HOW TO SCHEDULE MUSIC WITHOUT A COMPUTER

CONDENSED FROM THE PROGRAMMING OPERATIONS MANUAL
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Preface

Computers are marvelous things and virtually all the top radio stations in the world now use music scheduling software to produce the daily music logs. But what do you do if you don't have the software? Well, modern music radio existed for about 30 years, from the 50s through the 80's without music scheduling software and some old hands would argue that music radio was more compelling back in the old days, back when it was more fly-by-the-seat-of-your-pants, back when announcers would often "cheat" and play songs they weren't supposed to be playing, giving listeners surprises here and there. But, of course, competition wasn't so stiff in the old days. Even the biggest towns would have only a couple of stations competing with similar formats. The first 'song rotation' plans we as simple as: Play one from stack A, one from stack B, one from stack C, then repeat. With the growth of FM radio, which began in earnest in the early 70s, things got more complicated. It was much more important for radio station programmers to maintain consistency in the stations' music selection and song rotations hour by hour. Systems were developed with which the program director could get the job done.

Listeners are creatures of habit and schedule, they tend to turn on the radio at about the same time each day and listen for a consistent period of time. If they hear a song that they don't particularly like while they are driving to work two or three times during the week, they may conclude that yours is a station that 'plays the same songs over and over' and go looking for another one to listen to.

This is the one, ever present riddle for Current music radio programmers. Listeners want to hear their favorite songs over and over for weeks, even months before they tire of them. And, on the other hand listeners don't want to hear songs they 'don't like' repeated. Some of the songs that one group of listeners just loves are songs that other groups of listeners don't much care for. The only time a listener will conclude your station 'plays the same songs too much' is when they hear songs they don't like repeated. Listeners almost never feel a station plays the same songs too much if the songs they hear are primarily songs that are their current favorites. Then when they begin to grow tired of a hit song, if the station continues to play it frequently, the same listener will begin to feel the station is now playing that one too much. The riddle is: how do you play the same songs over and over, which is what listeners like, without playing songs too much? This is the game we play as music radio programmers. It is a game of nuance and gut feel. It is not easy to be a success at. But for those of us who enjoy it, it is much better than having to work for a living. We play our game by first developing our strategy, how we are going to 'construct' our music library and then present it to the audience. Then we have to develop tactics and a system with which to do it. This section contains the instructions for programming a 'manual' music rotation system which means you do it by hand with grids, a printed lists and cards. The goal is to maintain controls on the rotations of the songs in your library so that your on air product will be consistent. The music flow will be as you want it to be, well balanced and representative of the totality of your library.

If you are a Pop music station, you have many different musical styles, some hard rock, some rap, some disco, etc. You generally don't want to have a run of half a dozen disco songs in a row, followed by three female ballads. Better to have the different kinds of songs you play spread out to present your audience with a 'variety' mix. To do this, you've got to have a system. You can't rely on the announcers to do it correctly anymore than a doctor can rely on the nurses and attendants to perform the operation. The system you read about here isn't my invention. I learned it from a programming consultant I worked with in the early 70s. It is the system that was then being used by the great major market radio stations in America at the time owned by the RKO Radio chain. The company's stations included KHJ/Los Angeles, KFRC/San Francisco, WRKO/Boston, CKLW/Detroit and 99X/New York City. This is how the fine program directors at those stations scheduled and controlled their music flow.

When the computer age came upon us, it was my goal to develop software that could replicate the system and, of course, make it the computer schedule music as consistently and accurately as I was able to do by hand...and, of course, do it faster. Music1 was developed with careful consideration of the fundamentals of the manual rotation system you read about here and that is why its song rotations are as consistent and reliable as they are. If you learn and understand this 'manual' scheduling system, you'll gain extra insight into how our software works.

If you are working without software, you will find this manual music formatting plan easy to adapt to your own station, style and needs. Once it is set up it runs very efficiently and requires maybe two hours of your time each week to maintain and update. It also requires about 15 minutes preparation time by each announcer before each airshift. While you could use it to schedule every song in every hour, I wouldn't recommend that. Instead, I used it to pre-schedule about half of the music for each hour. I would slot-in the Heavy Currents, Recurrents and Power Gold. Essentially,

every second song was pre-scheduled. Then, I'd rely on the announcers to pick the in-between songs, the Medium Currents and Secondary Gold songs. They could then make adjustments with their selections, picking songs that would balance the music flow properly. Naturally, like any coach, I had to be diligent, listen to how they were doing it, the choices they were making and I'd instruct them with corrections as necessary.

The rotation structure and formatting techniques you learn here are easy to apply to all music formats. The basics of planning and controlling music rotations are much the same regardless of the 'type' of music you play. The variables are how frequently you want songs to be played, how many songs are in each of your categories and the content or 'mix' you prepare with your format clocks.

The 'Current' music formats rely on industry trade charts for guidance in selecting and programming their music and since the charts are published weekly, most station update their playlists each week, add some new songs, dropping others, moving songs from one rotation group to another to increase or decrease the rotation and exposure of them. No longer being a trade chart 'reporter' myself, I update and publish my Current list three times each month and that is adequate. My consulting clients and music list subscribers receive updated Power Oldies and Recurrent list twice a year. I recommend following a similar schedule. If you are not reviewing and updating the content and category rotations of your library regularly, your station's music mix will soon become stale.

1. Playlist Structure
In 'today's hit music' radio there are three main categories of songs. Current, Recurrent and Oldies. Currents are the new songs on the station. What constitutes a Recurrent or an Oldie is a subjective call, but generally Recurrents are hits from several months to a year or so back.. Oldies are Hits from a year or more back. You can sub-divide the groups in a lot of ways.

