is available, make a commitment to research the answer and provide a response to all those interested. Try to get the business cards of all those attending and follow up with thank-you letters. This is how you build your network.

After one experience you will be an experienced speaker. In fifteen years, after meeting several thousand speakers, I have not met any who regretted the results.

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Maintenance Priorities

Maintenance organizations must be managed under two constraints, limited funds and limited manpower. I refer to these constraints as the *Maintenance Pie*. Unless the pie can be made bigger by the infusion of more money or labor, increasing the size of one piece decreases the size of another.

In order for management to decide which customer, or type of work gets the biggest share of the resources, it is necessary to use some type of priority system. Frequently, this decision is left to the maintenance supervisor. A simple system of three priorities is often used. "A" work carries the highest priority, "B" the next highest, and so on.

Unfortunately, this type of priority system is not usually a system at all, and "the wheel that squeaks the loudest often gets the most grease". Decisions are not made objectively, and maintenance suffers.

A priority system that overcomes these deficiencies was developed and copyrighted in 1964 by Albert Ramond and Associates, Inc., a Chicago consulting firm; it is called the RIME system. RIME, which stands for the Ranking Index for Maintenance Expenditures, is relatively complicated and cumbersome to use in all but large organizations. Ramond modified the system, however, into a simplified version that I have used successfully for several years.

The RIME system consists of two factors, the ranking of each piece of equipment, and the classification of each type of maintenance job. Each *Equipment Type* and *Job Class* is ranked on a scale of one to ten. Ten carrying the highest priority. These decisions are made by maintenance and production management when the system is implemented, and usually only changed when equipment or functional priorities of the facility are changed

An example of an "Equipment Ranking" and "Job Classification" index is shown in Figures 1 and 2. These have been revised slightly from the original Ramond version and were used successfully in a medium-size food plant.

EQUIPMENT RANKING

Rank		Description of Equipment
10	*Safety*	Equipment with a safety hazard. Includes personnel and food safety.
9	*Utilities*	Utilities equipment effecting several production lines. Includes boilers, compressors, etc.
8	*Key Production Equipment*	No stand-by equipment available; will shut down an entire line. Includes fryers, case packers, etc.
7	*Multiple Production Equipment*	Units for which standby equipment is available, shuts down part of a line. Includes extruders, packaging machines, etc.
6	*Key Mat'l. Handling Equipment*	No stand-by units available, no alternative method of moving product. Includes conveyors, etc.
5	*Multiple Mat'l Handling Equipment*	Stand-by units available, alternative method for moving product exists. Includes forklifts, hand jacks, etc.
4	*Support Equipment*	Includes all support units, such as shop equipment, office equipment, waste handling equipment, etc.
3	*Bldg. & Grounds*	Includes cafeteria, offices, wash rooms, parking lots, etc.

Figure 1

JOB CLASSIFICATIONS

Class		Description of Work
10	*Real Safety, Critical Food Safety*	Critical safety work where life or limb is in danger. Actual product contamination. Work is an emergency. Call maintenance.
9	*Breakdown, Poor Quality*	Equipment or process failure. Major potential problem, breakdown is near. Items causing production loss or poor quality is an emergency.
8	*Preventive Maintenance*	Inspections, lubrication, and repairs to auto. lubricators or alarm systems. Work to prevent breakdowns or repair work.
7	Service *Work, Serious Food Safety*	Necessary work during operating periods. Potential for product contamination.
6	*Spares, Corrective Maintenance*	Work on spare parts or units, no additional spares. Corrective maintenance to reduce repetitive work.
5	*Shutdown, Work*	Necessary shutdown work, including safety work not critical enough to require immediate shutdown.
4	*Routine Work, Normal Safety*	Work on spare parts or units, normal maintenance, including routine safety work.
3	*Production Or Quality Improvement*	Necessary work to improve quality or quantity of production, maintenance or materials handling.
2	*Cost Reduction*	Cost reduction work not falling in to one of the higher classes.
1	*Lavatories, Maintenance Painting, Housekeeping*	Keeping locker rooms and lavatory facilities operable. Protective painting to prevent rust.

Figure 2

In order to determine work order priority, the equipment rank and job class is determined and these two factors multiplied together to give a priority number, with 100 being the highest available. Since the index will not always provide the correct priority, however, maintenance supervisors must have authority to change priority. Explanations for deviations must be required or the system will soon fail.

Some notes: 1) Any equipment with a *safety hazard* receives an equipment rank of 10. 2) Job class 10 is never used on a normal work order; this is reserved for critical safety items that warrant an emergency maintenance call. 3) A system should be used that increases the RIME after a work order is a given age, i.e., thirty days. This will help ensure that low priority work orders eventually get completed.

Some type of priority system must be used in any successful maintenance organization. The RIME system, in this simplified version, is easy to use and addresses the shortcomings of other systems. I have experimented with many priority systems during the previous fifteen years and have always returned to the RIME index. It works!

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Effective Maintenance Organizations

There is no single formula for success. This is especially true for an effective maintenance organization. There are, however, common elements that are a part of every effective maintenance program: 1) clear, challenging objectives; 2) an accurate inventory control program; 3) an up-to-date preventive maintenance (PM) program; 4) a work order (WO) control system; 5) information systems for documentation, progress measurement, and training.

When building an effective maintenance organization the first step is developing key objectives. These objectives should include regulatory compliance, training, cost control, capital funding, PM, and customer relationships. Objectives can be developed and presented as business goals or treated as a charter to a mission statement. The key is to use objectives as a communication tool to convey organization direction and focus to the entire plant.

The inventory focus should be critical spare parts. These are items that are not readily available and could cause downtime in excess of an acceptable amount. Many managers stock "one of everything" so when it breaks they have a spare. This should be a conscience decision as you do not want your stock room to become the "local hardware store." It is more cost effective to in-