

A Sleep Plan Strategy

We have an extraordinary job. Flying large jets to every corner of the country and literally around the world—normally a fun and rewarding job. However, our extraordinary job can also take an extraordinary toll on our bodies, and sometimes our health. Many of us operate our trips with the adage: sleep when you're tired, drink when you're thirsty. This method may work well for some, but unfortunately, not everyone, and it is not always apparent nor easy to actually know when you are tired.

When you are at home, you probably maintain a pretty regular schedule. You wake from the same bed at the same time, you eat at the same three meals, it gets dark at the same time. With these and other clues, your subconscious regularly tells you when you ought to be tired, and you normally go to bed at approximately the same time every night and wake up at about the same time every morning. It's not too difficult to stay reasonably rested.

But, when you travel across time zones, almost all of those normal clues are missing and it is not nearly as easy to continue that regular routine. Your regular life is left behind, the sun is in the wrong place, and it can be difficult to maintain a regular meal schedule. Without our normal daily clues, we are actually rather poor at assessing our own state of tiredness. It turns out that our bodies are capable of staying up for longer periods of sleeplessness than we normally would and operating pretty efficiently—least for one day. However, there is a problem when you try to do that at extended day repeatedly. It can lead you into a sleep deficit and a fatigued condition that can be insidious and eventually debilitating.

A trip sleep plan can help you replace all those normal daily cues, particularly the cues that tell you when it is time to go to bed. This is a description of one such tool. A plan in the form of a specialized daily spreadsheet. Not a spreadsheet to track when you sleep, which only tells you why you are tired, but one that tells you when to go to bed to help you maintain a regular sleep schedule, similar to what you experience at home.

A Sleep Plan

Each trip sleep plan starts as a spreadsheet template that includes headings for UTC as well as every possible time zone in which our trips may operate. The rows divide the day into half hour segments and also includes a home, or “normal” sleep time that is shown as a gray area. The templates rows are prearranged into days that will be modified later (A link to the Pages template used in this description can be obtained [here](#)).

| UTC | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | |
|-------------|-----|-----|-----|-----|-------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|--|
| | | | | | Memphis Night Time (22:30 to 06:30) | | | | | | | | | | | | | | | | | | | | | |
| MEM | -5 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| WEST COAST | -7 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
| ANCHORAGE | -8 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| JAPAN/KOREA | 9 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| SINGAPORE | 8 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| CHINA | 8 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| INDIA | 5.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 | 13.5 | 14.5 | 15.5 | 16.5 | 17.5 | 18.5 | 19.5 | 20.5 | 21.5 | 22.5 | 23.5 | 0.5 | 1.5 | 2.5 | 3.5 | 4.5 | |
| DUBAI | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | |
| EUROPE | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | |
| BRITAIN | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | |
| EAST COAST | -4 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
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The second step is to modify the original template. Remove all the times zones that are not going to be included in the current trip. Modify the dates in the days column usually starting two days before the trip begins. Then enter the trips various duty periods as blocks starting with each alert time and ending with the

expected arrival at the next layover hotel. These duty periods are represented by the larger white bars in the days rows.

Once all the duty periods are entered onto the template, you will have graphical representation and perhaps a whole different perspective of your trip that you can use to your advantage.