Most people divide their Current list into three groups; Heavy, Medium and Light. Personally, I seldom use a Light rotation. Light is generally used to introduce new records into play. The idea being to let the new ones become 'familiar' before moving them up into more frequent rotation. It's a valid principle for some programmers, the thinking being that since audience research always shows the listeners prefer 'familiar' music more than unfamiliar, the programmer shouldn't have new songs playing all that much at first. Instead, put the songs on the air in a Light rotation and break them in, so to speak. Myself, I figure people like new music. The conundrum is they only like new music that they 'like'; they don't like new music that the don't like. The ability to consistently tell the difference, to instinctively feel which new songs have the best potential to become mass-appeal favorites before you add them to your playlist is a real art. But if you love the type music your station is playing, it is an art that can be learned.

Most typically, a Light rotation is constructed so as to allow each of the songs in the group to play no more than twice in a 24 hour period. I figure if I've picked the right new songs, why limit the amount of exposure they get in the first weeks of play? I am a programmer who wants to cultivate the image of being the 'station that plays the best new songs first.' The station that gets that image is NOT the station that plays the most new songs. Rather, it is the station that finds the small handful of the best new songs, the ones that have the most potential for becoming big hits and then puts them into rotation with a more frequent exposure pattern, allowing four to five plays in each 24 hour period. Now this is clearly open to debate and not all stations need to be postured the same way. So, think about your competitive situation and decide what you think will work best for each and every one of your rotation groups.

Some programmers get very exotic with their divisions and sub-groups. But you really need only five. Primary (Heavy) Current; Secondary (Medium) Current; Recurrent; Primary Gold; Secondary Gold. These are explained below.

"Recurrent" is for songs that are half way between Current and Oldie. Generally, the industry calls it "recurrent" as soon as the song drops off the "current" playlist and until the song is about a year to eighteen months old. Most Hit records have a "Current" life of 12-16 weeks. Some have exceptional appeal and don't burn out until well past 18 weeks of play. Once a song begins to fade from listeners' 'my favorite new song' status, they still want to hear it, just not as much. Thus, the Recurrent rotation group; a category in which the songs continue to play once or twice every day. Now some hits wear out quickly. After listeners have heard a certain song a lot for a three month period, they tire of if and don't desire to hear the song at all until some point in the future when hearing it occasionally is a treat. This is the kind of song you may want to 'rest', bypassing the Recurrent group and keeping it out of play for a period of time. Or, after it drops off the Current list you may simply put it into Secondary Gold rotation where it will get only a few plays a month.
There's a lot of 'feel' that goes into all the rotation decisions you have to make each time you update our current list. Once you have your general plan figured out, my best advice is to not be a by-the-numbers bureaucrat about it. If you are well aquatinted with the kinds of songs your listening audience favors most, then your intuition is more likely to lead you to the most competitive adjustments than chart and/or 'research' numbers can.

The Primary Current Rotation (HEAVY)

You can call it Power, if you like, as many people do. These are the most important songs on your playlist. They are the ones that set the pace and define much of the style and musical personality of your station. Conservative stations wait a long while, watching local and national audience reaction to each song before placing it into this category. The point of this strategy is to have a stationality that is always familiar and comfortable. Liberal stations place some brand new records directly into Power rotation. Their strategy is to create the hip image of a "musical leader". There is more excitement in this kind of programming but also more risky because if the program/music director makes too many wrong choices and pumps up airplay on records that don't have the 'juice' to become mass-audience hits, the station's ratings will suffer.

Overly conservative stations bore some listeners because the "play the same songs over and over." Overly liberal stations irritate some listeners because the "favorites" aren't heard often enough. As current hit music stations, the place most of us want to be is probably somewhere in the middle.

Determining just which songs will comprise the Primary Current rotation each week is a combination of art and science. The science part is in the study of listener requests, music sales and the national music charts. (See the sections "Qualitative Request Tabulation", "Qualitative Music Sales Research" and "Using The Trades".) The "art" comes from professional judgment, attention to detail and your gut.

Most stations have a Power Current rotation comprised of between nine and fifteen songs. Whatever you decide upon, there is one important rule that must be followed. If you are formatting an even number of Power Currents in your format hour clocks, you need to have an odd number of songs in Power. If you format an odd number of Powers in your hour clocks, there must be an even number of songs in the rotation group. If you don't follow this rule, what happens is the songs in the category will tend to get scheduled and played at the same position in the hour too frequently. Like, Power Current #5 will be scheduled at :10 and :40 minutes past the hour the majority of the time, seldom getting scheduled at :20 and :50. With an odd number in the category, you can schedule one Heavy per quarter hour, play the songs in numerical order and they will float around the hour positions of the days during the week, receiving airplay at different times in each daypart. (Read about Schedule Grids for more on this.)

If you are going to format four Power Currents an hour, you should have either eleven, thirteen or fifteen titles in the category. Playing one per quarter hour, eleven songs will give you a 2:45 turnover; thirteen will give you a 3:15 turnover; fifteen will give you 3:45
You could use 10 songs in the rotation group but format only 3 Power's per hour. That would produce a 3:20 turnover. You may want to experiment with other combinations, but always remember: Use an odd number of songs in the rotation group if you format an even number of Powers each hour. Use an even number of songs if you format an odd number of Powers each hour.

Secondary Current Rotation (MEDIUM)
This group is comprised of new records on the way up (recent additions to library) and well established hits on their way down (they've been into the top rotation but are not longer the 'hottest' in appeal.

