## LT JOO'S PROGRAM FOR ST PREP TRAINING

> The intended audience for this dissertation are all cone-gonnabes, be it PJ or CCT, or PR or STO.
> This can be used as a supplement to your current workout program or a guide to help you achieve your goal to become a special operator in the United States Air Force. Be smart about what you read here and don't get yourself hurt...
> ...it will make me feel really bad.

The key to my new training program is training smarter. Just to give you an idea of what I did before, my typical schedule looked like this:

## Calisthenics:

(Mon-Sat)
Ins: $60+1$ pushups and $50+1$ sit-ups or $25+1$ dips and $50+1$ sit-ups
Outs: $15+1$ chin-ups and $50+1$ sit-ups or $13+1$ pull-ups and $50+1$ sit-ups
I would normally end up doing these about 6 to 8 times a day.
MWF
I would do about an hour of calisthenics.
"Super Sets"
Run 150 yds, do 20 pushups, run 150 yds, do 20 sit-ups, run 150 yds, do 20 flutter kicks, run 150 yds, do 20 mountain climbers, so on and so forth.
"Intervals"
On a two-minute interval, do 30 sit-ups then 30 pushups. The time left over is rest. (This could be varied by substituting sit-ups for flutter kicks.)

## "Pyramids"

What always challenged me, and still challenges me, is that PT pyramid in Stew Smith's workout book. The 1 pull-up, 2 pushups, 3 sit-ups, 2 dips, 2 pull-ups, 4 pushups, 6 sit-ups, 4 dips...on up to 10 pull-ups, 20 pushups, 30 sit-ups, 20 dips...and back down.

## Run:

I would run everywhere I go. The great thing about being a college student is you can wear whatever you want to class. My bag would be full of books, around 30 to 40 lbs . and I would just run between classes...EVERYWHERE! The afternoons (MWF) would be the timed pace runs 1400-1500 or 19002000, up to 6 miles. Sometimes I would run in the morning 0700-0800, long and slow for about 5 miles.

## Swim (Mon - Fri):

I was in the pool from 2200-2400 every weekday, sometimes Saturday if I had to skip my Wednesday night session. My hour cal session usually preceded the pool stuff by about an hour or so (I would do my cals at around 2000, get done at 2100, and watch the women's water polo team practice for an hour, then hit the pool).

## MWF

Start with 4 underwaters, then freestyle $11 \times 300-400$ yards.

## Water Con (Tue Thu):

Week \#8 standards and events. Now with the underwaters, I'd always push myself to stay underwater longer. Near the end before I left for Phase II, I was going there and halfway back before I surfaced.

The shortfall of this program is that it did not prepare me for the same kind of intensity that they give you at Phase II. If you notice, there are hours between a run and cals, or cals and swim. Also notice that the run was always before cals and that the workouts were geared toward PAST events rather than whole body workouts. Whenever I would do cals, I would rest in between each set, except the "Super Sets."

The PAST I took for the Phase I of the selection looked like this:

| Swim | $19: 56$ |
| :--- | :--- |
| Run | $9: 53$ |
| Chin-ups | 17 |
| Sit-ups | 87 |
| Pushups | 85 |
| Flutter Kicks | 88 |

The PAST I took at Phase II looked like this:

| Chin-ups | 20 |
| :--- | :--- |
| Sit-ups | 90 |
| Pushups | 100 |
| Flutter kicks | 85 |
| Run | $10: 20$ |
| Swim | $20: 30$ |

What you can get from this is how much the order in which you do things matters. Personally I think that doing cals before your cardio stuff sucks, but that is exactly what we want. Training like we fight...if not...HARDER!

The schedule at Phase II looked something like this:

| SUN | MON | TUE | WED | THU | FRI |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Paint Shirts | PAST | PT | PT | PAST (week 3 standards) | Briefings |
| LUNCH | Introduction to Water Con | Run | Ruck <br> March/Run | Water Con |  |
| Cadre Introduction | LUNCH | Plyometrics | Jerry Can Lug | LUNCH |  |
| Psychological Evaluations | Introduction to PT | Water Con | LUNCH | LRC |  |
|  | Work on Briefings | LUNCH | Work on Briefings | Work on Briefings |  |
|  | DINNER with Cadre (Icebreaker) | Obstacle Course | DINNER |  |  |
|  |  |  | Recall/Hell Night |  |  |

The events on Thursday and Friday are educated guesses because I wasn't around then, but that's the gist I got from the other guys on the team.

There is a point to all this. If you notice above, the Phase II schedule you will see a pattern arising. It is built to suck. There is no real rest scheduled in there. Take Tuesday morning, from PT we went straight into the Run, from the Run straight into Plyos, etc. This is the foundation of my new plan.

## THE PHILOSOPHY

As with any program, you need to start from the ground up. Thus beginning with the legs. You are on your feet doing something all day long, other than when you are in working on your briefings. So comes the idea of building around your legs. They are the part of your body that MUST be able to go whenever you call on them. How should one go about this? Train for endurance...more specifically, MARATHON. The principle is to train the muscles in your legs for long distances, making your body more efficient in using energy. This is the only way to go about it. Just as a long distance runner who begins his race fast, will burn out too early. We want to be able to go far and long. The paces of the runs at Phase II start at around $7: 30$, then as the run progresses, it speeds up to about 6:30. When you train, keep in mind that you do not want to run slower than 7-minute miles when you are there...ever. In order to train your body to get used to this type of life is to do it everyday. Never give yourself an excuse; never take off more than a few days. So you may be thinking, what if I get injured? That's the ace-in-the-hole of the plan...we want to take time to train up GRADUALLY. Putting the bar up a little bit higher until our body gets used to it, then once it gets to easy, bring it up another notch. Yes, it's going to take what seems forever, but that's one reason why I chose to take another year. Training for endurance sports isn't something you can few in a matter of a few months. It takes a lot of time and patience...as I painfully learned in June.

If you just run, you would only develop your legs to do just one thing, work in one motion repetitively leaving the possibility of forgetting about some other muscles in your legs. That is where plyometrics come in. For those who do not know what plyometrics are, they are exercises that focus the explosive motions such as jumping in volleyball or punching in boxing. These are exercises that the instructors love to have students do. Why? Because they really hurt if you do a lot....and you will end up doing a lot be it at Phase II or the OL. Remembering the same premise as we developed before, "TO TRAIN HARDER THAN WE FIGHT" we will move to the sand for plyometrics. The reasons are: (1) it is THAT much harder to do frog jumps, duck walk, lunges, etc. in sand (2) it will reduce the risk of injury because sand is soft and it will help you develop the muscle stabilizers in your legs. So find a beach volleyball court...they are on every single military base l've been to, or if you're lucky you can find them right next to an ocean. Oh, and no rest between each exercise.

Calisthenics are good, high numbers on evals are really good, staying in good form and being strong throughout a PT session is the best. How does one train like this? By making things harder on yourself. I experimented this past week with a few ideas that paralleled what they did to us at Phase II. When you do cals, NEVER rest. Once you start your cal session, do not stop, go immediately to the next exercise...and so what if you just did 20 reps of tricep pushups, if 40 regular pushups are next, then do 'em! Don't rest. At Phase II, yes you do get a "rest" but only for the time that it takes to say "THE EIGHT COUNT PUSHUP HOO-YAH!!!" As you train, just think in your mind, what can I do next to make this suck even more? To start, go with low reps, 5 pushups, 5 triceps pushups, 5 wide pushups, 10 flutter kicks, 10 crunches, 10 neck rotations... Have your PT plan written out so you don't have the excuse to "think up another exercise to do" and when you do write it out, put them in big letters and within eyeshot so you don't have to pick up and read that piece of paper which outlines your hour of power.

To supplement the list of calisthenics on the card, do exercises that will work on opposing muscle groups. For instance, back extensions or "supermans" work opposite of sit-ups; upside down pushups or "military press" work opposite of pull-ups...get the picture?

