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#### Equipment Maintenance: Vender Service Contract vs. Independent Providers vs. Insurance Company/Self-insure Options M&M 2000 Expert's Session on Facility Management

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This article is the second of a series transcribed from the discussion taped during the Facility Management session at M&M 2000. It is printed with permission of the Microscopy Society of America. Bulleted paragraphs indicate comments by individuals attending the session.

D. Sherman: Equipment maintenance issues appear at regular intervals on the MSA listserver. They often are associated with pleas from facility managers for ideas on how to reduce costs of maintaining their microscopes and related equipment. All of us are familiar with original equipment manufacturer's (OEM's) service agreements and many have some familiarity with independent or third party service options. When organizing this session in June, I asked for topic suggestions which led me to another alternative for maintenance...that offered through self-insurance and insurance companies...and to Paul J. Wirtz. Paul started out with an accounting background but spent many years in the corporate world as a turn-a-round specialist for internal projects, company divisions and company acquisitions. He saved millions of dollars in equipment maintenance and other operating expenses for the companies for whom he worked. Paul also spent many years teaching expense reduction throughout the world. He was a consultant to corporations and organizations to help them improve their profit position through savings generated by purchasing services and products at less cost. He is the founder of Expense Reduction Analysts International - an international franchise dedicated to finding new ways to maintain equipment to increase productivity and decrease cost and Paul is presently devoting his active "retirement" years to this company. He will give us a generic view of this approach so that we have a third option to consider for our facilities.

P. Wirtz: What I am going to try to do for you is see if I can give you enough information to permit you to understand your options a little better or at least you may understand how to delve out the information necessary to make informed decisions. There are multiple ways that you can go about doing what I call "equipment maintenance." Most people talk to venders about full service contracts or time and material contracts, areas dominated by the original equipment manufacturers (OEMs). But there are other companies formed when employees break away from OEMs because they think they can do it better or someone sees a market and decides to come into it. These companies are usually regional or very local and can't expand across country or the world. Sometimes the OEMs can't either. So there is a secondary tier called the agents for the OEMs, the original equipment manufacturers, who can take pieces and do the same work. Again they work under contracts. Not necessarily in this industry, but you have companies like Xerox and Canon who have their own equipment maintenance departments and also have their own agents who can provide equipment maintenance. They could both be in the same city. Usually the agencies are less expensive than the OEMs. Then there are the insurance companies.

There are multiple insurance companies who do the work. I will go into the advantages and disadvantages in a moment. Basically what happens is they sell you a policy. The key piece of that is you then have a budget. Nothing can be done to make you spend dollars beyond that budget for any one year. The question that constantly comes up is "what if we buy in the first year and then the next year the contract goes up 20 or 30%?" We have not seen g this happening anywhere. The pool of equipment that you have under contract, whether it is throughout the University, throughout the industry or in many different organizations, determines the pricing that they give you for the policy. The less equipment, the more the cost of the policy per instrument, but it may not be that be significant. Insurance agencies also can find the insurance companies. One of the problems with insurance agencies is they g know less than you do about what's going on and you have to be very, very careful about what you are doing when you go through an agency. Some organizations insist that you go through an B agency they use. Others will say go any way you want, but it is a better to go through the actual insurance companies.

About 10 years ago a number of companies were formed when people decided they could develop blanket insurance coverage for equipment maintenance, initially for the hospital industry. We have a for equipment maintenance, initially for the hospital industry. We have a some body else, either an insurance company or another agency. For instance, GE purchased one of the smaller companies because they wanted to get into the business. But more importantly to me is that these small companies are constantly starting up and you'll see them.