If you aren't using music scheduling software, you'll need to a simple rotation system to allow the jocks some flexibility for selecting Medium currents. The Rolodex card-file system works well for this. With this system, you put the title and disc/cart number of each song on a card. The cards are kept in a flat-tray Rolodex file on the control board. The jocks select from the first three or four cards, play the song and place the card in the back of the file. Since the Heavy currents are pre-scheduled, this allows the jocks to balance and pace the musical flow of the hour. For example, if the Heavy Current at 1:10 is a female ballad, you'll probably not want the announcer to play another female ballad from the Medium Current stack next to it, even if that one happens to be the top card in the stack. He'll need to select the second or third card/record to play at 1:14 and hold that female ballad for the next quarter hour opening.

You'll need to clearly orient your announcers about your personal game-plan and rules for music flow and you'll need to consistently monitor their selections to insure they are doing things the way you want. The grid systems works with Announcer Prep sheets (details and example of following pages). Make it a practice to examine at least one day's prep sheets from each announcer each week. For example, you may have told them you don't want to hear two "hard rock" records back to back. One day you'll hear a hard rock Power followed by a hard rock Medium. Or you'll see two of them back to back on the prep sheet. Speak to the jock about it. If you let things like this pass very frequently, before long your music flow will lose the consistency that you desire. It's not that your announcing staff necessarily wants to countermand your wishes, it's that they are announcers, not programmers. They don't think on such things the way you do unless you keep them focused.

Primary Gold Rotation
There are as many different Oldie rotation plans as there are program directors. There are lots of ways to do it right. There is one big way to do it wrong. That's to play non-hits as Oldies. Not every song you add to your Current playlist

is going to have staying power, make it to the top of listeners' favorites so they'll still want to hear it in future years. In the long run, only about 20 percent will have continuing programming value over the next several years.

An Oldie isn't Golden unless it was a Hit. In my book, that means a Top 10 hit on the Billboard chart and even then many Top 10 records are better buried than retained. If the record didn't have the strength to make it to the Top 10, it will have very little continuing programming value. There are only a few exceptions to the rule. Formats like AOR and Classic Rock that aren't based on "single" hits and need to rely on the individual tracks' performance on the Radio & Records airplay charts. Hit lists are available from other sources as well, including programming consultants and on-line radio industry databases. Smart programmers develop their own, keeping song lists and libraries in their personal computer where they regularly review the collection and make adjustments to the content of the various rotation groups.

Your Primary Gold list should be the biggest hits from the last few years, perhaps spiced up with a hand picked selection of the most major hits from earlier years. Except for Oldies and Classic Rock formats, very few records will continue to have programming value after about 10 years. For the majority of records, the cutoff point is five years. The number of songs in the Primary group is up to you. Sit down with pen and pad and figure out various scheduling and rotation plans. If you put 145 songs in the group and play two per hour in a 24-hour day, each one will play about twice per week. If you use 45 songs and play one per hour, each one will get on the air about three times a week. Decide what you want, how frequently you want the songs in the category to be exposed. Strategize and develop airplay tactics that will construct the kind of music flow and variety you seek. Put your rotation plan into play and on the air for a few weeks and see how it feels. Then make some adjustments and try something else to see if you like it better.

One of the most important things to observe is the daypart flow pattern. Ideally, each song should play in every daypart before it repeats in any one of them.

You can control the Primary Gold rotation with the Rolodex system or with Schedule Grids. Read carefully about Rotation Grids on the following pages.

If you choose, you can divide your Primary Gold into two or more groupings. Since I have always programmed for an Uptempo music flow, I use two Primary Gold rotation groups. Primary Gold A and Primary Gold B. My "A" group is all Uptempo. I format it (schedule it) to play after News and Stopsets and set the turnover at about 3.3 days. The "B" group has songs of all tempos and a slightly longer 3.6 day turnover.

Secondary Gold Rotation
Everything that's not in the Primary Gold rotation is in this group. Remember: Work with Top 10 hits but remain aware that there are a few exceptions to that rule in any format. For example, several Beatles hits were never released as singles. Classic Rock, Gold-based Adult Contemporary and Oldies stations should certainly consider some of the top Beatles LP cuts for their Gold library. Prince's first single, "I Wanna Be Your Lover" peaked at #11, but a few years later he was a superstar. Some Urban and Dance formatted stations might want that in their libraries.

The number of songs in the group is up to you and your programming strategies. The total library can be anywhere from a few hundred to a couple of thousand. The more Gold-intensive your station is, the larger the group should be. As with Primary Gold, I divide Secondary Gold into "A" and "B" groupings. Here, tempo isn't the prime consideration for me. Age is. The more recent hits, say those from the last six years or so, go into A. The rest go into B. This allows me to subtly adjust the texture of the station. For instance, a Pop station can be adjusted to a slightly "older" appeal during Midday if I program a higher percentage of "B" Golds in that time slot.

If you're not using music scheduling software, the Rolodex system is best for controlling the Secondary Gold rotation. The Grid system doesn't allow enough flexibility for adjustments should the jock discover too many of a certain type of song scheduled in a given hour. And, when working with so many titles, the Grid system is a pain to keep updated.

The Rolodex allows some jock flexibility and also helps prevent record pilferage (if you are using discs.) Give each disc a number. Keep all the Oldies in numerical order. When a jock pulls a card and discovers the disc isn't there, have him give the card to you. Run an inventory on the cards each month. You'll know each time a record turns up missing. If you then make everyone aware that you know the record is gone, the thief will be less inclined to push his luck. (And maybe the disc is simply misplaced.)