None of us have time to completely devote days $100 \%$ to training for CCT, so we need to make the best of whatever time we have. Work/rest ratios are really important in the overall training strategy. We want to ensure that within our designated training time we spend no more than $5-10 \%$ of the time resting. (This is a ballpark figure from what I saw at Phase II) The smaller you can get that number the better. The best thing to do when you start off is to make sure you set a reasonable goal for yourself. Tomorrow, if I say I'm going to do cals for an hour, that means I would have to do 57 minutes of work and with a total rest of 3 minutes...I would have a heart attack and keel over if I did that tomorrow. Start off easy, let your body get used to it. Six months from now, I had better have no problems doing cals for 57 minutes straight. What I may do tomorrow is, 10 minutes of cals, within that time I will give myself a 30 second break, just enough time to get myself some 2-to-1 Gatorade (2 parts water for every 1 part normal mix Gatorade).

I've read in fitness magazines that rest is more important than the actual exercise...but then again, in all the magazines that I have read that in, they had a picture of this really huge ripped guy that could probably crush me with his pinky. Unfortunately, we will not have that luxury during our ordeals in pursuing that Red Beret. You WILL be doing something physical from the moment you wake up until you fall asleep at night (that is if they let you sleep). We cannot stop and look at how huge we are in the mirrors, which just wastes too much time. We are looking to become endurance machines; not some dude who could crush a beer can between his pecs. I am not trying to bad mouth rest here, because it is very important...you just need to be SMART about where you put it. There is no sense in going out, trying to do cals for 2 hours, when you rest for 2 minutes every 1 -minute you work. Do what you need to do, stop for a couple of seconds to hydrate, and move on to the next event.

Stretching is so important. Being flexible can mean the difference between an easy 6-minute mile and a killer 6-minute mile. Unfortunately you won't get much of a chance to stretch during the PT sessions, nor will you be given time before or after say, a run. They will keep you warm, and if you're not tell them, and they will get you warm very quickly, so, the risk of injury there, because of a lack of stretching, isn't that high. Now since we are not there yet and are training on our own, we can seriously devote at LEAST 15 minutes of good stretching after every session. If you can, stretch throughout the day, in addition, set time away from your training sessions to just STRETCH. (If you ever are a team leader, ask the instructors, or better yet, TELL the instructors that you are going to stretch your team out... and tell the team to hydrate or use the restroom, etc. whatever you can do to steal some precious minutes of rest.)

I didn't write too much about swimming because it is very technical and if done correctly, doesn't take much effort. If you can have yourself swim (freestyle) a mile in less than 28-30 minutes, don't focus on it too much, just do whatever to maintain that speed. Don't remove swimming freestyle from your program; just do only about 1000-2000 yds per session. The meat of your swim should be finning. Do what it takes to get to that 4000 meters $/ 4400$ yards in less than 80 minutes. The only way is to just keep on finning. Break it down into pieces. All my sessions that I did before were based on 11 sets. I would do $11 \times 100$ yds, which would work out to 1100 yds. I would set a goal pace and try to meet that pace at each set. In my estimation, to be able to comfortably swim 4000 meters in 80 minutes, you should find yourself doing at least 6000 meters in a session.

Water confidence should NOT be neglected. Especially if you can't do all the events listed in the week \#8 standards. Don't show up thinking you'll just learn there, because you won't. They will show you quickly the first day, then expect you to be an expert at it the next. Practice everything right!!! Know water entry procedures; practice it every time you enter the water. Get into the habit of putting your mask around your neck, NOT YOUR FOREHEAD. Tread water efficiently (you can get more efficient by holding a dive brick or a gallon of water above your head while treading), you will be doing it a lot, between events, when you come up during mask and snorkel recovery, before, after and during equipment recovery...and DON'T HANG ON TO THE WALL. At Phase II and the OL, it's telling the instructors that you're quitting.

This should end the philosophy, now I will begin with outline of the plan that is based on simplicity and freedom. You can say it's formless because it is designed to fit your own personal progression.
REMEMBER: Your mind is the master of your body, so make sure to remind your mind to ask your body how it's doing from time to time.

| MON | TUE | WED | THU | FRI | SAT |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Cals-Run | Cals-Swim | Cals-Run | Cals-Swim | Cals-Run | Ruck Run/ <br> Heavy Item <br> Cals-Water <br> Con-Swim |
| Opposing <br> Cals-Run- <br> Plyos | Cals-Water <br> Con-Swim <br> * | Opposing <br> Cals-Run- <br> Plyos | Cals-Swim <br> Water Con | *Run Intervals |  |

This is what I am planning to do...but chances are I won't stick to it. What I WILL stick to here are the associations. ALWAYS CALS FIRST!!! Stick right after cals, some endurance event, like running or even cycling. A tough cal session is best stuck next to a water con session. You will learn how to become
more efficient that way, and plus it will challenge you that much more to focus in the water. Notice the running speed sessions on Wed and Sat. They are necessary, but not priorities. Use them if you need to get your times down or if you hit a plateau. Your times should drop anyway as you train for a "marathon."

## THE PROGRAM IN DETAIL

## RUNNING

This is a running program I got off of RunnersWorld.com, it seems to hit all the right points and meshes with the philosophy I wrote above. I rewrote it just a little so it applies more to us, but full credit goes to Benji Durden. I changed the word "week" to "level" because you should stay at a certain level of a program until your body is completely comfortable with it. Meaning, you could stay on level 1 of the plan for a few weeks, then move on. On chart two you should be doing the times for a $10-\mathrm{K}$ of less than 46:00, if you run a $10-\mathrm{K}$ in greater than 46:00, you should seriously consider base building first. My base building plan goes as such:

| (miles/time) | MON | WED | FRI |
| :---: | :---: | :---: | :---: |
| LEVEL 1 | $1 / 7: 00$ | $1 / 7: 00$ | $1 / 7: 00$ |
| LEVEL 2 | $2 / 15: 00$ | $2 / 15: 00$ | $2 / 15: 00$ |
| LEVEL 3 | $3 / 22: 30$ | $3 / 22: 30$ | $3 / 22: 30$ |
| LEVEL 4 | $4 / 30: 00$ | $4 / 30: 00$ | $4 / 30: 00$ |
| LEVEL 5 | $5 / 37: 30$ | $5 / 37: 30$ | $5 / 37: 30$ |
| LEVEL 6 | $6 / 45: 00$ | $6 / 45: 00$ | $6 / 45: 00$ |

Stay at each level until you can do the listed distance in that time on all three days. So to start, go out and run a mile on Monday, if you run the mile in say 6:45 on Monday and Wednesday but run a 7:30 on Friday, stay at that level.

## THE MARATHON PROGRAM

For the program I will detail, l've made a few assumptions. First, this is a 15 -level training plan, so if Phase II or IQT is next month, forget it. This schedule won't work for you. Second, you should be comfortably able to complete a 1 - to 2 -hour run on a weekly to biweekly basis. You also should be able to run 60 minutes or better for a 10-K. While it's possible you could make it through the program without meeting these criteria, wait until you're at least able to complete the long run. Otherwise, the program will be harder than it should be.

Chart 1 (below) gives you the basic training schedule. Each week consists of four parts: a long run, a speed or strength run, a pace or tempo run and four optional easy runs. About every third week, the long run is replaced by a timed run.

