# FINDING THE BEST FITINCREASING VOLUME AND INTENSITY

# Southern Utah University



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# MY INFLUENCES

#### Clyde Hart

Design a training program to develop strength and endurance in Sprinters. I apply some of this training to Distance athletes.

### Joe Vigil

His use of percentage runs. Making every step count.

"The body will adapt to gradual and progressive loads"

### Emil Zatopek

Five Olympic medals and 18 World records. In 1952 swept the 5K, 10K and Marathon in the Olympic Games.

"I already know how to run slow"

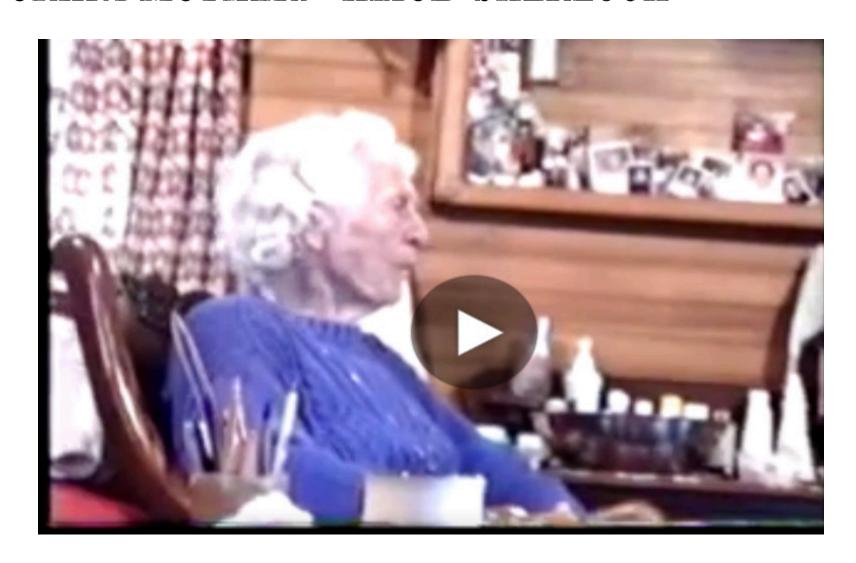
"All it took was effort, persistence and a cheerful indifference to discomfort"

### Family

Together 95 year of experience. Its in the family blood.



# GRANDMOTHER: ALICE SHERLOCK





# INFLUENCES: TAKE AWAYS

- 1. By focusing on Volume, Intensity, Rest and the time of season you can increase loads and intensity more effectively.
- 2. The utilization of percentage runs is a great way to monitor and development the athletes' tank.
- 3. Rest is great but at some point you have to get out of bed.
- 4. Avoidance, silence or yelling are not motivators just as complacency doesn't achieve dreams. It's my job to inspire, develop and the athletes' call to be true to their hopes and dreams.

You need to have Teflon skin to keep your fighting Spirit alive.



## ATHLETE DEVELOPMENT

### MALE ATHLETES

ATHLETE	RACE	HIGH SCHOOL PR'S	SUU PR'S
JESS BAUMGARTNER	MILE 3200 5K	4:28 9:36 16:30 XC	10K 29:01 5K. 14:05 NCAA XC 3 <sup>RD</sup> NATIONALS ALL-AMERICAN
CAM LEVINS	800 MILE 3200 5K	1:58 4:18 9:23 15:13 XC	1:49 3:57 13:18 10K 27:27 NATIONAL CHAMP 5K-10K ALL-AMERICAN BOWERMAN WINNER
NATE JEWKS	MILE 3200	4:25 9:31	13:50 5K 28:43 10K ALL-AMERICAN



## ATHLETE DEVELOPMENT CONT.

### MALE ATHLETES

ATHLETE	RACE	HIGH SCHOOL PR'S	SUU PR'S
HAYDEN HAWKS	800 MILE 3200	1:58 4:21 9:20	5K 13:31 10K 28:53 ALL-AMERICAN
MIKE TATE	800 MILE 3200	1:55 4:08 9:09	4;00 7:51 3K 13:37 5K ALL-AMERICAN
KASEY KNEVELBAARD	800 MILE 3200	1:53.65 4:09.44 9:05	1:48 3:55 13:50 ALL-AMERICAN
GEORGE ESPINO	800 MILE	1:55.07 4:21.91	1:47 4:03