Review and update your Oldie rotations at least two times per year. You'll need to move some from Primary to Secondary and vice versa. You'll add some and delete some from the lists. Once you've got the system operating the way you want it, it will take care of itself for a while. But don't let it stay the same for long periods of time. Freshen it up.

One other important item. If you don't have music scheduling software, at least get your Gold library entered into a computer database of some sort so you can quickly sort and resort your library by Artist, Title, Rotation and Cart/Disk number. In mine, I also keep the hit date, gender and tempo of each record plus my own personal 'sound code' or 'style' characteristics. You must have an inventory sort and print capabilities if you are going to keep your finger on the pulse of your Gold library.

2. Format Texture

Texture is the basic scheme, or makeup, of your music format. It's the end product of all the elements you weave into it. The surest way to control the texture and flow of your music is to put songs of similar sounds, styles and/or characteristics into individual rotation groups. The most common example of this is the "Image Gold" or "Power Recurrent" rotations many programmers compile and then schedule next to the station ID or out of specific stopsets. You can take it many steps farther. For example, you could put most of your Dance hits into a dance group; really old Oldies into a "Classic" group; songs with primary teen appeal into a "teen" group; Oldies by top level artists into an "Image" group. Then, you can mix your textures in a myriad of ways. Be careful not to make it too complicated, however. Remember, all the music ever written has used the same few notes. You can run a really fine music mix with only a few rotation groups.

3. Rotation Grids

The Rotation Grid is a simple contraption designed to plan and control the rotation of songs. You usually don't want the same Current to play again in the same hour today as it did yesterday. You usually don't want a Power Gold to repeat again in morning drive until it has played in each of the other four dayparts. So, you give each song in a rotation group a rotation number. You write the song numbers in sequential order into the hour squares on the rotation grid. Then, you can clearly see the rotation patterns; where songs will repeat.

If you don't have music scheduling software, you really must use rotation grids for your Power Current and Power Gold rotations and any other special rotation groups you develop...especially the 'short list' groups.

There is a sample rotation grid for a Power Current rotation on the next page. On this one, I call the rotation group "Red". I have 13 songs in Red and format 4 Reds per hour. You can see that song #1, which plays in the first quarter hour of the 6am hour on Monday, won't repeat in that hour until Wednesday, and then it will be fall into the last quarter of the hour. (As you look at that grid, be aware that the number in each box represents the first song to be played in each hour. This one is set up for four songs from the Red group per hour. So, on Monday in the 6am hour, Red songs #1-2-3-and-4 will play. On Wednesday, in the 6am hour, songs 11-12-13-and-1 will play.)

The same grid can be used every week if the placement of songs on the Heavy Current list changes regularly. That means shuffling the order of the songs in the rotation group each week, assigning different numbers to each one.

Note to computer music schedulers: Some music scheduling software (like Music1) automatically display rotation grids. If yours doesn't do this, it's a good idea to use grid worksheets as you set up or change your computer system. Look at your rotation patterns on a grid. Then you can make adjustments before you put the computer into play. Song rotations are always the end result of two things. 1) how many songs are in the category. 2) how many times in the hour, day, week the category is formatted. Fifteen songs in one category might not work out well, while eighteen songs would be perfect. Working with rotation grids, you can easily 'see' your the repetition pattern your individual songs will have.

With the Grid system, as you 'number' the songs in each category, take care to spread songs that are similar, distribute them throughout the list. Avoid having Slow songs in positions 4, 5, 6 and 7. It would be better to have the Slow songs in positions 4, 7 and 10. This is important because if the announcers have to make switches of pre-scheduled songs during the hour, they won't have a similar song as the next number. For example, if a Recurrent #7 doesn't 'fit' at 6:15 because it is a ballad, you tell the announcers to flip it with Recurrent #8, playing that one at 6:15 and then playing Recurrent #7 in the next slot where #8 normally would have been. If both #7 and #8 were ballads, the announcers would have to have extra instructions about how to handle the situation. The more adjusting they have to do, the greater the chance your rotations will become inconsistent, the greater chance they'll pick something that is not to your liking.

Be aware that the more categories you pre-schedule with rotation grids within each hour, the greater chances will be for formatting conflicts. For example, say you do not wish to have three Slow songs in a row. Depending on the way the numbers fall, you could get a pre-scheduled run of Slow songs, one each from Heavy Current, Recurrent and Power Gold. This kind of thing will normally happen. When it does, you train the jocks to 'flip' the Recurrent in 'this' slot with the next Recurrent. But if you are pre-scheduling much more than half of your hours' music content, it will become more difficult for the announcers to move songs that are pre-scheduled around to different positions while still

maintaining proper music flow. Maybe they won't be able to flip the Recurrent at 6:15 with the one at 6:45 because the Recurrent scheduled for 6:15 doesn't fit the next slot well either because of other formatting rules conflicts with other songs that are pre-scheduled at 6:41 and 6:49.

There is simply no way that music rotation schedule grids (or music scheduling software either, for that matter) can be set up so that all of the songs will fall into proper alignment without human intervention and adjusting. I think it is better to pre-schedule only about half of the hour with rotation grids and then allow the announcers some flexibility to make music flow adjustments as needed than to try to pre-schedule everything and then have the announcers trying to figure out to keep the numbers 'straight' and still maintain proper music flow.

