

The Certified Maintenance & Reliability Professional (CMRP)

An Introduction to Certification

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Building Leadership Excellence

20/20 Foresight

Maintenance & Reliability Systems

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500 Years of Change???

“There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order to things.”

Niccolo Machiavelli (1469-1527)

History of the CMRP

- No standards prior to 1997
- Society for Maintenance & Reliability Professionals (SMRP) took action
- Development complete in 2000
- First test in 2000
- Today, 1300+ CMRP's worldwide

Certification Goals

- Consistent standards
- Well-defined body of knowledge (BOK)
- Identify masters of the trade
- International standard

How were standards developed?

- Professional Certification Committee
- Validated findings
- Evaluation process refined

The Exam

- SMRPCO administration
- NOCA certified
- Formalized test procedure
- 110 question exam



Benefits of the Certification

- Clear direction for development
- Recognition
- Portability
- Eliminate gaps in knowledge
- Better hiring practices

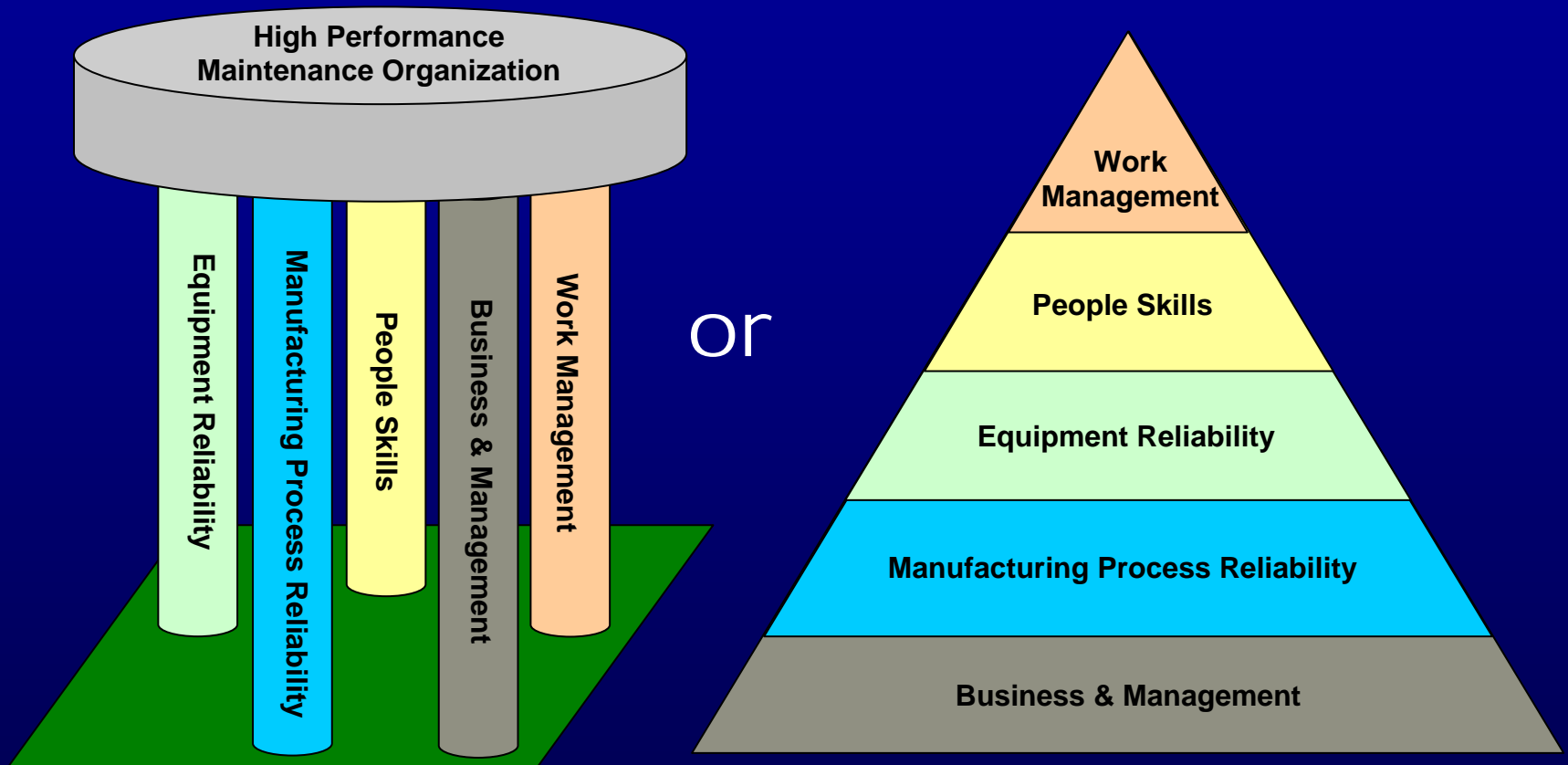
Why CMRP instead of Others?