## Chart 1: Basic 15-week Marathon Training Program

|  | $\begin{aligned} & \hline \text { Mon } \\ & \text { *Long } \end{aligned}$ | $\begin{aligned} & \frac{\text { Tue }}{\text { Easy }} \end{aligned}$ | $\begin{gathered} \text { Wed } \\ \text { Hills/Track } \end{gathered}$ | $\begin{aligned} & \text { Thu } \\ & \text { Easy } \end{aligned}$ | ${ }_{* *} \stackrel{\text { Fri }}{\text { Tempo }}$ | $\frac{\text { Sat }}{\text { Easy }}$ | $\frac{\text { Sun }}{\text { Easy }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Level 1 | $\begin{gathered} \text { 2:00 plus } \\ \text { adjustment } \end{gathered}$ | 30-40 | 20 wup/wdn; 6 hills | 30-40 | $\begin{gathered} 20 \text { wup/wdn; } \\ 2(8 \mathrm{t} / 2 \mathrm{e}) \end{gathered}$ | 30-40 | 30-40 |
| Level 2 | 2:15 plus adjustment | 30-40 | 20 wup/wdn; 7 hills | 30-40 | 20 wup/wdn; $3(5 t / 1 \mathrm{e})$ | 30-40 | 30-40 |
| Level 3 | 6 mi timed | 30-40 | 20 wup/wdn; 8 hills | 30-40 | $\begin{gathered} 20 \text { wup/wdn; } \\ 2(9 \mathrm{t} / 2 \mathrm{e}) \end{gathered}$ | 30-40 | 30-40 |
| Level 4 | $\begin{gathered} \hline \text { 2:20 plus } \\ \text { adjustment } \end{gathered}$ | 30-40 | $22 \mathrm{wup} / \mathrm{wdn} ;$ 7 hills | 30-40 | $\begin{gathered} 22 \text { wup/wdn; } \\ 3(6 \mathrm{t} / 2 \mathrm{e}) \\ \hline \end{gathered}$ | 30-40 | 30-40 |
| Level 5 | 2:40 plus adjustment | 30-40 | $22 \mathrm{wup} / \mathrm{wdn} ;$ 8 hills | 30-40 | $\begin{gathered} 22 \text { wup/wdn; } \\ 4(5 \mathrm{t} / 1 \mathrm{e}) \end{gathered}$ | 30-40 | 30-40 |
| Level 6 | 10 mi timed | 30-40 | $\begin{aligned} & 22 \text { wup/wdn; } \\ & 9 \text { hills } \end{aligned}$ | 30-40 | $\begin{gathered} 22 \text { wup/wdn; } \\ 2(12 \mathrm{t} / 3 \mathrm{e}) \\ \hline \end{gathered}$ | 30-40 | 30-40 |
| Level 7 | $\begin{gathered} \text { 2:50 plus } \\ \text { adjustment } \end{gathered}$ | 30-40 | $\begin{gathered} 25 \mathrm{wup} / \mathrm{wdn} ; \\ 6 \times 800 \\ \hline \end{gathered}$ | 30-40 | $\begin{gathered} 25 \text { wup/wdn; } \\ 3(8 \mathrm{t} / 2 \mathrm{e}) \\ \hline \end{gathered}$ | 30-40 | 30-40 |
| Level 8 | $\begin{gathered} \text { 3:00 plus } \\ \text { adjustment } \end{gathered}$ | 30-40 | $\begin{gathered} 25 \mathrm{wup} / \mathrm{wdn} ; \\ 7 \times 800 \\ \hline \end{gathered}$ | 30-40 | $\begin{gathered} 25 \text { wup/wdn; } \\ 4(5 \mathrm{t} / 1 \mathrm{e}) \\ \hline \end{gathered}$ | 30-40 | 30-40 |
| Level 9 | 6 mi timed | 30-40 | $\begin{gathered} 25 \mathrm{wup} / \mathrm{wdn} ; \\ 8 \times 800 \\ \hline \end{gathered}$ | 30-40 | $\begin{gathered} 25 \text { wup/wdn; } \\ 3(9 \mathrm{t} / 2 \mathrm{e}) \\ \hline \end{gathered}$ | 30-40 | 30-40 |


| LeVEl 10 | 2:45 plus adjustment | 30-40 | 25 wup/wdn; $7 \times 800$ | 30-40 | 25 wup/wdn; 3(5t/1e) | 30-40 | 30-40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Level 11 | 12 mi timed | 30-40 | 28 wup/wdn; $8 \times 800$ | 30-40 | 28 wup/wdn; $2(15 t / 4 e)$ | 30-40 | 30-40 |
| LeVEL 12 | 3:00 | 30-40 | $\begin{array}{\|c\|} \hline 28 \text { wup/wdn; } 9 \times \\ 800 \end{array}$ | 30-40 | 28 wup/wdn; 4(7t/2e) | 30-40 | 30-40 |
| LeVEL 13 | 2:30 | 30-40 | $\begin{array}{\|c\|} \hline 28 \text { wup/wdn; } 8 x \\ 800 \\ \hline \end{array}$ | 30-40 | 28 wup/wdn; 3(9t/2e) | 30-40 | 30-40 |
| LeVEL 14 | 2:00 | 30-40 | 45 easy | 30-40 | 1:30 easy | 30-40 | 30-40 |
| LeVEL 15 | Phase II or IQT |  |  |  |  |  |  |

Note: All workouts are given in hours and minutes.
*If you want to increase the length of your long runs, see Chart 3.
**See text for a complete explanation of tempo-run workouts.
Rest, or easy days, are the most overlooked part of many programs. Typically, runners are reluctant to rest enough between hard workouts because they worry about losing ground. I was a perfect example of this during the early days of my career. I knew about former University of Oregon coach Bill Bowerman's hard day/easy day philosophy, but I thought "easy" meant not doing speedwork. To me, "easy" was still doing two 6 -mile runs a day.

Notice on Chart 1 that easy days are 30 - to 40 -minute runs. Limiting easy days to just that length is vital to allow adaptation to the hard work that you'll be doing the other three days of the week. Resist the temptation to go longer or faster on these days.

Chart 2: Workout Paces Based On A Recent 10-K

| 10-K Time | Easy Run | Long Run | Tempo Run | 800 Repeats |
| :---: | :---: | :---: | :---: | :---: |
| 32:00 | 7:13 | 6:42 | 5:20-5:23 | 2:25-2:35 |
| 33:00 | 7:26 | 6:54 | 5:29-5:33 | 2:30-2:40 |
| 34:00 | 7:39 | 7:06 | 5:39-5:43 | 2:34-2:45 |
| 35:00 | 7:52 | 7:22 | 5:48-5:54 | 2:38-2:50 |
| 36:00 | 8:05 | 7:35 | 5:58-6:04 | 2:43-2:55 |
| 37:00 | 8:18 | 7:48 | 6:07-6:14 | 2:47-3:00 |
| 38:00 | 8:30 | 8:01 | 6:17-6:25 | 2:51-3:05 |
| 39:00 | 8:43 | 8:14 | 6:26-6:35 | 2:56-3:10 |
| 40:00 | 8:56 | 8:27 | 6:35-6:45 | 3:00-3:15 |
| 41:00 | 9:09 | 8:40 | 6:45-6:56 | 3:04-3:20 |
| 42:00 | 9:21 | 8:52 | 6:54-7:06 | 3:08-3:24 |
| 43:00 | 9:34 | 9:05 | 7:04-7:16 | 3:13-3:29 |
| 44:00 | 9:47 | 9:18 | 7:13-7:26 | 3:17-3:34 |
| 45:00 | 9:59 | 9:31 | 7:22-7:37 | 3:21-3:39 |
| 46:00 | 10:12 | 9:44 | 7:31-7:47 | 3:25-3:44 |
| 47:00 | 10:24 | 9:56 | 7:41-7:57 | 3:30-3:49 |
| 48:00 | 10:37 | 10:09 | 7:50-8:07 | 3:34-3:54 |
| 49:00 | 10:49 | 10:22 | 7:59-8:17 | 3:38-3:59 |
| 50:00 | 11:02 | 10:35 | 8:08-8:28 | 3:42-4:04 |
| 51:00 | 11:14 | 10:47 | 8:18-8:38 | 3:46-4:09 |
| 52:00 | 11:27 | 11:00 | 8:27-8:48 | 3:51-4:13 |
| 53:00 | 11:39 | 11:12 | 8:36-8:58 | 3:55-4:18 |
| 54:00 | 11:51 | 11:25 | 8:45-9:08 | 3:59-4:23 |
| 55:00 | 12:04 | 11:38 | 8:54-9:18 | 4:03-4:28 |
| 56:00 | 12:16 | 11:50 | 9:03-9:28 | 4:07-4:33 |
| 57:00 | 12:28 | 12:03 | 9:12-9:38 | 4:11-4:37 |
| 58:00 | 12:41 | 12:15 | 9:21-9:48 | 4:15-4:42 |

If you aren't sure how fast you should go on an easy day, check Chart 2. For example, if you have been running around 48 minutes lately for $10-\mathrm{K}$ (don't use your PR unless that is your most recent performance), Chart 2 suggests that your easy pace should range around 10:37 per mile. (Please note that for easy runs, l've given a suggested pace. It's fine if you are within plus or minus 20 to 40 seconds of that pace.) During your easy runs, check occasionally to see that your pace is comfortable and in the right range. If you err, err to the slow side.