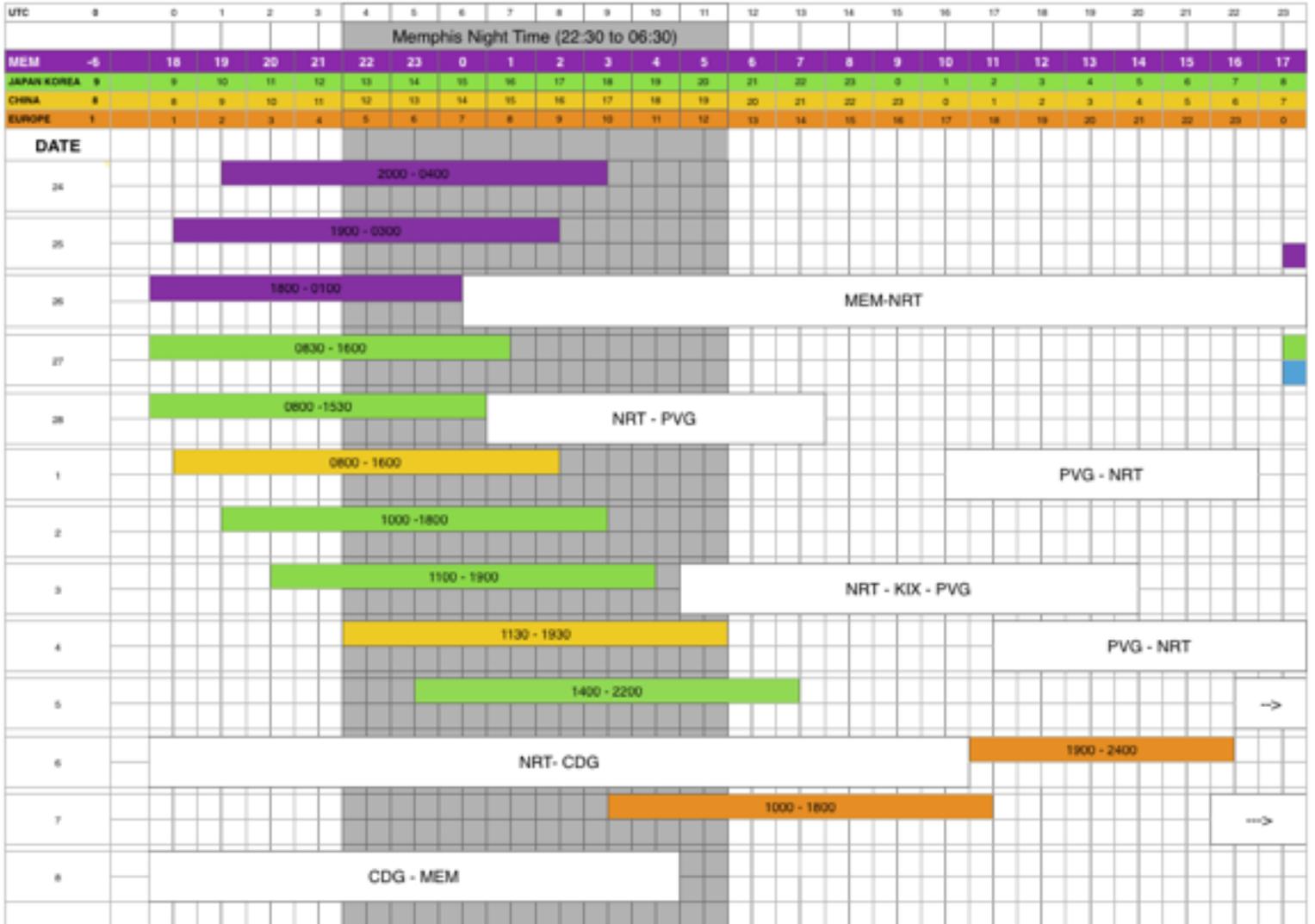
| UTC | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
|-------------|----|----|----|----|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | | | Memphis Night Time (22:30 to 06:30) | | | | | | | | | | | | | | | | | | | | |
| MEM | -6 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| JAPAN KOREA | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| CHINA | 8 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| EUROPE | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 |
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From this point, using your home time as a starting base, you can manually enter your planned sleep periods. If your home life allows, start your sleep planing a few days before the trip so as to slide your waking times closer to your first duty period start time. This planning step takes a little practice to get right, but after a few times you will understand what is optimum for yourself. As you enter each planned sleep period, and if you desire your nap times, the goal is to start and end each sleep period as close as possible to the previous days sleep period without moving the period more than an hour each day. This one hour variation is important when advancing the start time earlier that the previous days start. Our bodies are usually able to go to sleep one hour short of our

normal 24 hour periods but trying to begin sleep more than one hour before the previous periods start time is usually not easy and often not successful.

There are times when the planned sleep periods may need to start over an hour later than the previous period. This deviation from the regularity of the plan is generally acceptable since we seem to be able to accommodate later start times easier than we can accommodate earlier start times, but be aware that we also have a tendency to wake at about the same time as the previous day.

Add in the local start and end times of the planned sleep periods. It will make it easier to follow the plan if you do.



When the duty period extends completely over the normal sleep period as is seen in the NRT-CDG duty period in this example the main concern is to maintain a sleep period trend as much as possible. It is preferable to get eight hours sleep that ends many hours before the duty starts then to try to get eight hours that ends with an alert call by delaying the start of the sleep period. Not

only should the beginning of a sleep period start at approximately the same time every day but the waking time should also have some consistency. By delaying the start of the sleep period you are risking waking up at yesterday's normal time and not getting a full sleep period before your day starts. It is akin to staying up to 2 am one night at home in anticipation of an afternoon launch and then waking up naturally at your normal 7 am resulting in a short 5 hour sleep period that probably will make working over the next evening quite difficult. If you had gotten a full night sleep the night before you would be starting the duty period without the induced sleep deficit you created by delaying the start of sleep and waking up at the normal time.