Now advantages and disadvantages. Vender (OEM) provide experience understanding the equipment ...that's the number one advantage. The disadvantage is the cost. It is extremely expensive. Let me give you a comparison. Most companies doing full service contracts use a figure of somewhere between 13-15:1 meaning for \$1 spent, they are going to return \$15 in gross profit. That is the reason for the huge cost. Time and materials instead of full service is 4-6:1, *i.e.*, \$1 spent results in \$6 back into gross profit. So there is a difference in pricing issues. The independent providers are less expensive...that's their advantage...and they charge pretty much the same way.

Another alternative is self-insuring from your organization, whether it is a university or a company. Money is put in a pool if you do it 100% self-insured and then you hope and pray that it doesn't get used up for some disaster. And that is an issue, some other disaster. Whatever that disaster may be, whether it is an act of God or anything else. The insurance companies who purchased these small companies who started up decided there's a better way to do this. That is combine self-insurance with a policy, which then caps your exposure for any time in one year. And it is a total cap. They have added something else to it. What they have added is that it covers everything...act of God, fire, what ever else it may be. So you have to be extremely cognizant of that and make sure when you are talking to an insurance company that everything is covered in their contract. I have put a listing in Figure 1 of what the insurance companies cover verses what an OEM service covers and there is a tremendous amount in there.

One of the other advantages of insurance is cash flow. For instance, take a million dollars of which \$500,000 is self-insurance and \$500,000 is company insurance. The 500,000 self-insurance can be used during the year to pay the bills or an agent of the insurance company will pay the bills, either one. That \$500,000, if it

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is not used, goes back into your pocket. It does not go on to somebody else. So that is important because many firms are finding that the self-insurance is enough to cover them in most years. In order to use an insurance company and selfinsurance, you have to convert all to T & M; time and materials work...every bit of it. But the insurance policy will also pay for your own people if they are doing some of that work. In a time and materials contract, the biggest objection is with " well they won't come out when they said they would" whether it is a 4hour, 8-hour or 24-hour response. We are not finding historically that that happens. Remember that equipment manufacturer needs more business from you. If they start playing games with time and materials because it is not as profitable, you are not going to look at them favorably.

With the insurance companies you can use any organization. You don't have to have a particular one. Most people stay with your current vender...just change the way the work is done. I would say it is 90%. But if you want to change, you can. The insurance companies will have a huge list of somebody who can do the work throughout the world if you don't know who to change to. Most of the companies doing it are very large corporations all across the world. So there is a significant way in which to change.

Now what are the savings? It can be anywhere from 15% to 45%. And the 45% is not a figure that someone throws out there to tease you in and it's really going to be only 10 or 15%. We are seeing one company and another one starting to guarantee at least 25% savings. That is significant dollars back into your pool, however you want to use it, wherever you want to use it, as long as the administration doesn't steal it from you... which does happen. At least it happened in one case that I know of. My summary of it all is that it brings you value so consider it. But you must put together a specification that says this is what you want. I provided you some information to help you do that because if you don't, the venders will take advantage of the situation of you not saying exactly what you want. And it is imperative that you do that.

Another issue that comes up it is "well there is not enough equipment here" or "I have mission critical equipment and I can't have it down for more than 2 hours." Whatever the case may be. Try this approach of insuring. Maybe you'll like it. Put a small amount of equipment on contract. Every company that I have worked with has gone in this direction. Take a small amount of equipment and start it whether it is organization wide or just within an organization. And it is amazing how many people come around and say," how in blazes did you save that much money? How do I get onboard?" The resistance in certain organizations is there. They want the full service contracts. They don't want time and materials, but as I've heard you say as I was standing here, many, many administrations are saying, "you will cut expenses!" This seriously is a way to reduce costs and it can be significant. You don't have to accept the proposal if you don't want to. You can walk away. But you can at

least get proposals to determine the savings and service available. Now questions and answers. Whatever you want, however you want to treat it, any examples, anything you would like.