Easy days are optional. If you don't want to run because you're too tired or something comes up, don't run. At some point during any lengthy training program, the realities of a busy life are going to require skipping or postponing a hard day. That's fine as long as you resist the trap of trying to catch up by dropping the easy days to get in the hard ones. Just because the easy days are optional run days does not mean the rest/recovery can be skipped. If you miss a hard session, keep on schedule. You will still improve your fitness. But if you skip the easy/off days, you'll be more prone to injury.

RUN LONG
In most marathon programs, the long runs are considered the key hard runs. These runs are essential because they allow your body to adapt to the stresses of running the marathon distance. Covering the distance isn't the problem--most runners who can cover 10-K in under an hour should be able to walk or run 26.2 miles--but it's a question of how much stress your body can take--and for how long.

By starting with a long run that is only moderately challenging and gradually increasing the length, your body will adapt to running for longer and longer periods while still being able to recover sufficiently for the next hard workout.

While most marathon programs, and runners in general, measure long runs in distance covered (miles or kilometers), I prefer to specify the amount of time spent running. The body doesn't know how far it's running, but it understands effort for a given time. The reason I don't like running a known distance is because it encourages you to race a workout, either against your own standard or someone else. Nothing is more destructive than racing a long run.

Looking at Chart 1, it may seem that the progression is difficult, but if you keep your pace close to that suggested in Chart 2, which is 10:09 per mile (plus or minus 5 to 15 seconds) for our 48-minute 10-K runner, you should be able to manage the long run.

You also may think that the suggested time range for the long run is too slow. Similar to the easy run pace, resist the temptation to go faster. The main value of the long run in the marathon training program is to train your body to be more efficient at burning fat and sparing glycogen stores. If you can teach your body to burn fat, rather than depleting glycogen to produce energy, you're less likely to run out of fuel and hit the wall come marathon day. But the faster you go on your long runs, the less likely it is that your body will learn how to burn fat efficiently and the more likely it is that you will hit the wall in the marathon.

While it seems logical that the faster you are able to go on your long runs translates to a faster marathon, it's not true. Trust me on this. The important factor isn't the absolute speed of the run but the relative effort. The effort required to run 6:40 pace for a 32-minute 10-K runner should be similar to the effort required to run 10 -minute pace for a 48 -minute $10-\mathrm{K}$ runner. The effort is fast enough to be challenging, but it's not too tough. Finally, by staying within the suggested pace for your long run, it will allow adequate recovery for the strength and speed sessions on Tuesdays.

## Chart 3: Long-Run Adjustments

| 10-K time | Adjustment |
| ---: | :--- |
| $<40: 00$ | none |
| $40: 00$ | $5: 00$ |
| $41: 00$ | $10: 00$ |
| $42: 00$ | $15: 00$ |
| $43: 00$ | $20: 00$ |
| $44: 00$ | $25: 00$ |
| $>44: 00$ | $30: 00$ |

Also notice that for most of the runs, I've included a time adjustment that can be found on Chart 3. Our 48minute runner, for example, can add 30 minutes to the time of the long run on the chart, which in Week 2 would yield a 2:45 long run. (After Week 10, you should not adjust the long runs, as you will be beginning a long taper into the marathon.)

You may wonder why 10-K runners with times faster than 40 minutes have a zero adjust factor, and those
slower than 44 have a 30-minute adjust factor to their long run. The adjustment is based on what I believe the maximum long run should be. Faster runners, likely to run a sub-3-hour marathon, should not run any longer than 3 hours. Slower runners need to train to be on their feet longer, up to 3 hours, but no longer, to avoid injury.

One other important consideration is to make sure water is available at least every 15 to 30 minutes. Plan your long run carefully so it passes water fountains. Or carry a water bottle with you. If you don't want to lug a bottle, stash some water along your loop the day before the long run so you can keep hydrated. Even if it's cool, drink as frequently as possible. You'll need to drink at every aid station in your marathon to maximize your performance, so practice this in training.

## TIMED RUNS

The timed runs that are scheduled for every third week of the program are almost as important as the long runs. It's been my experience that if I didn't time myself often enough before a marathon, I wouldn't feel "race fit" when I needed to. I was fit enough, but the shock of timed running left me with dead legs way too early in the marathon. I knew this could be a problem going into the ' 80 Olympic Trials, so as part of my preparation I timed myself every week for 18 weeks.

Even though I had a timed run scheduled for the weekend, I still did my long runs every Thursday. Some of my runs were good, but others reflected that I was still tired just a couple of days after a 2 -hour run. But my goal was the race at the end of the plan--the Olympic Trials--not these "training" races. It must have worked because at the Marathon Trials, I ran a PR by 3 minutes to finish second and make the Olympic team.

That's why I believe that if you have to choose only two workouts to do other than easy runs, do a weekly long run and a timed run often. Try not to become too concerned about your times, because you'll be fatigued from the hard training. The schedule is flexible. It doesn't have to be exactly a three-week cycle; you can swap a weekend timed run with a long run and be fine. But don't drop the long runs entirely in favor of timed runs because they're more important in the overall plan. If you have time during the week to do your long run, consider swapping Thursdays' workouts with Sundays' to get in a long run even when you have a timed run planned.

## TEMPO RUNS

Friday runs are tempo runs sandwiched between a warmup and warmdown. Look at the workout for Friday in Level 1. The 20 wup/wdn; 2 ( $8 \mathrm{t} / 2 \mathrm{e}$ ) looks like a complicated algebraic formula, but it's simple. First, warm up at an easy pace for 20 minutes ( 20 wup ). Then, run for 8 minutes at a fast pace ( 8 t )--the actual tempo run. The speed should be approximately the pace you could maintain for an hour. (Chart 2 puts this range as $7: 50$ to $8: 07$ for our $48-$ minute $10-\mathrm{K}$ runner.) This should be a fast effort but not exhausting. If it's too fast, back off. Follow the 8 minutes of fast running with 2 minutes at an easy pace, and then do another 8 minutes of tempo running. Finish the workout with a 20 -minute warmdown (20 wdn).

If this is still unclear, look at the next week. For our 48-minute runner, the $20 \mathrm{wup} / \mathrm{wdn} ; 3(5 \mathrm{t} / 1 \mathrm{e})$ means:

- warm up for 20 minutes at 10:02 to 11:11 pace per mile
- run 5 minutes at 7:50 to 8:07 pace per mile
- run 1 minute at 10:02 to 11:11 pace per mile
- run 5 minutes at 7:50 to 8:07 pace per mile
- run 1 minute at 10:02 to 11:11 pace per mile
- run 5 minutes at 7:50 to 8:07 pace per mile
- warm down 20 minutes at 10:02 to 11:11 pace per mile

Some runners like to run the tempo workouts continuously; a single 15-minute run, rather than three separate 5-minute runs. Do whatever feels comfortable. If you feel any inclination to do this workout on the track in the form of mile repeats, forget it. Mile repeats are often done too hard on the track to be useful for marathon training. By doing timed runs of 5 to 15 minutes on the road, you train on the surface on
which you'll be racing and avoid the constant feedback you get on the track that might entice you to run too fast. The purpose of tempo work is to improve running efficiency for the marathon, not set a mile PR.

## HILL WORK

The schedule on Wednesdays calls for hill workouts, which are designed to build muscular and cardiovascular strength in preparation for the faster training you'll do later on the track. This phase of hill runs lasts for six weeks. Ideally, the hill you choose for this workout should have about a 4 to 6 percent grade and take about 90 seconds to run. It's a good idea to find a hill that takes a bit longer than 90 seconds to run at first, since you'll get faster as you gain fitness.

For the first workout, warm up 20 minutes ( $20 \mathrm{wup} / \mathrm{wdn}$ ) and then run uphill for 90 seconds at about the same effort as your tempo run pace. You should be breathless by the time you hit 90 seconds. When you've run for 90 seconds, notice where you are and jog back to where you started. Turn around and repeat the uphill run five times. If you started out at a reasonable effort, you should be able to get to the same spot or farther in 90 seconds on all six uphill runs. If you can't, start slower the next time you run hills. Follow the hill runs with a 20 -minute warmdown ( $20 \mathrm{wup} / \mathrm{wdn}$ ). Later in the schedule, the warm-up and warm-down times increase slightly.

