

# Budgeting for the Cost of Maintenance

by Greg Hanks

**Everything is finally set.** The months of planning are behind you, the building is leased, the architect's plans are in hand, and a construction crew is starting on the first of the month. The dreams are coming to fruition, and you are in the studio business! However, it strikes me that a lot of people entering into the studio business, (and a lot of those in it already) ignore the subject of equipment and facility upkeep and repair. Maintenance is an expense that only gets bigger when not attended to. So let's examine some of the "hidden" costs of operating a facility.

## Initial Expenditures

There are a number of elements missing from your usual equipment purchase list. When an automobile is purchased, it comes with a spare tire, jack and sometimes a small collection

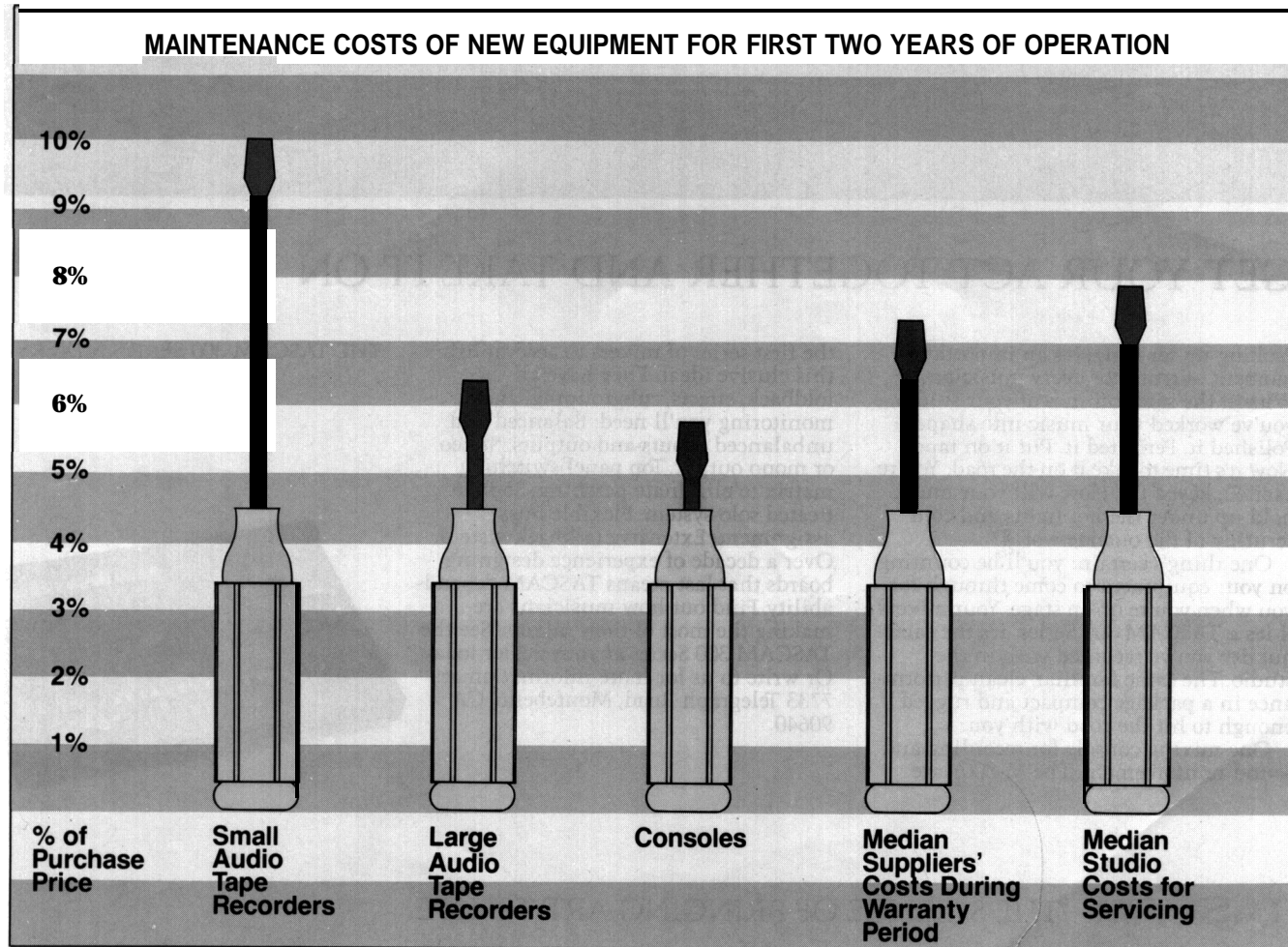
of common hand tools. Most professional audio equipment does not, and it is just as essential to have spare parts for your console and tape recorders as it is that spare tire. Therefore, when looking for a given machine, ask the dealer about what type of spares are included, and how much they will throw in with the purchase price. This is one of the many good reasons for utilizing the same brand of machine throughout a facility whenever this is practical. In this way, the quantity of spare parts is minimized. The spares collection should include at least one of every active device used in the item. Are all of the required extender boards included in the purchase? If not, have them included. Some equipment requires specialized tools for proper servicing, and these should be considered at the time of purchase. However, this may not be practical when the cost of the required tooling is so high that it is cheaper to

