



Certified Reliability Leader Workshops

The industry's most advanced thinking in reliability



of reliability improvement efforts fail to generate sustainable business success.

The CRL Workshop explores the WHY and WHAT of reliability, providing you the understanding so you can move from failed initiatives to successful ones.



Included in your registration

4-Day Workshop Pass

Uptime Elements Passport Series plus Travel Guide - \$1.50 value

30 - day free trial to the Uptime Elements Academy Learning Management System - \$299 value



BRING YOUR TEAM!

reliabilityleadership.com 239.333.2500 l 888.575.1245 crm@reliabilityweb.com





Bristol-Myers Squibb Journey



<u>Initial Implementation</u> and Prioritizing of **Uptime Elements**

(Dec/Jan 2016 p. 30)





The Central Team's Effort Aligned to Our Strategy (April/May 2016 p. 22)



Journey to 200 CRLs

AJourney Shape Reliability Fxcellence at

Bristol-Myers Squibb

by George Williams and Robert Bishop

This fourth installment shows how the Bristol-Myers Squibb Company (BMS) was able to train and certify more than 200 employees as certified reliability leaders (CRLs) in just one and a half years. The series began in *Uptime's* December/January 2016 issue with the initial implementation of Uptime Elements at BMS. The second installment in the February/March 2016 issue explained the alignment of the framework with the sites, while the third installment in the April/May 2016 issue covered the role of the central corporate strategy. These all supported the culture that led BMS to 200 CRLs.

Journey to 200 CRLs

he first facilitated CRL exam was held in October 2014 at BMS's annual reliability excellence conference. This exam resulted in 28 CRLs across seven sites, planting the seeds for BMS's journey to 200 CRLs. Each of the sites acquired an appreciation for the value of the CRL education and an appetite quickly developed to spread this experience to others in the organization.

Like many companies, BMS begins each new year with the development of objectives. These discussions begin at the top of the company and cascade downward throughout each organization. Objectives are separated into categories and each objective is aligned through a line of sight back to the overall company goals. For reliability excellence, 2015 brought with it some key objectives associated with growing the culture across not only the reliability centric positions, but across functional areas. The Uptime Elements and CRL training and certification offered a fantastic opportunity to do just that.

So embedded in the central team's objectives was a goal to reach an additional 50 CRLs across the BMS manufacturing network. While this was a documented goal, the central team informally set a goal of 100 CRLs across all of BMS.

Why was this a goal for the central team? Put simply, reliability comes from people. The CRL process allows for the removal of silos and increases the understanding of other departments and functions. It develops and demonstrates a minimal level of understanding across the framework relating reliability to BMS employees and their roles in it. It facilitates conversations about improvements that can be a strategy for training and certifying BMS employees was needed. With the same goal across many sites, it was decided to certify an internal employee for the training delivery and exam invigilation. The next step in the strategy was to coordinate visits to a dozen sites and fill rooms with people willing to take the course and sit for the exam.

It's no easy task to have a production site commit to filling a room with personnel for reliability training, especially when they are needed to execute the daily mission and particularly if reliability is not something they would define as their core role. So began the efforts of e-mails and phone conversations to gain alignment on why this was an important effort and why the sites should invest their time in this training.

Honestly, for BMS, this was not as difficult as you might think. BMS employees get it; they understand that at the core of who BMS is as a company, its employees have to operate and maintain equipment in order to

> deliver to BMS patients. The sites recognized that the CRL was not just for maintenance reliability individuals. Many departments were engaged, including operations, manufacturing support, quality, training, validation, engineering, supply chain, metrology and more. Not only was the central team able to gain commitment for the courses, but several sites required multiple sessions to accommodate the number of people interested.

As summer approached, the central team finalized travel plans and prepared to

made to systems related to asset management and develops a sense of ownership in equipment reliability across functional boundaries. The development of CRLs is a mechanism to nurture the BMS culture.

To help facilitate this process, BMS joined the Reliability Leadership Institute (RLI). RLI offers an organization access to many benefits, including the Uptime Elements learning management system, which includes access to the body of knowledge in PDF, audio books and videos. Users log in and are guided through each passport and its knowledge checks. Additionally, the organization commits representatives to participate in the RLI community as board members, implementation and benchmarking champions and learning managers. These groups meet regularly to discuss goals, achievements, lessons learned and opportunities to expand on the current framework.