If you live in a flat area of the country, don't despair. Improvise by running up a bridge, up a ramp to a multistory parking lot or on sand--any surface that takes extra effort and leaves you a little breathless after about 90 seconds. You can also run on a treadmill that has an adjustable incline feature. Kim Jones does nearly all of her hill workouts on her treadmill to eliminate the stress of running downhills.

## TRACK WORK OR REPEATS

After six weeks of hill work, you're ready to move to the track. The workouts are all 800-meter runs (two laps around a track) with 400-meter recovery jogs (one lap around a track). Check Chart 2 for the times to shoot for. Our 48-minute runner should aim for 3:34 to $3: 54$ for the 800 s. The 400 recovery jogs should be run at, or slower than, the easy run pace. The warm-up and warm-down times are 25 minutes at first, increasing to 28 minutes by the end of the program.

Consistent times are what to shoot for, rather than starting hard and finishing slow. If you can run all of your 800s within 5 seconds of each other, it's a much better workout than if you ran two 800s fast, but then have to slow down for the final ones.

If you don't have access to a track or if you simply prefer the roads, run for 3 minutes on the road at the 800 -meter pace followed by a 2-minute recovery. Do the same number of 3-minute runs as the schedule calls for in 800 -meter runs. For example, Week 8 calls for seven 800 -meter runs, so instead do seven 3minute runs.

If your training is going according to plan, you'll be racing faster as you work through the program. If you are a 48-minute $10-\mathrm{K}$ runner and you improve your race times 30 to 40 seconds later in your training schedule, adjust your paces a bit. It takes a little math if you want to be precise in how much to move up in speed since $47: 30$ isn't on Chart 2. But it isn't necessary to be that exact. There is some overlap between the low range of one performance level and the high range of the next. If your training has gone well, your perceived effort for a given pace should become easier. Focus on effort level and move through the range of times for your recent racing efforts.

## PHASE II OR IQT WEEK

Finally, the Phase II or IQT is within sight. It's the last full week of training, and this one is different from all the preceding weeks. Your final serious hard training run should have ended with the tempo run the week before. From this point on, all runs should be done at an easy pace, including Sunday's 2-hour run and Wednesday's 1-hour run.

I know what you're thinking: Do a 1-hour run just a few days before the Phase II or IQT? Exactly. But remember--this run is supposed to be extremely easy. It's not a run that has any important training
purpose other than to deplete slightly your glycogen stores--the carbohydrates stored in your muscles that serve as the primary fuel for distance running. This is helpful because if you can deplete your supply of glycogen, you can pack in more energy than normal when you begin loading with carbohydrates immediately after the run. The more energy (in the form of carbohydrates) you can store, the easier it will be to run the marathon. After the 1-hour run, rest as much as you can during the remaining days before the marathon--and have fun. You've earned it.

Drink as much as possible, especially when you start eating a high-carbohydrate diet. For every gram of carbohydrate your body stores, you need 2 grams of water. Expect to feel a little bloated as your body stores these extra carbohydrates and fluids.

During this last week, it will be difficult not to think about Phase II or IQT. But try to get as much sleep as you can. The night before the race you may have trouble sleeping, but you'll be fine if you have slept well the rest of the week.

As you go through the program, remember to enjoy your running. If it seems too much like work, you're probably trying too hard.

## RUCK RUN/MARCH AND HEAVY ITEM CARRY

At Phase II you will do a ruck run, which is the second event which is a GO/NO GO event. Meaning, if you fall behind a 15 mile/minute pace, you will be eliminated. (The first is the PAST) It is done with a 50-lbs. medium ALICE pack with frame. Since the recent move to the OL, it will be done with a large ALICE pack with frame. When you train for this, only do it once a week, maybe even less frequently. Your knees take a ton of abuse (but this never stopped me). When I would run to the track, I would run with my ruck on. When I run to the pool I have it full of all the swim gear (about 45 lbs . including water and Gatorade). My heavy ruck weighs 60 lbs . It is loaded with sand in the worst possible configuration. I did not use the radio pouch because that would make life much easier. So the bottom of my ruck bulges, and all the weight is placed on my shoulders. When you practice the ruck run/march, you should do it in your field BDUs. (Last year my cadets found me running the 3 miles to the detachment with my ruck and in full BDUs) Like everything else I write here, do it in slow progression. Start off with a mile at 15 min. Then move up the distance and pace as you move on.

The Heavy Item Carry refers to the Jerry Can Lug. For about a $1 / 2$ mile, you will carry two 50 -lbs. jerry cans full of water up a long steep hill. They did this at the last $1 / 2$ mile back on course back to the CCS at Pope. I know exactly where there going to do this at Lackland. There's a big long hill just past the CATM range on Medina that would be perfect for it. If not there, then the road near where they stored all the nukes. Do this once a week with an item of comparable nature, or walk to the grocery store, do your shopping and walk back as fast as you can with all your groceries.

## CALISTHENICS

Always start with warm up exercises:

| Neck Rotations | Start standing, feet shoulder width apart, with your hands on your hips. <br> Count 1 - Tilt head to the left <br> Count 2 - Tilt head back <br> Count 3 - Tilt head to the right <br> Count 4 - Tilt head forward <br> and reverse... |
| :--- | :--- |
| Turn and Bounce | Start standing, feet shoulder width apart, with your arms extended out to your <br> sides parallel to the ground. <br> Count 1 - Twist your body as far as you can to the left <br> Count 2 - Ready position <br> Count 3 - Twist your body as far as you can to right <br> Count 4 - Ready position |
| Fore and Afts | Start standing, feet shoulder width apart, with your hands on your hips. <br> Count 1 - Bend at your hips until your body is level to the ground |


|  | Count 2 - Ready position <br> Count 3 - Lean back as far as you can (feel the stretch in your abs) <br> Count 4 - Ready position |
| :--- | :--- |
| Toe Touchers | Start standing, feet shoulder width apart, with your arms extended out to your <br> sides parallel to the ground. <br> Count 1 - Bend at your hips, twist your body and touch your left foot with your <br> right hand <br> Count 2 - Hold at Count 1 <br> Count 3 - Hold at Count 1 <br> Count 4 - Ready position |
| Trunk Twisters | Start standing, feet shoulder width apart, with your hands on your hips. <br> Count 1 - Push your hips to the left <br> Count 2 - Push your hips to the front <br> Count 3 - Push your hips to the right <br> Count 4 - Push your hips to the rear <br> and reverse... |
| Steam Engines | Start standing, feet together, with your arms extended in front of you. <br> Count 1 - Lift your left knee as high as it can go <br> Count 2 - Ready position <br> Count 3 - Lift your right knee as high as it can go <br> Count 4 - Ready position |
| Arm Circles | Start standing, feet shoulder width apart, with your arms extended out to your <br> sides parallel to the ground. <br> Count 1 - Move your arms in a circle to the front <br> Count 2 - Same as count 1 <br> Count 3 - Same as count 1 <br> Count 4 - Same as count 1 |
| Arm Stretch | Start standing, feet shoulder width apart with your left arm across your body. <br> Count 1 - Hold stretch <br> Count 2 - Hold stretch <br> Count 3 - Hold stretch <br> Count 4 - Hold stretch <br> and reverse.... |
| Side Stretch | Start standing, feet shoulder width apart, with your hands together above your <br> head. <br> Count 1 - Lean as far as possible to the left <br> Count 2 - Ready position <br> Count 3 - Lean as far as possible to the right <br> Count 4 - Ready position |

These are the warm up exercises I can vividly remember, I think there were more, but they seem to have fallen out of my head.