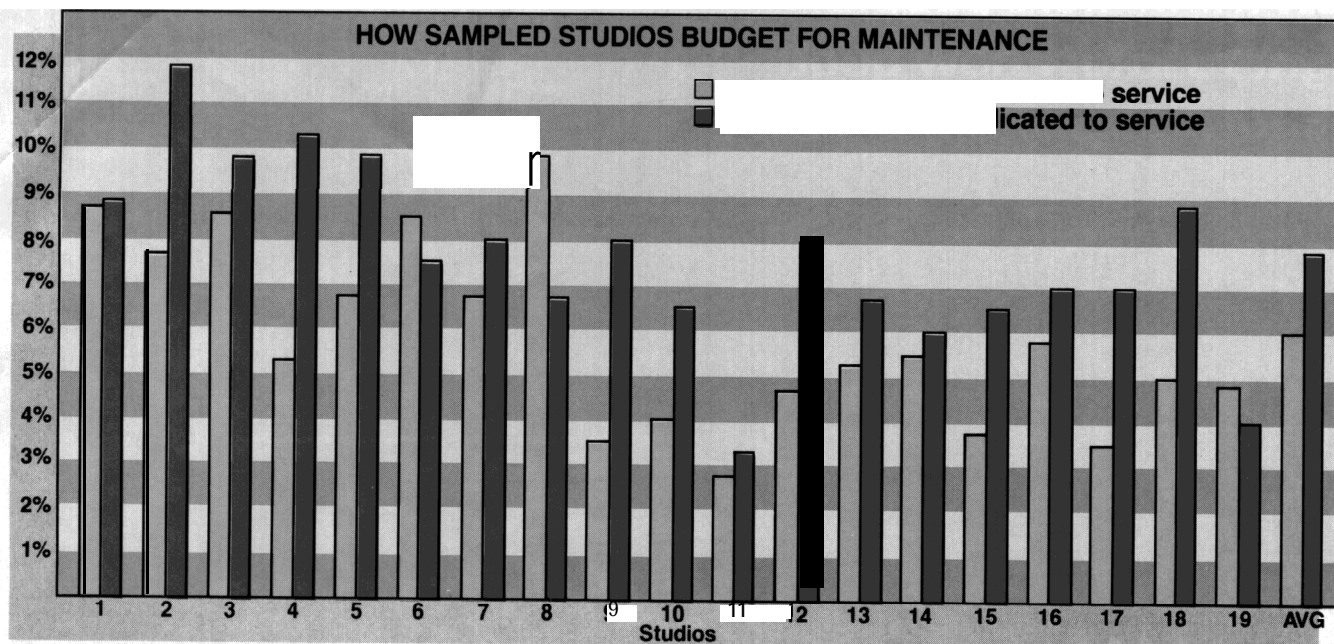
have those procedures handled by an outside facility. We will address this in depth a little later. So to re-cap the above, whenever equipment purchase is contemplated, the price should include: The base price of the equipment plus-A) The "spares" kit; B) All extender boards; C) Specialized hand tools; D) Service manual (if not part of owners' manual).

Now that the major pieces of equipment are in hand, how about the test equipment necessary to keep it in like-new condition? Now is the time to make that purchase. This topic was covered in a previous article (Mix, Oct. '85), so I won't bore you with more ravings on the subject other than to say that it is not a frivolous, unnecessary expenditure. On a major purchase, many manufacturers will provide technical training at the factory or U.S. service facility, usually at no charge. Avail yourself of this bonus-pay for the travel, time and expense, as it will repay itself the first of second time the training is applied

## Costs of Ownership

Aside from the initial outlay described above, the ongoing direct and indirect expenses of caring for equipment must be anticipated. Direct expenses are the materials and labor





necessary to repair defects, as well as the materials and labor necessary to maintain optimum operation. The indirect expenses are those incurred through studio down-time when a piece of equipment fails, or the non-income producing time spent on preventative service. Additionally, rental expenses for replacement equipment are included in this category.