	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
6am	1	6	11	3	8	13	5
7am	5	10	2	7	12	4	9
8am	9	1	6	11	3	8	13
9am	13	5	10	2	7	12	4
10am	4	9	1	6	11	3	8
11am	8	13	5	10	2	7	12
12n	12	4	9	1	6	11	3
1p	3	8	13	5	10	2	7
2p	7	12	4	9	1	6	11
3p	11	3	8	13	5	10	2
4p	2	7	12	4	9	1	6
5p	6	11	3	8	13	5	10
6p	10	2	7	12	4	9	1
7p	1	6	11	3	8	13	5
8p	5	10	2	7	12	4	9
9p	9	1	6	11	3	8	13
10p	13	5	10	2	7	12	4
11p	4	9	1	6	11	3	8
12m	8	13	5	10	2	7	12
1a	12	4	9	1	6	11	3
2a	3	8	13	5	10	2	7
3a	7	12	4	9	1	6	11
4a	11	3	8	13	5	10	2
5a	2	7	12	4	9	1	6

Hot Current Grid: This grid applies for a Current music category with 13 songs in the group. Playing four from the group per hour gives a 3:15 turnover. The number in each box represents the rotation number of the first of four Heavy Current to be played in the hour.

4. Calculating Music Rotations
"Tight" rotations, the categories with the highest repetition factor (like, Power Currents) usually work best when you follow the Even/Odd Rule. If you have an odd number of titles, use an even number of songs from the group each hour. Example: If your Heavy Current rotation has 13 titles (an odd number), format your clocks with 4 Heavy Currents per hour.....If you have 10 titles in Heavy, format 3 cuts per hour. In most instances the Even/Odd Rule will prevent songs from repeating in the same hour for 2 or 3 days. When it does repeat in the same hour, it should fall into a different quarter of the hour.

Here are rotation formulas you need to use to plan your rotation patterns:
For Rotations in which ALL titles play every day. This would be your Currents and maybe a short Recurrent list.
FORMULA: Divide total number of "plays" by the total number of songs in the rotation group. Then divide the total number of hours by the play-number.

Example:
• Four Medium Currents are played each hour. Medium Current Rotation has 25 titles.
•4 per hour X's 24 hours in the day = 96 Medium Current "plays" per day.
96 divided by 25 titles = 3.84 plays per day

24 hours divided by 3.84 plays = 6.3 hour turnover.
.3 X's 60 Minutes = 18 minutes

So, Medium Currents will turn over approximately every 6 hours and 18 minutes.

When your calculations give you a turnover that is very near a number that can evenly be multiplied to a total of 24, you may want to make an adjustment. Four hours, for example, divides equally into 24 hours. Which means that all the Medium Currents will tend to get repeat plays at very near the same time they played on the previous day. It would be better, in that case, to either add enough songs to the group, which would give a near 4:30 turnover, or to take enough songs out of the group to give an approximate 3:30 turnover. Turnovers near 3, 4, 6, 8 and 12 hours will all result in songs playing near the same time, day after day.

For Rotations in which titles do not repeat for 1 or more days.
FORMULA: Divide the total number of Songs in the rotation group by the number of times the group is formatted each day. Next, multiply the fraction by 24 (hours). Then multiply that fraction by 60 (minutes).

Example:
Power Gold list has 231 songs. You format 3 Power Golds per hour.
3 (per hour) X's 24 (hours in day) = 72 "plays" per day.
231 (songs) divided by 72 = 3.2 day turnover.
.2 (days) X's 24 (hours in day) = 4.8 hours.
.8 (hours) X's 60 (minutes in hour) = 48 minutes.
So, Power Gold will turn over, on average, every 3 days 4 hours and 48 minutes.

I set up all Gold and Recurrent rotations to turn over "X-number of days plus 5 to 7 hours". The 5 to 7 hours is the important number, because that way songs will generally rotate through all five dayparts before repeating in any one of them.

5. The Gold Library
By another name: Oldies. What is "Gold" is a matter of formatting semantics. Some PD's call a song Gold as soon as it moves out of Recurrent rotation. That would be about 18 months, typically. To other PD's, songs become Gold at the 2 year mark. If you haven't been in the business long enough to have sufficient experience to compile a competitive Gold library it would be wise to purchase a list. Some research companies and most programming consultants have them available. (I provide Country music lists.)

Otherwise, buy the Whitburn Billboard Chart lists and begin developing your own lists. Play nothing that wasn't a Top 10 hit in your format. What follows now is the basic rotation plan which can serve as a guide for your own formatting strategy.

Suggested Rotation Options
In the absence of music software, the simplest method for rotation control is with the flat-tray Rolodex file, Rolodex cards and quarter-inch stick-on dots. Use colored dots and a specific color for each of your categories. Type the title and artist on a card, stick the song's number on both the card and the disc or cart. Instruct the jocks to select their Oldies from the first four cards in the file and to place the card to the rear of the file when they play the song.

Don't put any songs in the control room unless they are okayed for airplay. If your songs are on hard-drive it may be a little more difficult to prevent unwanted play. Depending on your system, the software may make it easy to lock-out unapproved songs. If you do have such an automation system, you should regularly call up and review log history and you can see if anything is being played in conflict of your orders.

The Gold List should be divided into at least two groups; let's call them Primary and Secondary. The Primaries are the strongest cuts. For more controlled Oldies programming, you can preschedule your Primary category with rotation grids. To do this, I suggest setting up TWO groups of Primaries; Primary A and Primary B. Here's how it would work with 75 songs in one group (Primary A) and 77 songs in the other (Primary B). Number th songs in each group consecutively. Use a different color-dot for each group. On your format clock, schedule one Primary from each group each hour. Use schedule grids and play them in numerical order. Primary A group will turn-over every three days and three hours; Primary B group will turn-over every three days and five hours and the same two songs won't show up in the same hour for a very long time.