Now for the good stuff...

| Pushup | Start in the front leaning rest, feet no more than 12 inches apart, with your <br> hands below to just outside your shoulders on the ground. <br> Count 1 - Down <br> Count 2 - Up <br> Count 3 - Down <br> Count 4 - Up |
| :--- | :--- |
| Tricep Pushup <br> (not to be confused with <br> the diamond pushup) | Start in the front leaning rest, feet no more than 12 inches apart, elbows near <br> your sides with your hands pointed away from your body at 903. <br> Count 1 - Down <br> Count 2 - Up <br> Count 3 - Down <br> Count 4 - Up |


| Diamond Pushup | Start in the front leaning rest, feet spread shoulder width apart, index and <br> thumb fingers touching below your chest forming a diamond. <br> Count 1 - Down <br> Count 2 - Up <br> Count 3 - Down <br> Count 4 - Up |
| :--- | :--- |
| Wide Grip Pushup | Start in the front leaning rest, feet no more than 12 inches apart, hands placed <br> much wider than shoulder width apart on the ground. <br> Count 1 - Down <br> Count 2 - Up <br> Count 3 - Down <br> Count 4 - Up |
| 8-Count Pushup | Start at the position of ATTENTION. <br> Count 1 - Squat down with your hands touching the ground next to your feet <br> Count 2 - Thrust out your feet from under you into the pushup position <br> Count 3 - Down <br> Count 4 - Up |
| Count 5 - Down |  |
| Count 6 - Up |  |
| Count 7 - Bring your feet up under your body as you are in count 1 |  |
| Count 8 - Ready position |  |\(\left|\begin{array}{ll}This exercise is done on a pyramid count <br>

Start on your knees. <br>
Do one pushup, get on your knees, and push up into the air like a military press <br>
for one repetition... <br>
Do two pushups, get on your knees, and push up into the air like a military <br>

press for two repetitions...so on and so forth....\end{array}\right|\)| Start on your back, hands under your hips, feet 6 inches off the ground, chin in |
| :--- | :--- |
| your chest. |
| Count 1 - Bring your left leg up, with no bend in the knee, toes pointed away |
| from your body, until your foot is about 36 inches off the ground |
| Count 2 - Bring your left leg down to 6 inches off the ground, and right leg up in |
| the same manner as count 1 |
| Count 3 - Same as count 1 |
| Count 4 - Same as count 2 |


|  | ground, left foot over the right knee <br> Count 1 - Crunch up until the right elbow touches the left knee <br> Count 2 - Ready position <br> Count 3 - Same as count 1 <br> Count 4 - Ready position <br> and switch... |
| :---: | :---: |
| Alternating Crunches | Start on your back, hand interlocked behind your head, feet on the ground, arms extended down your sides <br> Count 1 - Crunch up until your shoulder blades are off the ground <br> Count 2 - Ready position <br> Count 3 - Same as count 1 <br> Count 4 - Ready position <br> and switch...place your hands folded on your chest... <br> Count 1 - Crunch up until your shoulder blades are off the ground <br> Count 2 - Ready position <br> Count 3 - Same as count 1 <br> Count 4 - Ready position <br> and switch...place your hands interlocked behind your head <br> Count 1 - Crunch up until your shoulder blades are off the ground <br> Count 2 - Ready position <br> Count 3 - Same as count 1 <br> Count 4 - Ready position <br> and switch...place your hands folded on your chest... <br> Count 1 - Crunch up until your shoulder blades are off the ground <br> Count 2 - Ready position <br> Count 3 - Same as count 1 <br> Count 4 - Ready position <br> and switch...put your arms extended down to your sides |
| Neck Rotations | Start on your back, hands folded on your chest, feet on the ground, head off the ground. <br> Count 1 - Place your chin in your chest <br> Count 2 - Tilt your head back <br> Count 3 - Same as count 1 <br> Count 4 - Same as count 2 <br> and switch.... <br> Count 1 - Tilt your head to the left <br> Count 2 - Tilt your head to the right <br> Count 3 - Same as count 1 <br> Count 4 - Same as count 2 |
| Bicycles | Start on your back, hands interlocked behind your head, feet 6 inches off the ground. <br> Count 1 - Bring your left knee and your right elbow together <br> Count 2 - Bring your right knee and your left elbow together <br> Count 3 - Same as count 1 <br> Count 4 - Same as count 2 |
| Lunges | Start standing, feet together, with your hands on your hips. <br> Count 1 - Step forward with your left foot <br> Count 2 - Lower your right knee to the ground while keeping your back straight <br> Count 3 - Begin movement to ready position <br> Count 4 - Ready position <br> and switch... |
| Jumping Jacks | Start at the position of attention <br> Count 1 - Move feet more than shoulder width apart, swing arms above your head <br> Count 2 - Ready position, do not slap your sides <br> Count 3 - Same as count 1 |

## Count 4 - Ready position

This exhausts my memory of the calisthenics that we did, with the exception of pull-ups, dips, and chinups. You can supplement these exercises this with the exercises in the AF Elite Workout book or one of the Navy SEALs prep books. Using the principles stated in the beginning, develop a workout plan which will encompass all of the above within the shortest period of time. If you have a weakness, take time outside of your "actual" calisthenics session to work on it. These exercises should be done before every run or swim with minimum or, ideally, no rest between events. NOTE: Whenever you see "and switch" or "and reverse" that means you do whatever number of reps of that side or position, then you switch.

When you devise your calisthenics plan, add in between some exercises as "rest" some isometrics. Wall sits, staying in the front leaning rest, hand stands, etc. Do these if you need to take an "easy" day.

As you notice there aren't any descriptions of weight related exercises. The only weights you should do are exercises that you cannot accomplish with your own body weight, or to add to the difficulty of an exercise. Like using ankle weights for flutter kicks, putting a 45 on your back while doing pushups, or doing the seated row to work the muscles opposing pushups. The only place where I could see weights come into play are extremely high rep exercises where you could use some additional resistance, like squats. You should chose a weight where you can do 30 to 40 reps. But this is all supplemental to keep your mind and body refreshed by "changing" the scenery every now and again. Your core should be the cals listed.

The ins and outs listed in the IQT handbook should still be done to supplement your calisthenics program. Ins and outs can be modified to help develop your weaknesses. Before I went to Phase II, my weakness was sit-ups, so as you saw, I added sit-ups to the ins and outs, and I was able to surpass my old scores.

This should go without saying but KNOW THE PROPER TECHNIQUE AND PRACTICE IT!!! With pullups and chin-ups you can pull all the way up to your chest rather than just have your adam's apple clear, just to add to the difficulty of your preparation. With pushups, touch your chest to the ground, with sit-ups, find an incline bench, or if you're a stud, get some gravity boots and do 'em upside down.

Just to help develop your own calisthenics plan, listed below is a ballpark distribution of what we did at Phase II.

|  |  |
| :--- | :--- |
| Neccent Rotations | $2.3 \%$ |
| Turn and Bounce | $2.3 \%$ |
| Fore and Afts | $1.1 \%$ |
| Toe Touchers | $1.1 \%$ |
| Trunk Twisters | $1.1 \%$ |
| Steam Engines | $2.8 \%$ |
| Arm Circles | $14.2 \%$ |
| Arm Stretch | $0.6 \%$ |
| Side Stretch | $0.6 \%$ |
| Pushup | $17 \%$ |
| Tricep Pushup | $1.7 \%$ |
| Diamond Pushup | $1.7 \%$ |
| Wide Grip Pushup | $1.1 \%$ |
| 8-Count Pushup | $1.7 \%$ |
| Military Press Ups | $1.4 \%$ |
| Flutter Kicks | $17 \%$ |
| Flutter Crunchies | $1.1 \%$ |
| Sit-up | $2.8 \%$ |
| Crunches | $2.8 \%$ |
| Side Crunches | $2.8 \%$ |
| Alternating Crunches | $3.4 \%$ |
| Neck Rotations | $5.7 \%$ |
| Bicycles | $2.3 \%$ |
| Lunges | $5.7 \%$ |
| Jumping Jacks | $5.7 \%$ |
| Pull-ups | $0.8 \%$ |
| Chin-ups | $0.8 \%$ |
| Dips | $0.8 \%$ |

Work on dips, pull-ups and chin-ups, by using the 16 -lbs. weight belt. It does a world of difference compared to just using your body weight. In terms of training for the PAST, your workout should look something like this:

|  | Percent | Round Robin <br> Reps |
| :--- | :--- | :--- |
| Chin-ups | $6.25 \%$ | 5 |
| Sit-ups | $31.25 \%$ | 25 |
| Pushups | $31.25 \%$ | 25 |
| Flutter Kicks | $31.25 \%$ | 25 |

What I mean by "Round Robin" is to do, 5 chin-ups, then immediately do 25 sit-ups, 25 pushups, 25 flutter kicks with no rest in between. Smaller numbers would be better to start with, but do this continually for as many rounds as it takes until muscle failure.