We are using an onsite provider at the University of Florida and they cover the entire university. It's called Specialty Underwriter. What we do is we go to Specialty Underwriters with the manufacturer service contract and we say we want exactly this. When I go with my Hitachi service contract to the insurance people, I get my 2 routines a year. I get all the service calls I need. Contrary to what you just said, we have no dollar limit. We have to get approval for any service call over \$5000 but I think I have probably billed \$20,000 on one of my instruments in the past year. The service contract from Hitachi was I think about \$10,000. I am paying \$3800 to this outside provider for the one instrument. Hi- I tachi comes and the insurance company pays Hitachi to fix my instrument...probably far more money than the service contract would have provided Hitachi. I work in this specialty and I know the service engineers quite well and they're just fine.

I don't want to turn this into a rah, rah commercial here but I ٠ am afraid that I am going to have to echo Greg. We are using a Specialty Underwriters for one of our instruments and we are saving at least 40%. I've got exactly the same engineers working on our instruments that worked on them under Hitachi and we are currently getting bids on other instruments, although for not as much savings. Our disadvantage that we are noticing is we are working with a local agent, whom I hope to change, and there are some communication problems. People aren't talking to Hitachi guite guick enough or the information that they are giving the Hitachi switchboard isn't getting to the Hitachi engineer. But those are minor problems and they are fairly easily taken care of and we are saving a huge chunk of money for exactly the same service with no cost limitations.

Is there priority or discriminations within Hitachi to the type of contract?

Not that I have noticed. I've gotten exactly the same response going through the third party provider that I got when I was going through Hitachi directly. In fact, I don't know if this is true but I have heard that that might be illegal.

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	OEM Service Contracts	Insurance Contracts
Repair Labor	Yes	Yes
Preventative Maintenance Labor	Yes	Yes
Parts	Yes	Yes
Coverage 24 hours a day, 7 days a week	No	Yes
Reimbursement for In-House Labor	No	Yes
Coverage for human error/negligence, power surge, environmental extremes	No	Yes
Ability to use any vendor	No	Yes
Alternative parts vendors	No	Yes
Repair History Reports, Asset Management Database	No	Yes
Improved Cash Flow	No	Yes
Guaranteed Budget	No	Yes
One contract to renew on an annual basis	No	Yes
Extra savings with good experience	No	Yes

Figure 1: Comparison of OEM Service Contracts with Insurance Contracts

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**P. Wirtz:** No it is not illegal. The issue on discrimination within the company...if you leave it to the sales people, they will never try to sell it because you are converting from a full service contract to time and materials and the profit and commissions are much less. Once it goes to time and materials the service organization treats it like anything else because of the profitability issue for their division. So there is no discrimination – at least none that I have found. If you find it, the first thing you do is make a phone call to someone in management within the organization and say, "knock it off!" But we have not seen it anywhere.

But how can Hitachi take the profit loss?

**P. Wirtz:** They have no choice because of competition. There are many other firms besides the OEM that can do the work. You can stay with the current vender when you want to. That is the way the program starts. If you don't like it, you can change to any other vender you want. But more importantly to me is most people say "I do not want to change. I am very happy with these people. They have done a great job for me so I will not change." So you don't have to change venders at all – just from full service to T & M. Do they like it? Absolutely not!

 I'm from the University of Kentucky and we have a different situation. There are a lot of scopes on campus from 1970 version Philips to brand new machines. We cover every company. We hired our own service engineer. We are on our second one. The first worked for 20 years before retiring. It's great. His salary is way less than if we had individual contracts on all those instruments. His office is on campus. He can work on all the instruments. The hitch is that you have to be careful when interviewing up front that you get someone that is capable of doing this. I think most of these guys are. This particular service person had a young family and got tired of traveling so we managed to swipe him away from a company. He's happy, they're not too mad at us anymore, and it cost a lot less. When we get new instruments, we negotiate with whatever company it is that the instrument will be under warrantee the first year and they will work with this fellow and train him. It is part of the upfront package negotiated when we purchase and they have always been very agreeable.