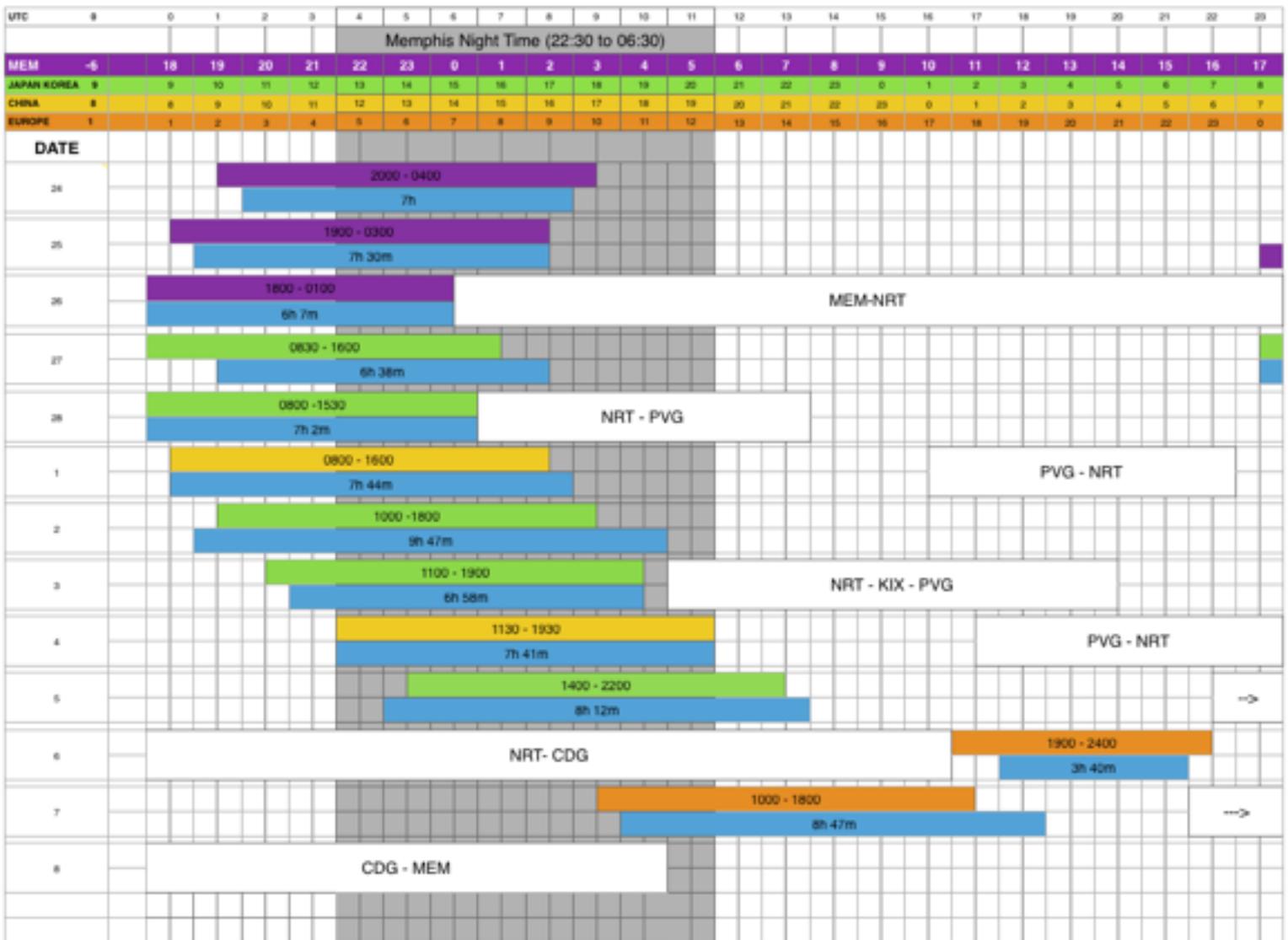
With a duty period like the NRT - CDG period in this example, plan on a nap when you arrive. You'll be tired but try to make it short and actually set an alarm so as to not adversely affect the next sleep period that should be as close as possible to the established sleep period trend. It should be easy to resume that trend and get a good eight or nine hours sleep that next period.

It is difficult to devise a good consistent plan with multiple duty periods that extend over your normal sleep trend but considering our scheduling parameters that require “resets” after long duty periods it usually doesn't happen. In the example you might notice that the last half of the sleep trend was “aimed” at and trended toward the last duty period, the CDG - MEM leg, and despite the NRT - CDG leg two days later, it was possible to resume the planned trend and attain nearly nine hours sleep ending just three hours before that last duty period.

Once you have the plan built it is important to use it, diligently.

The beginning of the sleep periods are the times that you should be turning out the light. Begin your sleep preparations at least an hour before that start time. Go to your room, close the curtains as best as you can using the extra pillows and furniture to make the drapes as light blocking as possible. Dim or turn off most of the room lights. Turn down the thermostat, turn off the TV, silence your phone's ringer and consider taking a relaxing hot shower or bath (not too hot). Get into bed and read a book, preferably not on a backlit screen. Relax and use a light blocking sleep mask and ear plugs if need be. If you are on plan sleep will come naturally.

Use a FitBit or sleep tracking app on your phone to help keep track of how long you sleep and use that information to keep track of your progress. There are numerous smart phone apps that can track your sleep, Sleeptracker 24/7 is one that is well rated.



Each day enter the previous “night’s” sleep into the plan as shown in this last figure as the sky blue lines. Add the duration in hours and minutes of the sleep period so you have an idea of how it is working. You can then also make adjustments to the plan as needed. Using this plan method it is often easy to get more sleep on trips than you would at home.

This plan strategy probably looks cumbersome and perhaps difficult to follow but the effort can be rewarding. By using a sleep strategy such as this plan you will find that you are more rested and probably safer for each duty period during the trip. You will also find that your recovery from your trips are much quicker. You’ll like that and your family will too.

Paul Zahner