## ATHLETE DEVELOPMENT

### FEMALE ATHLETES

ATHLETE	RACE	HIGH SCHOOL PR'S	SUU PR'S
ANGIE NICKERSON	800 MILE 3200	2:21 5:09 11:51	2:12 4:39 (1500 4:21) 5K 15:46 10K 33:12 All-Region XC
SHARLIE DIMICK	800 MILE 3200	2:18 5:08 11:24	2:13 4:34 (1500 4:16) 10:22 (3K 9:44)
JAMIE SMITH	400 800	61 2:18	Mile 4:48 5K 16:08 All-Region XC
DIANA MITCHELL	Mile 3200	5:31 11:53	4:45 (1500 4:27) 10:05. (9:31) 5K 16:15 ALL-REGION XC
ASHLEY HAWKS	800 MILE 3200	2:19 5:12 11:16	4:43 (1500 4:23) 10:01 (3K 9:29) 5K 16:23
SHARLA MANUELE	MILE 3200	5:31 12:01	4:41 (1500 4:23) 10:01 (3K 9:25 5K 16:05 ALL-AMERICAN



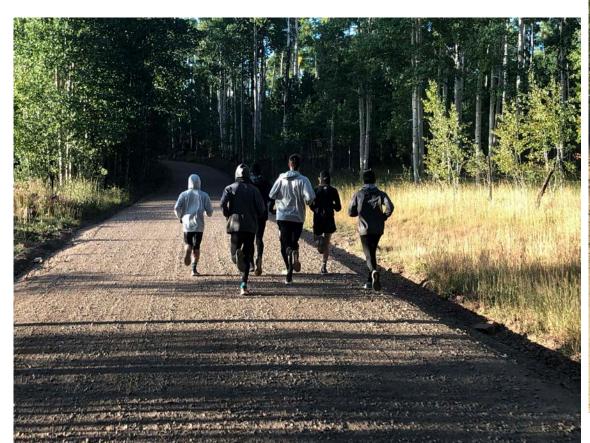
ELEVATION of SUU and FOOTHILLS 5700 to 6200 feet.

# SOUTHERN UTAH UNIVERSITY TRACK FACILITY





# CEDAR MOUNTAIN IS 30 MINUTES FROM SUU CAMPUS. ELEVATION: 8400 TO 9800 FEET











### 90% OF OUR COMPETITIONS ARE AT SEA LEVEL.





# RISK MANAGEMENT KEY FACTORS BEFORE INCREASING VOLUME AND INTENSITY

- NUTRITION
- PAIN MANAGEMENT
  WHILE INCREASING VOLUME
  HIGH INTENSITY WEEKS
- WEIGHTS/CORE
- FORM TRAINING
- MASSAGE/ICE BATH
- MONITOR RESTING PULSE



### INCREASING VOLUME

RHYTHM: IF 10 MILES IS THE GOAL

DAYS 3@8, 3@10, 3@12 OR LOW WEEK, MED WEEK, HIGH WEEK

Year	Gender	XC	Indoor	Outdoor	Summer	Volume Goal
1	Men Women	10-12 6-7	10-12 6-7	10-12 6-7	12-14 6-8	60-72 36-48
2	Men Women	12-14 6-8	12-14 6-8	12-14 6-8	14-16 8-10	72-84 48-55
3	Men Women	14-16 8-10	14-16 8-10	20 10-12 Red Shirt	20-25 10-12	84-90 50-60
4	Men Women	20-25 10-12 Red Shirt	20-25 10-12 Red Shirt	18-20 8-10	20+ 12-14	90-110 72-84
5	Men Women	20+ 12-14	20+ 12-14	20+ 10-12		100-140 60- 85



# INCREASING INTENSITY TRAINING CYCLE

Difficulty	Week	Session	Session	Session	Race/Sessi on
Moderate 1-2	1	Pace Day		Strength Day If no race	Race Secondary Events
Hard 3-4	2	Strength Day	Pace Day	Power Run	Speed Day Short but slightly below Race pace
Easy 1 +Race	3	Pace Day			Race Main Event
Recovery Week	4			60%	