• The perk is that he will work on small instruments as well so if you have an autoclave break down or a print processor held together with rubber bands he can help you out.

• Is there anyone here who has microscopes that are newer than 5 years old who have the insurance company service contracts?

 I talked to one of the major venders about the insurance companies and the VP for maintenance said that he really liked that idea. Apparently it extended their service force. He said the problem they had is that these companies will try to come back and renegotiate costs, for example, for high voltage tanks and guns, things like that. He said they have to compromise often on those original prices.

**P. Wirtz:** I would like to comment on that. It is how your contract is written as to whether they can come back and do that. Make sure you or the administrative staff get wording in the contract that stops the maintenance firm from coming back to renegotiate. Read their contracts carefully and get that type of wording out.

• We have a particular problem due to our remoteness. We are about 7 hours from the nearest service agent. So we have had to develop our own service facilities on campus. The difficulty that we have had recently is that some of the manufacturers have come in with service dongles which lock out some of the software and even the hardware. Our local people, no matter how well they are trained or how much we attempt to negotiate with the agents, cannot get access to the instrument. Does anyone have a comment on that?

• They have done that to try to force you back into a service contract. That is the whole reason for it. And that is again important that you have the specifications up front when you buy the equipment.

I have the same problem with a scope that has a dongle. You have a problem with newer instruments. They are digital and there 💐 are a lot of ways to lock things out. All the Philips EM-300's have relays. I can open the high voltage tanks. I can do anything I like. The newer instruments are trouble. I don't know what we are going to do about that. You have to have a good relationship with the company. After 6 years with that instrument I am able to get in and do what I need to do but it took a lot of negotiating and staying close to the management. And it can also be written into the contracts for purchases that they will send you to one of their service training centers for the full training. If you know their service people well you will know what full training means. It helps to stay in touch with the service guys anyway because of the upgrades. I've got upgrades for two years after dropping the service contract. However, then it started to change as the company merged with another. It is a changing business and I don't know what we are going to do with digital. That is a problem.

• I have two questions for the people who do have the insurance contracts. One is have you renegotiated to a second or third contract and has it changed much from the first? And also how much do they really cover for human error and stuff like that?

• Yes to the first question and the renegotiated price was identical to the first price. We've had no increase for a number of years and our contract specifies we are covered...period. So if the custodian comes in and starts twiddling with everything we are covered. It doesn't matter what happens. In fact it is specified right in the line in the contract. It covers everything. If someone welds a lightning rod to the scope and runs it outside in a thunderstorm, it's covered. Power surge, what ever it may be is covered. It is in the contracts.

• That is our same experience but our entire university covers all their equipment with this company. We can't personally negotiate with the insurance company so it is a little different. But the microscope manufacturers will tell you that they are going to put you at the bottom of their service list if you drop the contract. Maybe they are a little slower. But I would pay \$10,000 for a service contract and they bill \$15-20,000 to the insurance company. So they sort of like this.

**P. Wirtz:** One of the techniques I have used when they say they will put you on the bottom of the list is to write a letter back to their management saying that I was told this and you will be surprised how fast it is denied in writing. It is very common for them to imply

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that you are going to go to the bottom of the list. Return that in a letter to the top of the company and it goes away just like that.

• It has not been my experience either. I have had the same response time from the company. What you might look into is that maybe you can roll your one or two instruments into those of another University. We are looking into consolidating our instruments in Biology with those in material Science. That may work.

• I have a question for people who have an onsite engineer. Do you find that the company who manufactured a particular instrument jacks up the cost of the materials? I was told that if you go self-insured or with another company, that \$2.50 gasket is now going to cost you \$250.

 We have instruments from a number of manufacturers and we have not had that problem. Our engineer worked for one of the companies and knows what the parts should cost.

**P. Wirtz:** What we have discovered in the issue of parts costs is that the insurance companies have so much business now going to these venders that that doesn't happen anymore. It did in the beginning but it has all gone away. They know what other people are paying all across the United States and the world and so they ask, "why are we paying more?" and it ceases.