Down-time comes in two different colors, anticipated and unintentional. Unintentional down-time can become an albatross around the neck of the unfortunate studio. Most of my writings are aimed at avoiding/eliminating this dreaded occurrence. A studio's reputation can be destroyed by just a few ill-timed incidents of electronic or mechanical malfeasance. Few things

dampen the creative flame more than being told that your session will have to be re-scheduled because a major piece of equipment refuses to cooperate. So to eliminate the threat of the session going up in smoke, it is essential to care for the equipment during those times that the artist does not usually desire to be in the studio, such as the wee hours of the morning. The only time that this becomes difficult is when one arrives, only to find the previous evening's clients desperately trying for a take or a mix that's "just a little better." Room for technical care must be made in the schedule. A few hours a week are all that are really necessary to keep the "spit and polish" of a facility shining. When a room has a reputation for responding to the engineers' commands with a minimum of fuss and bother, it becomes a simple affair to demand a better hourly rate.

#### Rental

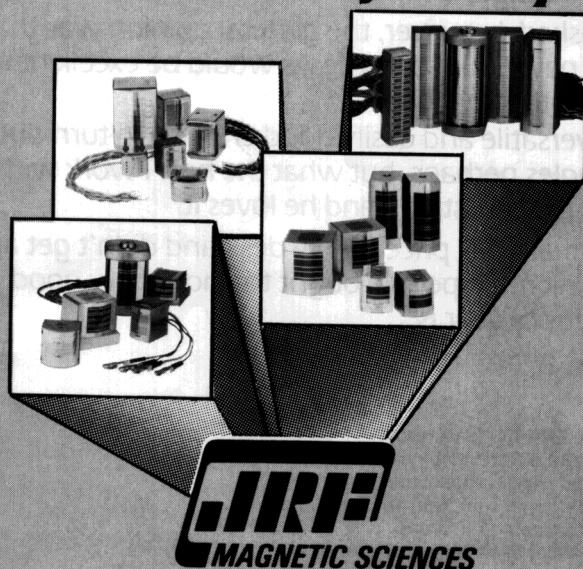
There comes a time in the life of every hunk of hardware that the mechanics become tired, the inter-connections don't work, and the attenuators act like switches. When this occurs, the decision to replace or rebuild must be made. There are a number of considerations to be kept in mind, such as:

1. The cost of rebuilding in parts and labor.
2. The cost of renting a replacement device during the re-working.
3. The value added to the article by re-building (in terms of its resale value)
4. Actual cash impact of replacement.

A good yardstick to use as a guide for the timing of re-build or replace decisions is when the costs incurred in maintaining the device start to exceed, on an annual base, ten percent of the original purchase price. By track-

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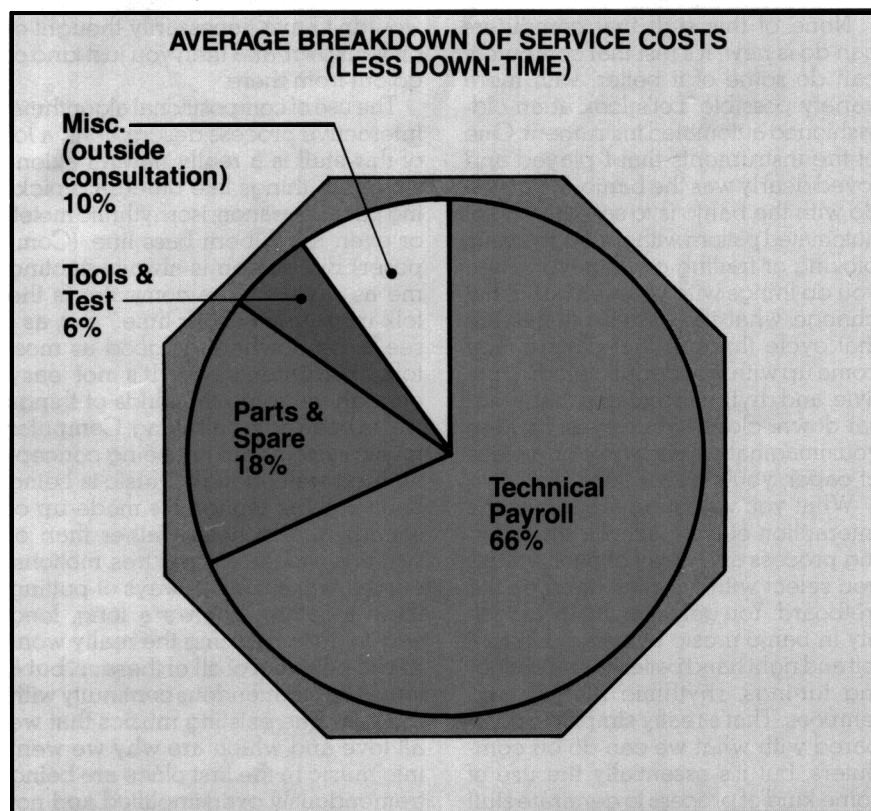
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machine, you can quickly see which devices need to be overhauled. The ten percent rule of thumb is a pretty good one to use as a budget base for establishing the cost of servicing the entire facility.