# CAW LEVINS

### FRESHMAN TO SENIOR

Totals	Freshman	Daily Rhythm	Senior (5)	Weekly Rhythm
800	1:53		1:50.61	
1500	3:54.68		3:42.61	
Mile	4:06		3:57.16	
3000	8:25.76		7:42.9	
5000	14:56		13:18.47	
10,000	32:14		27:27.96	
Fall: daily miles 10	60 a week	8-10-12	110 to 125	Low-Med-High
Winter: daily miles 12	70 a week	10-12-14	120-140	Low-Med-High
Spring: daily miles 10	60 a week	8-10-12	120-140	Low-Med-High
Summer: daily miles 12	70 a week	10-12-14	110-120 OG	



# CAM LEVINS JANUARY TOTALS 2012

Race	NAU	UW Meet	NCAA
800	1:50		
5000		13:42	
3000		7:44.10	
# of Races 3			
Average weekly mileage 112			
2 weeks at 120+ w/ll effort days			
NCAA 3000 3 <sup>rd</sup> place			7:42.9
NCAA 5000 4 <sup>th</sup> place			13:38.12



### JANUARY WORKOUTS 2012-CAM LEVINS

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Total Mileage/Efforts
8 20 MILES AT 50% 6:30 TO 7:00  Total: 20 MILES	9 AM Run: 10 mile @6:30 to 7:00 Practice Effort 6 MIN TEST CAM 2190 (RECORD) 5 1/2 LAPS (MILE 4:24) 64 PER LAP Total: 20 MILES Test	10 AM Run: 10 mile @6:30 to 7:00 Practice: 10 miles @6:00 to 6:35  Late Run: 7:00 to 7:30  Total: 25 Mile	11 AM Run: 10 mile @6:30 to 7:00 Practice: 10 Miles + 10X100 @ 3K pace  Total: 25 Miles	AM Run: 10 mile @6:30 to 7:00 Practice: Effort 80% (5:20 to 5:35) + 4x15,25,35 Whistle Hills, Home Depot Hill 2-5% grade Late Run: 7:00 to 7:30  Total: 25 Miles Power	13 AM Run: 5 miles@ 6:30 to 7:00 Practice: Pre-Meet 10 Miles  Total: 10 Miles	NAU MEET CAM Effort 800 1:50.94 Total: 15 MILES	WEEKLY MILEAGE/ Efforts: Mileage High 140 Miles 3 Effort Days
15 20 MILES AT 50% 6:30 TO 7:00	16 AM Run: 10 mile @6:30 to 7:00  Practice: 10 miles 50% Run 6:30 to 6:45  Total:	17 AM Run: 10 mile @6:30 to 7:00 Practice: Effort Practice: 20x400's 5@10Kw/60 sec 5@5K w/90 sec 5@3K w/2mins 5@Mile w/3mins	18 AM Run: 10 mile @6:30 to 7:00 Practice: Effort 3 miles @ 80% to Zion Bank. 1x2 miles up the Canyon, Timed. Cam: @ 2miles=9:40 @ 3miles=15:45	19 AM Run: 10 mile @6:30 to 7:00 Practice: Effort 60% Run 5:20 to 5:35 Farm Run 8 miles @ 60%+ Late Run: 7:00 to 7:30  Total: 20 Mile	20 AM Run: 10 mile @6:30 to 7:00 Practice: Effort 2x400,800,300 Cam: 56/2:12/42 56/2:16/42	Long Run 15 Miles @ 50% or slower effort: 6:30 to 7:00	WEEKLY MILEAGE: 120 Miles 4 Effort days so CUT Weekly Mileage by 15% 4 Effort Days
Total: 20 Mile	20 miles	Total 15 Miles Pace	Total: 15 Miles Power	Tempo	15 Miles Speed	15 Miles	