You can easily alter the exposure your Power Oldies are getting by using a longer or shorter list in each group. You could choose to have only one Primary group with, say, 57 titles. Schedule one per hour and you have about a 2-1/2 day turnover.

Or, you could have one Up-tempo Primary group and one Down-tempo group and schedule them at opportune times in your format hour. (Hint: always use an odd number of titles in each group and have a different total number of titles in each group.)

Or, you could elect to update your Primary Golds each week. If you used 27 titles and scheduled one per hour, each one would get on the air about 6 times and would be played in almost every daypart. The next week, you move those 27 back to 'regular' Gold and replace them with a different 27 titles. This keeps 'freshening' your Gold category week after week.

I've used many different rotation schedules and I tend to go in cycles.   One month, I'll use a limited list and change the selections every week. Then I'll put in a long Primary list and leave it alone for two months. Experimenting, trying different rotations is interesting. You find you can subtly adjust the texture and tempo of your station in many ways.

The point is no one rotation is right in all situations. And no one rotation is right forever. As long as you are playing Hits, there's very little chance you'll screw things up. But if you leave things static for too long, your music selection will become stale.

6. Current Playlist Set-Up
On a following page is an example of my weekly Current list from the past. It's not a 'chart', the numerical order of songs on the playlist is for rotation control only and does not indicate the relative popularity or programming value of the song. The number in parenthesis after the artist name indicates the number of weeks the song has been on the playlist. In the column on the right side of the page, the number before the title or artist name indicates where the song has moved in the numerical order. It's a good idea to type a new Current playlist each time you make rotation changes...usually weekly...and to keep all your past lists in a binder for future reference. You may need to check back to see how long you had the song in Power, you should always be aware of how long each song has been in play. Music scheduling software does this for you, of course.
Heavy Current
Heavy is the Power rotation; the songs that get the most airplay. I use these two words interchangeably. This group of songs is most prominently responsible for determining the image of a Current-based music station, it defines the musical 'personality'. This collection of titles should be the 'hottest' records on the playlist, the songs that you feel have the most universal appeal across all your listener demographics or sub-groups. Most programmers will not move a new song into Heavy until it has been on the playlist for at least six to eight weeks, long enough to have become familiar with the majority of regular listeners and to have generated enough positive response from listeners indicating it truly is a top-level programming unit. I personally like to occasionally add a new song straight to Power when I am particularly excited about it and have confidence in it's hit potential. This strategy is, however, a delicate thing. If I make too many 'wrong' calls and place too many less-than-stellar performers into my Heavy rotation group, it will have negative impact on my station's listenership. Listeners like new songs, but they only like HIT new songs. That's the catch.

Powers should pre-scheduled and played in numerical order, formatted for either three our four per hour. The schedule grid example (a few pages back) shows the first Power Current (called RED there) to be played each hour. The remaining three within each hour fall naturally into place.

Thirteen Heavys and one per quarter hour gives a 3:15 turnover. This rotation schedule is one that has performed best for me in the formats I have programmed; Country, Hot A/C and CHR (Top 40). By that I mean, I have been most comfortable with the returns my stations have received in audience ratings. My theory about it is this: The Arbitron ratings show that the average time spent listening (TSL) to these formats is typically between 10 and 13 hours per week. So, one can surmise that with a 3:15 turnover, the average listener will hear each of the Heavy Currents approximately three times each week. It seems to work out well for me as the stations I've programmed have mostly increased in listenership after I arrived and maintained their ratings while have been their pilot.. However, I have not programmed other formats and it has been many years since I handled a CHR station. Today it is quite common for a Top 40 station in the US to spin its Heavy rotation with a 2 hour turnover, a very high repetition. As you make your formatting plans, be aware of what other stations across your nation are doing with their rotations but don't be afraid to follow your intuition and try something different.

The turnover time of the Heavys may be increased or decreased by adding or subtracting the number of titles in the group. This should most always be done in increments of two. If you format an even number of Heavys per hour, there should always be an odd number of songs in Heavy, otherwise the songs tend to be played too frequently at very near the exact same time during the week.

Extra Rotation Check: Most all listeners have their own generally consistent listening patterns. They tend to listen at the same times each day, and they tend to tune in and out several times a day. Try to learn and remain aware of such things so you can make tactical rotation adjustments. For example, most Americans drive to and from their jobs

each day and so are commuting in their cars with the radio playing at a very consistent time. And the largest majority of them are on a 8-hour workday. With that in mind, I look at my rotation grids and consider how the plan relates to a 9-to-5 workday. I want to assure that I avoid having the same songs that play in the 8-9 AM hour (while they drive to work) repeat in the 5-6 PM hour (while they are driving home). If people hear the same songs going to and returning from work during their commute several times a week, they'll quickly get the impression that my station has a very limited number of records that we play over and over. This will be especially true of they hear a song they don't personally like twice in the same day as they do their to-and-from commuting. If I see my "standard" workday shift separation is okay, I feel more comfortable.

Medium Current
The Medium Current category contains the most titles on each weekly playlist. Unless music software is being used, I use the rotation grid system to pre-schedule six, sometimes seven of the 12-14 records played each hour (the Heavys, Primary Golds and Recurrents). I leave the rotation of the Medium Currents and Secondary Golds flexible and mostly announcer-controlled. It is important to orient the announcers about the general preferences I have about music flow, the formatting rules I want them to follow. For example, I don't want more than two ballads in a row. I want to avoid having more than two female singers in a row. If I have 'novelty' songs in the library, I don't want more than one of them to be played within any 60 minute time-frame. Using the rotation grid and rolodex card system, or any other plan for that matter, some formatting no-no's will naturally be encountered. The announcer's 'next' song will be in conflict with a formatting rule. The announcers must be instructed, trained and continually coached in order to assure they consistently make correct decisions.