On much larger capital investments, this percentage can be lowered, but not all that much. It may seem excessive to allocate \$15,000 a year to servicing a console, but it will be seen that the costs in payroll are not offset by even this hefty number. But down-time, as reflected by the time given back to the client, is also to be assigned to the device in question, which means that a machine can fall into the rebuild/replace position very quickly. This line of thinking brings in the concept of rental as an economic alternative: it makes sense to rent a replacement while the tasks are being performed rather than risk the potential of lost session time caused by the erratic behavior of a partially repaired machine.

#### The Bottom Line

To some extent, all of the above ramblings are doing nothing but side-stepping the real issue, which is how much-at the bottom line-is service going to cost you? To answer this question, we have drawn from our own client list and interviewed a large number of major recording facilities and manufacturers on both coasts. It is our contention that the service costs of an operation can be figured from two different methods.

When a studio first opens, all the equipment is new, and the manufacturer is responsible for warranty service for a period from 90 days to one year. It is also in this period that you acquire the initial expenses as a large capital outlay for tools, test equipment and spare parts. The benches must be bought or built, the filing cabinets, lights, chairs, drafting table and all of the other accessories that live in the tech room must be purchased. So on one hand, the parts and labor required for operation are minimal, while "tool up" is at a high point. Income projections for the studio are only that at this time, with no background of studio use as a basis for the projection. Since this is the case, the best way to forecast technical expenses for the first two years of operation is to use a percentage of the initial capital outlay for service expense.

It seems that when a manufacturer/dealer places a new piece of equipment, the costs approximate 7.4 percent to care for the warranty period. The research covers small 2-track tape recorders to larger computer-based consoles. This number is the average from our respondents. Based on a large random sampling of studios, we find that the average spent for technical support is 7.8 percent of the equipment capital outlay of the facility. These two numbers are fairly close to each other so we would say that the proper amount of money to expect to spend in the first two years of operation should

be around 7.6 percent of the money spent on studio equipment. (See the accompanying chart.)

#### Method Two

After a facility has been around the block a few times and the accountant types have decided that there are specific dollar amounts that can be expected for a given year, then it is time to allocate funds for the care of the technical operation. When looking for the financial wherewithall to maintain an ongoing studio, it is a good idea to have some foundation on which to base your requests. We feel that a good evaluator is the gross billings, and our research bears out those pre-dispositions. Having interviewed a goodly number of studios in both stable and growing markets, (you know who you are, and thank you!), we were able to chart service costs against gross income. The mean expenditures worked out to be about 6 percent of the total studio sales. This number can be misleading because it includes both the established facility that has long since amortized all of its expenses, and the growing firms that are attempting to break new ground and explore a larger and different client base. The extremes of this can be seen in the accompanying graph.

#### Conclusions

It can be seen from the charts and text that technical support is a significant percentage of both initial equipment outlay and gross income. By far the largest portion of the service dollar is spent on labor. Illustrating this point is the "pie" graph, which indicates the average distribution that has been indicated in our research. It is critical that these dollars are well spent. In times past, it was a simple affair to hire someone who possessed some technical experience, (usually built a couple of h-fi kits) who could learn the gear and integrate into the staff. Nowadays, with the profusion of automation, MIDI, microprocessor based outboard equipment and synchronized multi-track recorders, it is poor economy to try and shave expenses with un-trained or inexperienced technical staff. Your business life is in the hands of your technician... so make sure you have a good one.

There are many technical expenses that we did not include in this analysis. The installation of the studio and control room are capital expenses. Large scale modifications, custom construction and the like also fall into this category. Often these activities will increase the cost of the technical department because of the manpower drain that they represent, and the studio must keep on rolling! ■