THE POOL

## SWIMMING

I plan to stick with my " 11 " rule, starting off with $11 \times 100$, until I get comfortable with that distance and keep it moving up until I reach $11 \times 600$ or greater. The progression should look something like this:

| LEVEL 1 | $11 \times 100$ |
| ---: | ---: |
| LEVEL 2 | $11 \times 150$ |
| LEVEL 3 | $11 \times 200$ |
| LEVEL 4 | $11 \times 250$ |
| LEVEL 5 | $11 \times 300$ |
| LEVEL 6 | $11 \times 350$ |
| LEVEL 7 | $11 \times 400$ |
| LEVEL 8 | $11 \times 450$ |
| LEVEL 9 | $11 \times 500$ |
| LEVEL 10 | $11 \times 550$ |
| LEVEL 11 | $11 \times 600$ |

Start off with 4 underwaters on a 2 minutes interval. If just the $25 \mathrm{yd} /$ meter underwater is too easy, keep yourself underwater longer after you push off from the bottom corner of the pool. During the swim, vary the intensity of each repetition. For instance: Level 1, swim maybe the first two 100 meters at $60 \%$ then the next three at $100 \%$ then the next two at $80 \%$ so on....

Once you can get yourself swimming a mile in less than 30 minutes, start sessions with the 4 underwaters, then $4 \times 500 \mathrm{yd} /$ meters freestyle warm-up, then go into the " 11 " workout with fins.

With Finning, start off with short easy distances, 25 's and 50's. Get your feet and ankles used to the stress. Another question that comes up a lot is how to breathe. Before that you should be comfortable with being on your side. Start training with your arms at your sides and your body on it's side, and swim up and down the pool at a slow pace. Look straight down at the bottom of the pool, your chin should touch your shoulder. When you need to breathe, turn your head to the other shoulder and take a breath. As you swim down the lane, exhale through your mouth right after you take the breath. Once you get used to this, extend your bottom arm straight above your head, like you're asking a question in school. Keep your palm flat and streamlined, maintain the rhythm of your breathing. As you get more and more comfortable with this, speed it up. If you feel like you're not getting enough air, bring that lead arm back down to your side, slow down, and do to breathing drill that you did before. While you swim, it's important to keep your body in line. You're not used to being on your side like this. Make sure you kinda lean into the shoulder that is down until you can feel your top arm break the surface.

At the OL, you are allowed two dolphin kicks and 1 arm pull when you fin. OPEN TURNS ARE THE ONLY AUTHORIZED TURN THROUGHOUT THE COURSE.

## WATER CONFIDENCE

Before I cover water con, you need to know how to enter the water. This is learned best by seeing it done, I think the tape that the recruiter has about PJ/CCT shows some students going through the whole procedure, but I will attempt to describe it here.

## PREPARE TO ENTER THE WATER

From sitting at attention on the pool's edge with your feet on the gunnel, turn and reach for your mask, put it on your face, with the palms of both your hands, check the straps to make sure there are no twists. Then trace a line down with your left hand, from the top of your left deltoid to your speedos. (To better understand this, put a backpack or a camelback on, stick your left thumb under the left strap, with your palm facing away from your body, follow the strap all the way down to the bottom and hold, this is what you are really doing without actually doing it. The point of it is to check the strap of your SCUBA tanks and to hold them down so they don't hit you in the head and knock you out when you enter the water.) Your right hand during this is off floating doing nothing while you look down into the water, to the left, to the
right, and in front of you. Then your right hand with go in front of your mask, holding the bottom of the mask, and as if you were holding a regulator to your mouth. Then sit in this position until the next command.

## ENTER THE WATER

When this command is given, lift your rear from the deck of the pool, with your feet still on the gunnel. Turn your whole body to the left, and flop into the pool on your butt or back. The reason you do this is to prevent the tanks from hitting the side of the pool and damaging it. Once you are underwater, stick your left arm straight up with your hand in a fist and look straight up along your arm. (You always look towards where you want to go...makes sense, huh?) At the same time bring your right hand in a fist to your side, just below your right pec. (You are holding the imaginary release valve on the BC.) Stand up (if you're in the deep end, you would tread up) to surface and give the OK signal with your LEFT hand to the deck instructor. The OK signal is given by making your left hand in the shape of an "OK," bringing it to your sternum and pushing it away from your body in one motion toward the instructor. You will do this OK signal every time you surface from being underwater with the exception of underwaters and drownproofing.

Unless you come from a long line of fish, you probably won't be able to do the Week \#8 standards right off the bat. Below are some tips to train for each of the events required:

## Underwaters, 6 each w/2:00 interval, 25 meters

Push off the wall at the shallow end, swim underwater to the other side, staying close to the bottom, touch the bottom corner of the pool, turn around push off and up at a 45 degree angle, freestyle sprint back to the start. As you wait for the next underwater, keep as much of your body above the water line as possible to maximize lung capacity and circulation. Also another tip for when you push off..."jump up" to get as much of your body out of the water before you push off and take as deep of breath as you can take.

The instructors will have you count off by twos, threes, or fours. Don't be a bonehead and mess this up. He will then say, "ONES, READY" the ones will say "ONE, SERGEANT" he will say "READY GO!" at the next rep, he will say "ONES, READY" the ones will say "TWO, SERGEANT" so on and so forth...

When you're at work or in class, hold your breath as long as possible, concentrating on relaxing your diaphragm. Upper body strength is very important here as well. Doing pull-ups will definitely help doing underwaters. Learn the right technique! The keyhole stroke is all there is to it, and taking as few strokes as possible. Try wearing a T-shirt to add some more challenge to it.

## Mask and Snorkel, 25 meters, front

Notice the "front" to make this suck more, try "back." Meaning start facing away from the deep end of the pool, about 5-10 meters away from the wall. Swim underwater to the wall, do not push off or touch the wall, then continue the swim to your mask and snorkel. Put the snorkel between your legs, clear the mask, put the snorkel in your mouth, and without pushing off the bottom, using eggbeater, scissors or whatever kick and your left hand fist extended above your head, right hand holding the snorkel, surface, clear the snorkel, give the OK signal. Remember, this will be done with a T-shirt on.

## Buddy Breathing, 2:00, 2 way, w/full harassment

Practicing on your own with help you get comfortable with the idea of breathing through a tube. Pass it to your imaginary buddy if you are alone (if you have a buddy, even better!) making sure when you pass it, you keep the top of the snorkel above the water. Take your mask off after the first few times you try it out. The instructors will always break the seal of your mask first before anything. Focus on staying calm. If you have a buddy, have them thrash you around, splashing you, grabbing and tugging at the snorkel, your arms, dunk you, plug the snorkel, kick you in the nuts, etc. It's a lot more violent than it looks.

Treading Water, 2:30
You will do this right after Buddy Breathing so you will have to put the snorkel in your speedos and the mask around your neck with the glass behind your head. Practice like this all the time. Remember, you're still wearing that shirt you put on before Mask and Snorkel. To help develop treading water, use a diving brick (a 10 lb . rubber brick) or fill up a gallon jug of water and hold it above your head for your goal time. Holding it straight up above your head will add to the fun and excitement of learning how to tread water. The eggbeater is a must to learn in this situation, you will get the most thrust for the least amount of energy. Focus on being relaxed and slow strong motions with your legs and hips.

## Underwater Knots, 3 knots per dive

Right after Treading Water the instructors will tell you to ground your Mask and Snorkel with your gear, and you will retrieve your ropes and put on your booties and BC. You will tread over the rope with one rope in your hand and another in your speedo, until they tell you to do a "clear water surface dive." Dive down, tie your knots, bowline, square, and girth hitch with extra turn. DO NOT PUSH OFF THE BOTTOM!!! Surface, left-hand fist extended above your head, right hand on release valve of BC, with an eggbeater kick, give the OK signal.