We are also looking at this same problem on our campus. We are looking at campus-wide solutions to things like maintenance. When you are paying \$500,000 for contracts and still do not have all your instruments under contract because of the expense, you start looking for other alternatives. With every new microscope we buy the contracts go higher...where does it stop? Where it stopped at our university is that service contracts of older instruments are being dropped. The performance of these instruments goes down hill very quickly and before you know it the instrument is not usable. This does not seem to be a really good alternative if your instruments are fairly busy. So we are looking at the alternative of an on-site person to at least maintain some of the microscopes if not all. We will end up with a mixed bag where we may put some instruments under the care of a service engineer for \$70,000 in salary rather than \$100,000 in service contract fees. Then we could stay with venders for the very high-end high maintenance ones and maybe come up with another scheme for those in the middle.

• With regard to self-service and parts, there is usually a minimum whether it is \$75 or \$150. If I need a \$5 gasket in an emergency, I may have to buy \$150 of something we don't need. In that case we loose but it is still a lot cheaper to pay me than a service contract. It doesn't happen very often. A lot of times you can find parts outside if you search. It may take a week of research or actually much shorter now with the web.

 I must say that I have not heard the same glowing reports about other insurance companies. I am really leery but encouraged by what I have heard here. I might look at another one but does anyone have multiple insurance companies on any one campus? There is one that covers everything in our vet teaching hospital and they wanted to get us onboard. It was completely unworkable for our instruments because of the way the contract was going to work. We were told that we could not get, and would not get, the same service through any insurance company so we have told them we would not consider it.

**P. Wirtz:** There are some companies that do some restrictions but that is going away. There are people out there who cover every-thing, even elevators, escalators, heating and air-conditioning, and production equipment all under one policy.

• I don't know if anyone else is from a land-grant university, but I was also under the impression that at a land-grant university you are not allowed to solicit outside insurance.

• We don't have any problem with that. But we had another provider at the University of Florida a few years ago and we did have a lot of trouble with them paying the bills and so forth. So I think it is the quality of the provider. That was CIC and we were not very happy with them.

• But it didn't turn you off on the overall concept?

• Essentially I had no choice. The university committed campus-wide to this. So if I wanted a vender service contract I had to come up with the money and really justify it.

• Did you accept this and are still looking at this as something that was shoved down your throat or has it been a successful experiment?

No, It's working fine.

**P. Wirtz:** There have been some bad experiences depending on the company. That is not the issue. More importantly, references are the issue. When you have a network like this session you can E-mail lots of people and ask them for their experience with a particular company. You will get your feedback. Remember that some of the experiences are local. It is the local people. You can get around that by going to the corporate people if there is a problem.

• Can I just relate to our experience again? The vender service in our country is absolutely hopeless. The quickest response time is about 2 days and is quite often a week to tend to emergency breakdowns. So we use on-campus facilities. We have our own trained staff. We have actually put up funds from our own budget in order to train them and that has made a very good relationship with them. We can usually get them over within the hour for any problem. We use them as a bridging device. They can repair most of the problems we have and they are able to solve all but 1-2% of the cases. If it gets complicated, we get an independent servicing agent in. In this way we have been able to maintain our 5 instruments at a figure that relates to about 3/4 of my miserable salary.

• I have a question that if you do the time and materials, how do you get the preventative maintenance in there which we think is important?

**P. Wirtz:** That is included. There is a schedule of preventative maintenance the OEM publishes for all pieces of equipment. The insurance company will see that it is met.

Can you do that with a vender contract too?

P. Wirtz: Yes, you can do it both ways.

The discussion on this topic was concluded at this point. Next issue will contain the transcript from the third topic discussed at the session, which was "Justification of Cost, Cost Recovery, Electronic Bookkeeping and Billing." ■



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