

## **Not Enough People DEDICATE PLANNERS W/ PROPER RATIO**

This is the sixth follow-up article to July's 2004 article, "Not Enough People". The first five "forces" discussed in these articles were to (1) educate your maintenance/operations staff about the benefits of *Reliability Excellence (Rx)*, (2) establish the appropriate performance metrics, (3) clearly define the criteria for an emergency work order and apply the discipline to ONLY break the schedule when TRUE emergencies occur, (4) establish the appropriate priority system and instill the discipline in the organization to use these priorities, and (5) ensure the discipline in breaking the schedule with a "Authorization for the Inefficient Use of Company Resources", if required. If you have taken action in all of these areas you should have already experienced some victories in the war against "not enough people". This month and next month's articles will address a key general in the war against craft inefficiency...THE PLANNER. This month's article focuses on the proper use of and control span or ratio to the number of craft persons for planners.

Many facilities do have Planner or Planner/Scheduler positions in their maintenance department; however, it is estimated that less than 10% of these companies utilize their planners effectively. Even fewer have the correct span of control in place (planner to # of mechanics ratio). And even though most know it is counterproductive in the battle against the self-fulfilling prophesy of "not enough people", many of these facilities are only using their planners as a parts' expediter and/or clerk. A reactive organization CANNOT complete its transformation to a proactive culture unless planners are DEDICATED to the planning function and stay out of the REACTIVE world of maintenance (remember that a body at rest tends to stay at rest unless acted upon by an outside force). One planner for every 20 craft persons is considered to be a best practice, as long as your CMMS and the key Maintenance and Reliability Work Processes are in a best practice state as well. This ratio may drop to 1:8-10 if have you are working without a CMMS or with one that is not populated with the right data and does not provide for the proper links or automation of many planner activities. If your work processes for work control, reliability, and materials management are not at a best practice level, this will reduce the most effective ratio for your situation.

Many maintenance professionals that work with a crew of less than eight have often asked how can they justify a full-time planner for their crews. One way to address this concern is to consider, as an alternative, the dedication of a craft person or maintenance professional for four hours per day (or less if there are only a few craft persons). No matter how small the crew, effective planning by one employee to make more than two personnel more efficient is a good return on the investment in time. Part-time planning presents even greater opportunities for pulling a planner away from their planning focus. Something that has proved helpful in this situation is hanging a sign on the part-time planner's office door for part of the day that states,

“No entrance, Planning In Progress”. Of course, additional management support in the enforcement of this rule is required so the “part-timer” is not continuously being asked to perform activities performed when they wear “their other hat”.

There is no doubt that while you are consuming a high percentage of your work force and salary resources on reactive work that it is extremely difficult to break these planners away from supporting the supervision staff that are tasked with the execution of “today’s schedule and today’s emergencies”. But if you don’t instill the discipline in your organization to separate the planners from “today’s work”, you will NEVER plan for tomorrow. And if you don’t plan for tomorrow and build up a sufficient Ready To Schedule Backlog (work orders that have work packages completed and all parts on-site), you will never be able to schedule enough planned work to significantly impact the efficiency of your work force. But don’t forget that if your supervision is used to having the planners support them in emergency work; you will have to provide for the “parts expeditor” role. An effective way that has worked is to assign craft personnel to fulfill this role for a period of time until your reliability and work control efforts have reduced your emergency work to a more reasonable level.

We have briefly discussed the benefits of a planned job over an unplanned or emergency job from a safety and inefficiency standpoint in a previous article. Figures 1 and 2 reveal just how powerful of a force that planning can be in the war against “not enough people”. Figure 1 shows how moving from a reactive to proactive department by effectively planning and scheduling your work orders can double the direct work (wrench time) of your craftpersons by eliminating the activities they had previously been forced to do. Activities such as identifying and securing parts, drawings, special tools, mobile equipment, safety procedures and personal protection equipment, job procedures, safety permits, mobile equipment, OEM information, calibration and other specifications, etc. would be done BEFORE the job was given to a craft person. Also, don’t forget the wasted time that occurs from typical coordination problems when a job is not properly scheduled such as equipment not shutdown/cleaned out/cooled down, operations not aware of the planned work activities, multiple craft requirements not foreseen or properly scheduled, waiting on the arrival of plant or rental mobile equipment and operators, etc.

% of Day Spent:	Reactive	Proactive
Receiving instructions	5	3
Obtaining tools & materials	12	5
Travel	15	10
Coordination Delays	8	3
Idle at job site	5	2
Late starts & early quits	5	1
Authorized breaks & relief	10	10
Excessive personal time	5	1
<b>SUBTOTAL</b>	<b>65</b>	<b>35</b>
<b>DIRECT WORK</b>	<b>35</b>	<b>65</b>

*Figure 1: Example of how crafts personnel spend their days*



For example, Figure 2 reveals what could happen if one craft person is dedicated as a planner after being removed from a crew or two crews with a total of twenty craft persons. The crew output capacity would increase by 5.4 FTE (full-time equivalents) employees, which would result in a 77% increase in output. An FTE is a theoretical representation of a craft person doing direct work for a full eight-hour day. Consider your plant department size and do the math. Sure, it could be less and it could be more in your particular situation, but planning and scheduling your work according to best practices WILL INCREASE your manpower capacity and could significantly reduce or even eliminate the problem of “not enough people” in your organization.

Crew A and B without Planning	Crew A and B with Planning
2 Supervisors	2 Supervisors
	1 Planner
20 Craftsmen	19 Craftsmen
@35% Direct Work	@65% Direct Work
7.0 Equivalents	12.4 Equivalents
<b>Improved Output = 77%</b>	

*Figure 2: Benefits of Planning*

So if you want to take a giant step toward a proactive state and win a significant battle in the war against “not enough people”, dedicate your planners to the planning function and provide an adequate span of control to ensure their success. Next month’s article will continue the discussion on the importance of planning when we explore selecting the “right” person for the role of Planner and ensuring that they receive proper training and coaching.

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