### JANUARY CONT. 2012-CAM LEVINS

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Total Mileage
22 15 miles @ 50% Run 6:30 to 7:00  Total: 15 miles	Practice: 15 miles @ 50% Run 6:30 to 6:45  Total: 15 miles	Practice: 12 miles @ 50% Run 6:30 to 6:45  Total: 15 miles	25 AM 2 mile shake out Travel Day Practice: Pre-Meet 50% Run 6:30 to 6:45 +6 x 45 sec pick-ups @ mile pace w/2 mins rest Total: 12 Mile	26 AM 2 miles shake out Practice: Pre-Meet 50% Run 1x400 @ slightly FRP 3x50 meter starts.  Total: 10 mile	27 UW Meet: Meet AM 3 miles shake out Cam - 5K 13:42.90  Total: 11 miles	28 UW Meet: Meet Cam: - 3K 7:48.25  Total: 15 miles	WEEKLY MILEAGE:  LOW Mileage 97 Miles Race UW No Effort Days
29 Rest	30 AM Run: 10 mile @6:30 to 7:00 Practice: 10 miles @6:00 to 6:35  Late Run: 7:00 to 7:30  Total: 25 Mile	31 AM Run: 10 mile @6:30 to 7:00 Practice: Effort Practice: 20x400's 5@10Kw/60 sec 5@5K w/90 sec 5@3K w/2mins 5@Mile w/3mins Total 20 Miles	Practice: 50% Run 6:30 to 6:45  Total 20 Miles	AM NR Travel Day Practice: 50% Run 6:30 to 6:45 +6 x 45 sec pick-ups @ mile pace w/2 mins rest  Total: 10 Mile	3 AM 2 miles shake out Practice: Pre-Meet 50% Run 1x400 @ slightly FRP 3x50 meter starts.  Total: 8 miles	4 AM 2 miles shake out Meet Boston 3K 7:42  Total: 8 miles	WEEKLY MILEAGE:  LOW Mileage 91 Miles Race Boston One Effort Days



# CAM LEVINS-APRIL TOTALS 2012

Race	Stanford	Mt.Sac	Payton Jordan	NCAA	Olympic Games
1500	3:42		79 10 K 20 S	730	6
5000		13:18			
10,000			27:27 (9 days later) Second fastest in NCAA History		
# of Races 3					
Weekly Mileage 140					
			[3]		
NCAA 10,000 1st place				28:07.14	
NCAA 5000 1st place				13:40.05	13:18.29/13:51.87
OLYMPIC 10,000 11th					27:40.68
OLYMPIC 5000 14th				13:51.87	



**APRIL WORKOUTS 2012-CAM LEVINS** 

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Total Mileage
1 20 MILES AT 50%	2 AM Run: 10 mile @6:30 to 7:00	3 AM Run: 10 mile @6:30 to 7:00	4 AM Run: 10 mile @6:30 to 7:00	5 AM Run: 10 mile @6:30 to 7:00	6 AM 3 mile shake out	7 AM 2 mile shake out	WEEKLY MILEAGE:
or less	@0.30 to 7.00	Practice:	Practice:	Travel Day	Practice:	Meet	
7:00 to 7:30	Practice: 10 miles	Effort 10x400's	10 Miles @ 50%	Practice: 10 Miles @ 50%	Pre-Meet 50% Run 4M	Stanford 1500 3:42.61	115.5
	50% Run 6:30 to 6:45	5@ 3k Pace w/2min rest 4@ Mile Pace	6:30 to 7:00	6:30 to 7:00 6x45 sec pick-ups @	6:30 to 6:45 2X400 @ slightly FRP w/lap rest		1 Effort Day
	Late Run: 7:00 to 7:30	w/3mins	LEVINS	3K pace w/3 mins rest	WD 3 miles		
Total:	Total:	Total	Total		Total: 10.5 Mile		
20 miles	25 miles	20 Miles	20 Miles	Total 20 Miles			
8	9	10	11	12	13	14	
10 MILES AT 50%	AM Run: 10 mile @6:30 to 7:00	AM Run: 8 miles @7:00 7:30	AM Run: 10 mile @6:30 to 7:00	AM Run: 5 mile @6:30 to 7:00	AM Run: 10 mile @6:30 to 7:00	AM Run: 10 mile @6:30 to 7:00	WEEKLY MILEAGE:
6:30 TO 7:00	Practice:	Practice: Effort	Practice:	Practice: Effort	Practice: Effort	Practice:	WILLEAGE.
	10 miles @ 50%	10X500 @72	10 miles	10 miles	10 miles	10 miles	High Mileage
	6:30 to 6:45 with 2 mile Canyon Run	w/4 min rest	50% Run 6:30 to 6:45 +10 100m strides w/15 sec	50% Run 6:30 to 6:45 12x45 sec pick-ups w/90 sec rest.	50% Run 6:30 to 6:45 10x 2min pick-up w/90 sec rest	50% Run 6:30 to 6:45	145
	Late Run: 7:00 to 7:30	Late Run: 2 miles 7:00 to 7:30	rest @ mile pace	W/ 30 000 100t.	Late Run: 7:00 to 7:30	Late Run: 7:00 to 7:30	
Total:		7.00 to 7.00	Late Run:	Total:			
10 miles	Total: 25 Mile	Total: 20 miles	7:00 to 7:30 Total: 25 miles	15 miles	Total: 25 miles	Total: 25 Miles	