The first step in BMS's development of CRLs was to provide access to the RLI learning management system to anyone interested in learning more about reliability. As people began to utilize the training materials,



Certified Reliability Leaders Heat Map											
Executive Director, General Manager											
EHS	Facilities & Engineering	Plant Facilities	Finance	Health Services	Human Resources	Manufacturing	Manufacturing Support	Technical Services	Operational Excellence	Quality	Supply Chain
Director	Director	Director	Director	Director	Director	Director	Director	Director	Director	Director	Director
Manager	Manager	Manager	Manager		Manager	Manager	Manager	Manager	Manager	Manager	Manager
	Manager	Quality Engineer				Operator		Scientist		Training	Sourcing
	Manager	Mechanical						Scientist		Stability	
	Manager	Engineer						Validation		Validation	
	Rx Engineer	Planner						Validation		QC Labs	
	Maintenance Eng	Technician						Investigator		Field Quality	
	Scheduler	Engineer						Automation	ı		
	CMMS	MRO Specialist									
	Metrology										
	Critical Utilities										
	Administrator										
	Maintenance Tech										
	Metrology Tech]									
	Engineer										
	Engineer								Ke	V	
	Engineer								CRL Completed		
	Technician								Next Round CRL		
	Planner										
	Technician										

live out of hotel rooms for a while. George Williams, CRL, CMRP, the facilitator for these sessions, scheduled each session as a one-day overview to include

the exam. This was by design to help ease the burden of having many key people in training simultaneously. Individuals were encouraged to utilize the online content prior to the overview sessions and exam.

The first site to host a CRL overview discussion and exam brought 12 people to-

gether for an all-day interactive training followed by the exam. This allowed for conversations relevant to the site's unique situation. This format was very effective and became the platform rolled out at other sites. Over the next few weeks, three other sites hosted similar events, all with their own unique

One site expanded this even further and built an eight-week program. There was a kickoff meeting to explain the process, resources and expectations. This was followed by several lunch and learn sessions that were spaced strategically to make sure the group would stay on track. In addition to pre-

paring for the exam, the lunch and learns were designed to facilitate conversations, encourage opportunities and build relationships.

The framework provided a path to out-Put simply, reliability line the journey, but didn't prevent deeper discussions or the typical sidebar conversation. Each was supplemented with a video comes from people on a topic directly related to the framework. As the end of the program approached,

> training for the group, followed a day or two later with the exam. This format produced a 95 percent passing rate and has resulted in a culture tipping point in the direction of reliability across functions.

> Each individual brought a unique viewpoint to the discussion, specific knowledge and questions, but each left with a common language and understanding of the framework. It was this benefit that was realized and allowed BMS to achieve the 200 CRLs. Now, it's time to see where the journey goes from here. Perhaps someday, the CRL process will be part of onboarding each new employee.



George Williams, CRL, CMRP, is the Associate Director, Asset Management for BMS. George began his career at BMS in 2000 as a contract technician within the maintenance team. He is an instructor for the University of Wisconsin Maintenance Management Certificate program and has a MS in Reliability Engineering Management from Monash University. Since the completion of this article, George Williams now is the Director of Asset Management at B. Braun.



Robert Bishop, CRL, CMRP, is a Manager Maintenance and Reliability for BMS, Syracuse. He has an undergraduate degree in Mechanical Engineering from the University of Rochester and an MS in Bioengineering from Syracuse University. Rob has worked for BMS for over 9 years, supporting equipment in several roles. He is an early adopter and loves to improve systems and our culture. Rob has the IAM Certificate for ISO55000. www.bms.com

there would be a concentrated, all-day

Online 4 US Asset Condition Management

Online Ultrasound & Vibration Monitoring









- Stand-alone system
- Modular and flexible
- Up to 32 measurement channels
- Data & machine status posting
- Easy, user-friendly set-up
- 4 condition indicators







Produced by names you trust

WHAT YOU CAME TO

PROMIS

OF FOUR MONEY





See and hear it first at **IMC**





The International Maintenance Conference



IMC is the conference that brings you presentations that you can't find anywhere else!

Hyatt Regency
Coconut Point Resort
Bonita Springs, Florida

888.575.1245 • 239.333.2500

crm@reliabilityweb.com • reliabilityweb.com