I do not recommend posting a list of "don'ts", concerning music flow. A better strategy is to explain verbally to each announcer the kind of sound the station seeks to maintain. Then, once a week the PD should review one set of Programming Prep sheets from each airshift. If he sees a music segment that isn't quite right, he should bring it to the attention of the DJ, explaining why the segment was wrong and how it could have been better balanced. If they clearly understand what is expected, most DJs will do their best to follow-through.

Each disc jockey must select the Mediums during the airshift. With these, he balances the music flow. Through proper use of the Programming Prep sheets, the DJ knows some of the upcoming songs. He can then make adjustments to insure the music selection is well-paced. In general, a well-paced music flow avoids extremes. Some examples of 'extremes': a Classic Rock station may want to avoid having more than two "acid rock" songs in a row; a Country music station should avoid having two 'drinkin' songs back to back. A CHR or To 40 station may want to avoid consecutive plays of two 'rap' songs or having too many 'dance' songs in the hour.. A 'Nostalgia' station may want to avoid having too many instrumental hits within an hour.

A-Power
1   Where The Green Grass Grows...Tim McGraw (14)
2   You Move Me...Garth Brooks (re-4)
3   Fly...Wilkinsons (6)
4   Honey I'm Home ...Shania Twain (11)
5   We Really Shouldn't Be... ...George Strait (24)
6   A Little Past Little Rock...Lee Ann Womack (10)
7   Husbands & Wives...Brooks & Dunn (11)
8   Wherever You Are...Mark Chesnutt (13)
9   I'm Alright...Jo Dee Messina (11)
10   If You Ever Have Forever In Mind..Vince Gill (14)
11   I'll Go On Loving You....Alan Jackson (12)
12   Wide Open Spaces...Dixie Chicks (6)
13   How Long Gone...Brooks & Dunn (14)
14   You're Beginning To Get To Me...Clay Walker (15)
15   Let Me Let Go...Faith Hill (8)
16   Don't Laugh At Me...Mark Wills (9)
17   Forever Love...Reba McEntire (13)

B-Secondary
1   Busy Man...Billy Ray Cyrus (1)
2   Spirit of Boy, Wisdom of Man...Randy Travis (1)
3   There You Have It...Blackhawk (3)
4   Someone You Used To Know...Collin Raye (1)
5   The Key To Life...Vince Gill (1)
6   How Do You Fall In Love...Alabama (0)

7   A Bitter End....Deryl Dodd (1)
8   No Place That Far....Sara Evans (2)
9   Where Your Road Leads...Trisha/Garth (2)
10   Getcha Some...Toby Keith (3)
11   Right On The Money...Alan Jackson (0)

D/Power Recurrent
1   Holding Her Loving You...Clay Walker
2   Love of My Life...Sammy Kershaw
3   Bye Bye...Jo Dee Messina
4   This Kiss....Faith Hill
5   I Do (Cherish You)...Mark Wills
6   That's Why I'm Here..Kenny Chesney
7   You're Still The One...Shania Twain
8   From This Moment....Shania Twain
9   26 cents...Wilkinsons
10   True...George Strait

7. Playlist Maintenance
If you don't yet have music scheduling software, you have to update and maintain your playlist manually. Using the rotation grid system, here's how I did it before the computer age.

Supplies Needed:
•Black felt-tip marker
•Quarter-inch stick-on dots in Red (for Heavy), Yellow (Medium) and Green (Recurrent) and other colors of your choice for your Oldies categories.

For carted music or music-on-hard drive, you will also need:
•Flat-tray Rolodex card file
•A supply of Rolodex cards (size 2-1/2" by 4")

If you transfer your music to tape carts, of if your music is ripped into a music-on-hard drive system which is used without a music scheduler, then each song in Medium and in your Oldies library will need a Rolodex card. On the card, type the song's title and the artist. Mark the song's playlist number on two dots. Stick one dot on the card, stick the other on the tape cart or on the CD's jewel box. Put the song in the control room rack, put the card in the Rolodex tray. Set the tray on the console at the announcer's fingertips. Rolodex supplies oversized cards which you can use to separate your cards by category.

You may want to make cards for your Heavys, but if you are using the Prep Sheets and Schedule Grid system, the cards are unnecessary. Since Power Currents are played in numerical order, the jocks will know which songs to play and when. You will need to put numbered dots on the Heavy carts or discs, of course.

When updating the playlist each week, type a new card for each of the new adds. Stick a dot on the cart or disk and another on the card. Then make two new dots for each song that has moved to a different Current rotation group. Stick the new number on each cart/disk and card. Always have an updated print-out in the control room which shows the title and number of every song in the library to announcers and cross-reference and find any one quickly and easily.

If you play records or CDs, you'll need to stick the numbers on the discs. Do acquire some attractive boxes which allow the discs to sit upright so the jocks can flip through them conveniently.