### APRIL WORKOUTS 2012-CAM LEVINS

			e wormen no.	IN CHAIN ALORS VILLEY			
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Total Mileage
15 50% or less 7:00 to 7:30	16 AM Run: 10 mile @6:30 to 7:00 Practice: Effort 6x1K w/2:30 rest Avg: 2:37	AM Run: 10 mile @6:30 to 7:00 Practice: Effort 10 miles 50% Run 6:30 to 6:45 10x 1min pick-up w/90 sec rest Late Run: 7:00 to 7:30	18 AM Run: 10 mile @6:30 to 7:00 Travel Day Practice: 10 Miles @ 50% 6:30 to 7:00 6x45 sec pick-ups @ 3K pace w/3 mins rest	AM 3 mile shake out Practice: Pre-Meet 50% Run 4M 6:30 to 6:45 2X400 @ slightly FRP w/lap rest WD 3 miles	20 AM 2 mile shake out Meet Mt. SAC 5000 13:18.47	21 AM Run: 10 mile @6:30 to 7:00 Practice: 10 miles @6:00 to 6:35  Late Run: 7:00 to 7:30  Total:	WEEKLY MILEAGE: 130 2 Effort Day (Not counting Race)
Total: 20 miles	Total 20 Miles	Total: 25 miles	Total 20 Miles	Total: 10.5 Mile	Total: 10. Mile	25 Mile	
<b>22</b> 50% or less 7:00 to 7:30	AM Run: 10 mile @6:30 to 7:00 Practice: Effort Practice: 15x400's 5@10Kw/60 sec 5@5K w/90 sec 5@3K w/2mins	AM Run No Practice: Effort 3 miles @ 80% to Home Depot 4x15,20,25 Whistle Hills Cam: 3miles @15:36	AM Run: 10 mile @6:30 to 7:00 Practice: Effort (Med) 10 miles 50% Run 6:30 to 6:45 7x60 sec pick-ups w/90 sec rest Late Run: 7:00 to 7:30	26 AM Run: 10 mile @6:30 to 7:00  Practice: 10 miles 50% Run 6:30 to 6:45  Late Run: 7:00 to 7:30	AM Run:2 mile @6:30 to 7:00 Travel Day Practice: Effort (Med) 10 Miles @ 50% 6:30 to 7:00 6x45 sec pick-ups @ 3K pace w/3 mins rest	28 Next Page	WEEKLY MILEAGE:  156 High Mileage  2 Effort Days  2 Medium Efforts Days
Total: 20 miles	Total 27 Miles	Total: 13 Miles	Total 23 Miles	Total: 28 miles	Total 28 Miles		

### APRIL WORKOUTS 2012-CAM LEVINS — 9 DAYS STANFORD MEET

ATURDAY	SUNDAY	MONDAY	
28 AM 3 mile shake out Practice: Pre-Meet 50% Run 4M 6:30 to 6:45	AM 2 mile shake out Meet Stanford 10,000 27:27.96	30 Practice: 10 miles 50% Run 6:30 to 6:45	
2X400 @ slightly FRP w/lap rest WD 3 miles			AND
Total:	Total: 10 Miles	Total: 10 Miles	