## Equipment Recovery, 1:00 treading before ditch

You will start just at the edge of the deep end with all your stuff on, BC, weight belt, T-shirt, booties, mask, and fins. The instructors say: "Move into the deep end." At that point, move to the deep end, and do your best to tread water with all that crap on. Stay calm, and take deep refreshing breaths. They won't start time until you are over the deep end. Tread water by using long, wide scissors kicks. They will then say, "prepare for a clear water surface dive" then they will tell you to go. You will dive head first until you reach the bottom, sit down, take off your fins, put them together like you would a pair of shoes under your butt, remove your weight belt so that it falls on the "foot" part of the fins, roll over gently, take your mask off, slip it under your weight belt, then surface without pushing off the bottom using an eggbeater kick, give the OK signal. Take time to catch your breath as the instructor checks the equipment. Prepare for a clear water surface dive, dive down to your gear head first, grab your mask, put it between your teeth, stand on the straps of your fins, put the weight belt on, put your fins on, put your mask on and clear it. Surface without pushing off the bottom, left hand fist extended straight above your head, right hand on release valve of $B C$, give the OK signal, do not touch your gear. Exit the water, put your hands interlocked on your head and wait for the instructor to check the configuration of your gear.

This should be practiced piece by piece and repetitively and sequentially. First practice treading with the equipment on. Get comfortable with the weight. For a greater challenge, tread with the equipment and a diving brick or a gallon of water. Then after treading, go underwater, take off your fins, surface, put on your fins, and repeat. It's going to suck with that weight belt on, this is probably the only time you should let yourself push off the bottom. Then once comfortable with that, ditch the weight belt on the dive in addition to your fins, repeat. Then finally, ditch the mask as well, and there you have Equipment Recovery.

Weight Belt Swim, 7:00 w/16 lbs.
This is probably the toughest event to practice seeing that most indoor pools have lane lines interfering with your ability to swim in a circle over the deep end of the pool. In order to compensate for this, use the widest lane (usually the ones on the far left or right sides of the pool) over the deep end. Swim in a circle at best, without touching the sides of the pool. Meaning, do not stop and grab the end of the pool and turn around. This is tough to develop, but the best way I found is to do what I said above, but break it down into 30 second chunks...catch your breath...then go again for a total swimming time of 7 minutes. You should have an idea of how long it takes you to go from the middle of the pool to the end of the pool and back with the weight belt on, just take that time, divide it into 7 minutes, then do however many "laps" that will add up to 7 minutes.

The stroke that you're allowed to do is the UDT recovery stroke. The best way to figure this out is to go to the Navy Recruiter's office and ask to watch their SEAL PRT briefing video and watch the tadpoles swim the combat swimmer stroke.

## Equipment Tread, 1:00, tanks, BC, w/16lbs

Can't say much about this, other than that it's going to be the suckiest minute that ever sucked.
Drownproofing: Bobbing 5:00, hands/feet tied, Float 2:00, Travel 100 meters, Front Flip, Back Flip, Mask Recovery
Wearing just speedos, tie up your feet with the ropes that you used for knot tying, leave your hands behind your back (as if you were standing at parade rest). Tell the lifeguard who you are and what you're doing and also to keep an eye out on you. Again, break this down into pieces. If you can't float, work on doing the dead man's float without tying your arms and feet up. Every breath you take at the surface, make sure it is the deepest breath of air you can possibly take. Remember, the travel part is not timed, so you can take as LONG as you want.

Start with bobbing. Jump into the pool, exhale as you reach the bottom, get your feet set, and push off the bottom as hard as you can. The harder you push off the bottom the higher you will get out of the water, and the faster you will get back to the bottom (it's simple physics here). When you reach the surface, take a deep breath, and as you sink, exhale...and repeat. This is pretty easy to get comfortable with, so move on to floating. If you can, practice this on a 12 feet deep pool. The pool at the OL is only 9 feet deep, so the tougher conditions you have when you train the better.

Take a deep breath, bend slightly at your waist, and relax. That's all there is to floating. If you find yourself sinking, dolphin kick ever so slightly to get back to the surface.

Practice traveling first without your feet tied. The forward movement comes from you pushing your head forward. That means you need to make your body like a spring and push forward as such. When you breathe, give a little kick with your legs to get your head above the surface of the water. Keep your head up throughout the travel, it will keep your legs and body under the water at the optimal angle to give you forward propulsion.

Front flip is done after the travel. Within five bobs, you will complete one forward flip. This is accomplished by squatting down as low as possible, leaning forward until you feel like your going to fall forward, and pushing down with your feet, as soon as you feel your feel leaving the bottom of the pool, give one or two kicks forward with your feet. That should give you enough speed to flip over. The key is to wait for your body to complete the somersault. You DO NOT surface during the flip.

The back flip is also done within five bobs after the front flip. When your feet touch the ground, lean back as far as you can, push off (do not squat deeply) the bottom, immediately, tuck your knees into your chest, and kick backward from your knees with your legs. You should only have to kick once, but kick twice if you weren't able to get enough speed to come around. Then wait for your body to come around (this is the hardest part, the waiting), extend your legs again to touch the bottom, and push off. Again, DO NOT surface during the flip.

With mask recovery, you need to make sure certain measures are taken before you get to the pool. What I mean by this is taping your gear the right way. When you adjust the strap on your mask, there is a little tab that sticks out (the excess from the head strap). Leave it out, and tape only about a $1 / 2$ inch next to the metal part to keep it fixed. That should leave about 2 inches of strap that you can grab with your teeth. After you complete the back flip, the mask will be dropped into the pool. Wait for it to touch the bottom, then swim down to grab it with your teeth. What I found is most efficient to do is after to take a breath, go down head first toward your mask, grab that part of the strap you had sticking out with your teeth, if you miss that, just go for the seal of the mask. Then put your feet down and push off. Do five bobs in a row with it in your teeth, then you will be done with drownproofing.

The next few events are things that they do to you there to make you even more comfortable in the water:

## Ten-ups

Invented by SSgt Blake George. The team is split up in half, and lined up in the front leaning rest on both sides of the pool over the deep end. Do one pushup, flop into the water, one side swims high underwater to the other side and the other side swims low, get out of the water, get into the front leaning rest. Do two pushups, flop into the water...so on and so forth. The reps are done in a pyramid.

## Crossovers

I don't think that they called this anymore, but same as the above, minus the pushups, but you go from one side of the pool, underwater, to the other, getting harassed by the instructors.

## Underwater Hockey

I never played this, but I'm sure it is just as it sounds.

## CONCLUSION

Make sure you arrive there prepared, over-prepared would be better; knowing that you can complete all of the week 8 standards would be the best. Teamwork is so essential, get there and forget about yourself, there is no "I" anymore it will just become a "we" or "team." Help your teammates out; don't be afraid to sacrifice what you once knew as yourself. For the officers, work together to lead the team. At Phase II be the team, don't worry about being evaluated; focus on the task at hand. Be mature and care for the members of your team. Look out for one another. If you're the team leader, be especially caring for the condition of the men on your team. Are they hydrated? Do they need some food? Are they cramping? Do they need to take a piss? Are they out of water? Do we need to stretch? Take some heat for the team so that they can get a break. If you're a team member, keep your team leader informed on the condition of his men. Support the other members of your team, just by giving them a "Hoo-yah!!!" or some words to fire them up. There are times that it's going to really suck, and the thought of quitting will cross into your head. NEVER QUIT. Remember that you are there because you WANT to be there, don't lose focus of your goal, just look at the instructors and remember that you want to be like them. Don't compare yourself to other people on the team. People are genetically different, some are more predisposed to be freaks of nature that can run sub-5 miles all day long, yet aren't able to breathe underwater. Think about what you are representing there. You will be leading the top $0.1 \%$ of the Air Force, and you want to act as such. There is a great legacy that precedes us all, we want to make sure that legacy carries on and become stronger as time goes on.

This program should help those who are just beginning to train to become leaders of the greatest warriors on earth or for those aspiring warriors. If you have been training and may need some additional ideas or pointers, this could help you. Remember; TRAIN HARDER THAN WE PLAN TO FIGHT and progress as your body will allow you to progress, be smart and in tune with your body. Get yourself to one level, stay there until you're comfortable, then move up to the next one. Training for something like this does not come in a few weeks. If you train more solidly, the more solid you will become when the time comes to perform. Good luck to all the cone-gonnabes, soon we shall all be wearing the berets of maroon or red!

## FIRST THERE...THAT OTHERS MAY LIVE!!!

HOO-YAH!!!
2d Lt Stephan J Joo