- Non-commercial, independent
- Comprehensive, not just technical
- Benchmarked and certified
- Sponsored by SMRP

Qualifications for Certification

- No formal education or experience defined
- Experience in Maintenance & Reliability
- Training in Maintenance & Reliability
- Leadership experience is beneficial
- SMRP membership *not* required

“The Five Pillars”



**Certified Maintenance & Reliability Professional (CMRP) Introduction
PIMA 2006 International Leadership Conference**

The “5 Pillars” in Detail

1.0 – Business & Management

- Translate business goals into maintenance goals
- Support and contribute to business results

The “5 Pillars” in Detail

2.0 – Manufacturing Process Reliability

- Relate maintenance activities to the manufacturing process
- Ensure that maintenance activities improve the manufacturing process

The “5 Pillars” in Detail

3.0 –Equipment Reliability

- **Assess capabilities of equipment:**
 - **Reliability, Availability & Criticality**

- **Apply correct maintenance practices to:**
 - **Deliver intended capability, safety**
 - **Achieve most cost-effective performance**

The “5 Pillars” in Detail

4.0 –People Skills

- Assure staff are most qualified
- Assure staff are best assigned
- ...to achieve maintenance organization goals

The “5 Pillars” in Detail

5.0 –Work Management

- The skills used to get the work done
- Planning & Scheduling
- Quality Assurance
- Stores/Inventory management

Something to Think About

“The problems that we are dealing with will not be solved by the people who created them.”

Unknown Author

The Payback!

WIFM

What's In it For Me?

The Payback!

- Lower repair costs
- Production
- Environmental controls
- Safer
- Spare parts/expediting
- Equipment life



The Payback!

- Lower repair costs
 - No hunting for parts
 - No looking for instructions
 - No delays due to lack of coordination
 - Less rework
 - Precision repair

The Payback!

- Production
 - Higher equipment availability
 - Better equipment accuracy
 - Earlier problem detection
 - Failure elimination mindset
 - Finally, teamwork

The Payback!

- Environmental controls
 - Reliable equipment is cleaner
 - Less failures means less emissions
 - Smooth production, fewer changes
 - Better PM/PdM

The Payback!

- Safer
 - Planned work is safer
 - PM/PdM is cleaner than failures
 - Less repairs total
 - Time to think!

The Payback!

- Spare parts/expediting
 - Fewer parts in inventory
 - Less expensive parts
 - No rush shipping
 - Parts can be found
 - PM & JIT

The Payback!

- Equipment life
 - Maintained for long life
 - Cleaner, better care
 - Equipment applied correctly

Show Me the Money!

- Some typical results
 - 30-70% reduction maintenance costs
 - 50-75% reduction on hours/job
 - Shift people to more proactive roles
 - HUGE safety results

Show Me the Money!

- Real Figures
 - \$44MM budget reduced to \$23MM
 - ZERO incident rate for planned jobs
 - 17% increase in production for FREE
 - Paper machine repair days reduced from 12 hours to 8!

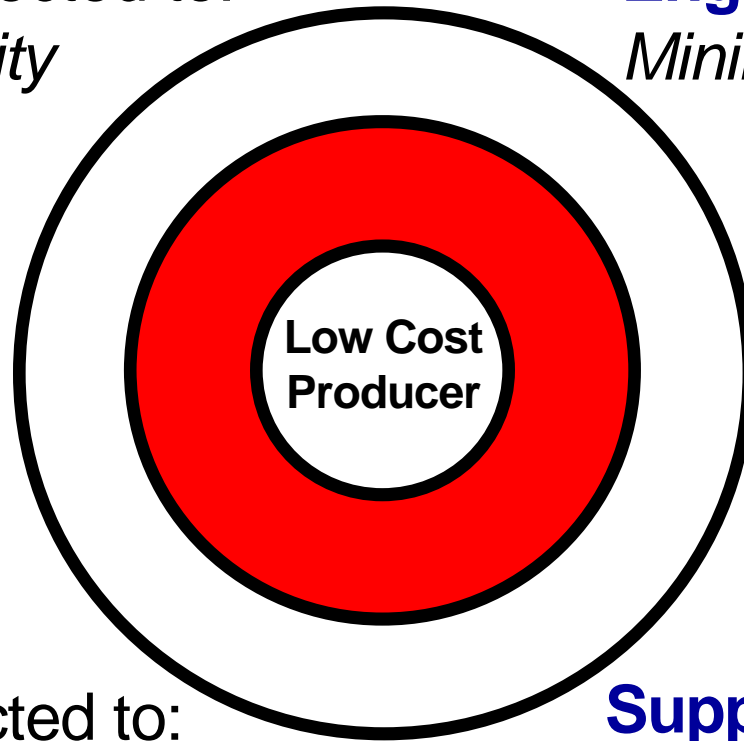
Role of the Leader

- Sponsor the initiative
- Support the champion(s)
- Show up!
- Lead by example
- Change & Transition
- Running the Race
- Deal with “white rabbits”

Shooting at the Same Target?

Maintenance directed to:
Maximize reliability

Engineering directed to:
Minimize project cost



Operations directed to:
Minimize downtime

Supply Stream direct to:
*Reduce Inventory, but
HAVE the parts needed!*

Resource

- Society for Maintenance & Reliability Professionals (SMRP) – www.smrp.org