8. Format Clocks
There is no great science involved in a format clock. Every programmer has his/her own tactics for positioning things, but the most important principles are balance and consistency. The clock should show where the News (if any) should be in the hour. It should show the approximate positions in the hour where you want your spot breaks, promo's, weather reports, PSA's and music sweeps to fall. And it should show the music schedule, by category. The only constant rule, I believe, is that the newscasts should be at the top of the hour. (See the section titled "News Placement" for more on this).
Music Positioning
When a station doesn't have music scheduling software, my formatting strategy is to pre-select about half the music each hour and to allow the jocks to select the rest. I generally recommend placing one Heavy in each quarter-hour when I have 13 songs in Heavy rotation or one Heavy every 20 minutes when I use a 10-song-in-Heavy rotation, two

Power Oldies in each hour and one or two Recurrents each hour. The Mediums Currents and other Golds are mixed and placed in between these.

The format clock examples I use here call for three or four Oldies per hour.
Running Long Place either a Medium or an Oldie at the end of each half-hour. Then, if the jock has to drop a record, he won't be dropping a more important Heavy or Power Oldie.
Running Short Decide what the jocks are to fill with when they need to play an extra song in a half-hour. I suggest filling at the bottom of the hour with a Medium Current and filling at the top of the hour with a Secondary Gold.
Coming out of News:There are many theories about which kinds of songs should be played coming out of a Newscast and other non-music programs. Some believe a Power Oldie should be used. Others believe it should be a very hot Current hit. I don't believe it is all that critical and perhaps the best thing to do is to vary it. Come out with an Oldie sometimes, a Recurrent or a Current at others. But, I do believe it should be an Uptempo song as I want to inject some energy into the flow after the extended talk segment.

How Many Clocks?
You need two basic format clocks. One for News Hours and another for Non-News hours. Turn ahead one page for examples. You then also need a clock for each hour that is significantly different from the two basics. For example, if you have a :15 minute newscast at noon, you'll need a separate clock for the noon hour. Take the time to draw one up for each needed hour. Don't let the jocks wing it. Give them a plan and direction.

Change your format clocks and music rotation schedules every now and then. Every couple of months, maybe. Don't let the same clocks run forever. It gets boring to both jocks and, perhaps overly predictable for listeners. If a listener is not particularly fond of Oldies and comes to know that your station always plays one following the news, that person may eventually come to realize that when your Newscast starts, he'll have a good eight to ten minutes to go dial-surfing to see what other stations may be playing. That's not something you want to encourage.

9. Drawing Your Clocks
A 45 rpm record or a CD makes a wonderful circle on a regular sized page. Use broad strokes and lots of colors as you draw your clocks. If you use regular sized paper, put the finished product in plastic page protectors to protect them when you post them in the control room. You can use the examples in this manual as a general guide for constructing your format hours. Note: The clock examples were lifted from the Macintosh music scheduling software I developed back in the '80s. It was the first music scheduler capable of putting such graphics onto the screen, then allowing the user to click-and-drag the elements to different positions around the hour. My new Music1 scheduler (the one for Windows) does the same thing and also puts a grid across the bottom of the page that shows each of the hours in the week where the clock is used.

10. Power Current Rotation Check
Songs have the most impact when people hear them when they are alone. Most Americans drive to work alone. If people hear a Current that they don't particularly like more than a few times on their way to and from work in a week, it can accentuate the impression that "the station plays the same songs over and over".

Of course, the flip side of this is that people could hear their personal favorite five or six times a day without complaining. Repetition of a Current is only a problem when the song that repeats is "one I don't like". Since almost every song, even the biggest of hits, has detractors, it is important to plan the Power Current rotation carefully because these are the ones that repeat the most.

The most important hours to check are those around the standard 9-to-5 workday. Watch carefully the songs that are scheduled for play between 8-9 AM and 5-6 PM. If rotation is acceptable to you there in the "standard" workday schedule, all others should be okay, too.

Here's an example of typical mathematics:
Say you format three Power Currents per hour times these two hours (8-9 and 5-6) times five weekdays equals 30 Power Current-plays per week in the two primary-drive-time hours. And you have 13 Power Currents. Divided into thirty we get an average 2.3 plays for each song each week in the to-and-from-work hours. If you see any songs repeating more than four times in those two hours, you should take steps to better schedule the spread.

If you are formatting your music manually, a Schedule Grid for your Power Currents will show the precise positions of all the songs during the week. Most music scheduling software has a "play history" feature which will show you the same thing.

11. Jock Instructions: Using the Prep Sheets
Preparing Prep Sheets for each airshift takes less than fifteen minutes. If you take the time to do it, the more able you are to make strategic programming adjustments as your shift progresses.

1) Get to the station early before each shift, get a blank Prep sheet for each hour of your shift.

2) Use the Format Clocks and fill out the Song Class/Category column in correct music schedule order. You'll fill in the boxes with P's (for Power), M's (for Medium Current), PG's (for Power Golds), R's (for Recurrent) etc.

3) Get the Power Current schedule grid and find the number of the first one you will play in each hour, then write the numbers after each P in the Song Class column. The Powers are played in numerical order, so write-in the numbers of all the Powers for the entire shift.

4) Get the schedule grids for other rotation groups and write-in the song numbers for each hour.

5) Get the playlists and write in the titles of the pre-scheduled songs each hour.

6) If station promos or other elements are pre-scheduled, write them in their approximate positions in the ELEMENTS column.

That is all that is required in advance. You will have the titles of five or six songs already scheduled as each hour begins. As the shift progresses, you can plan ahead, using your Medium Currents and optional Oldies to adjust the balance, pacing and flow. Write those titles in as you go. Make notes in the ELEMENTS column to indicate where the spot breaks fall. There are spaces on each side of the page where you can enter the times things play. Use either time-column or both, if you wish.

Some jocks like to write-in other data in advance. You may want to enter your spot breaks in the approximate positions where they will fall, for example. The better your prepare, the smoother things run.

[ends]