which includes leading indicators that align with HOS behaviors and practices, is one example. Another example is foreseeing the need for a process that strategically considers how and where to invest capital that addresses unacceptable levels of HSE and Facilities risk in the organization. Additionally, developing a robust SBG-specific compliance assurance program designed to assure compliance with legal and other requirements and
includes structured compliance audits and performance verification is another example of how HSEF has enabled the organization to successfully mitigate unacceptable levels or business and HSE risk.

Path Forward

When Honeywell Aerospace reflects on past successes and strategically evaluates the future, the path forward is rooted in our management systems. As such, in the spirit of continuous improvement, Honeywell Aerospace HSEF is embarking on a new management systems journey that will cement our partnership with the organization and assure true business integration. As part of our STRAP and strategy deployment efforts, HSEF is deploying a Facilities Management System (FMS), which is intended to improve infrastructure efficiency and reliability by leveraging the structure of our successful HSE Management System and the foundation of the Honeywell Operating System.

The FMS will assure consistency, stability and efficiency of our personnel and infrastructure by developing and implementing common processes and methods to monitor conformance. Where the HSEMS was designed to protect people and the environment, the FMS will provide strategic direction for the protection of assets and business continuity.

Through the HSEMS, the FMS, and full integration into HOS, Honeywell Aerospace HSEF maintains a diligent focus on its Vision to assure that HSEF is fully integrated into the business. As noted by our Vision and Mission, we strive to provide unparalleled HSEF value and we maintain an uncompromising commitment to employee health and safety and environmental stewardship. We are committed to protect people and the environment through the capabilities of our global talent and the strength of our HSEF Management Systems.