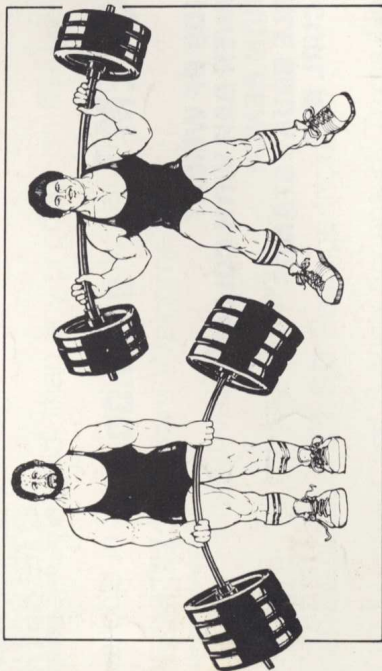


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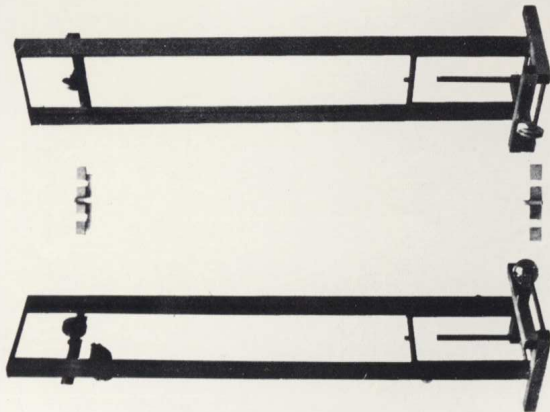
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HIPC IV!
MCCORMICK
PULLS WR 843

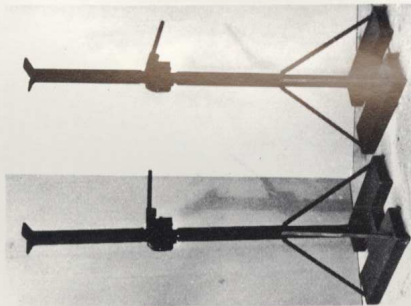
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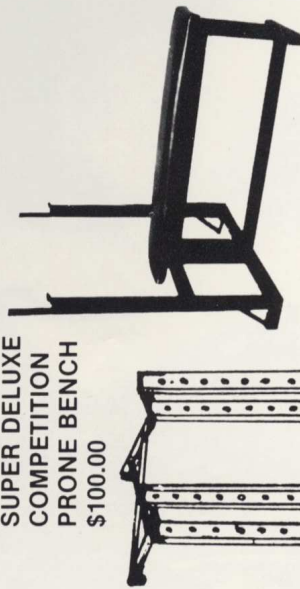
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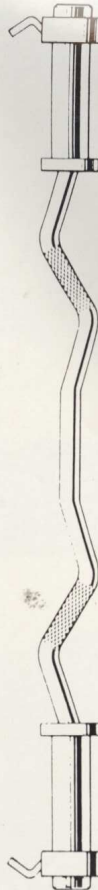
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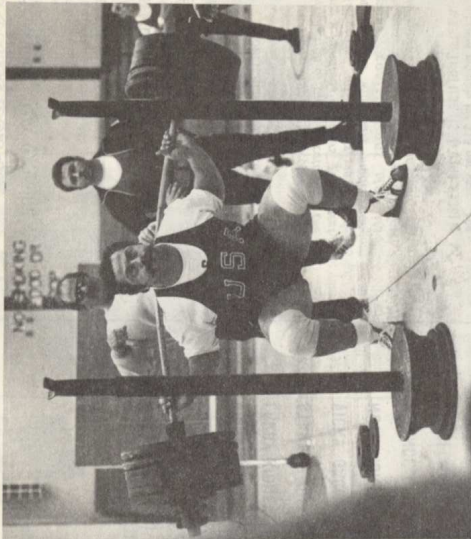


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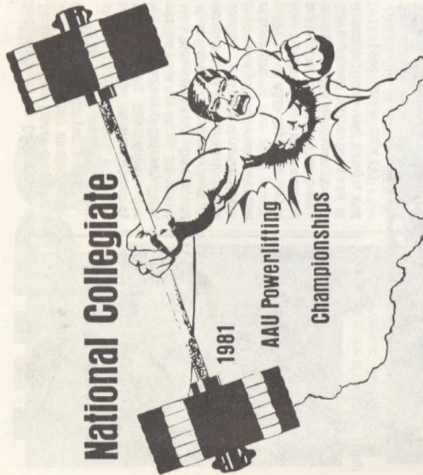
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NEXT MONTH... 'TANSTAABL' plus a gigantic TRAINING EXPO check full of valuable training tips.

ON THE COVER... Terry McCormick with a WORLD RECORD 843 deadlift at Gus Rethwisch's extravagant 1981 HIPC meet.



Kutztown State College, Pa.

Championship Report by Ted Kurlowicz

The 1st Women's National Collegiate Championships saw 35 lifters competing, representing 10 institutions. With big names entered, great lifting was expected and those in attendance weren't disappointed. The act that the competition for the women was held on a weekday may have held down entries and attendance, but with advance planning next year's meet should be much larger.

97 LB. CLASS Joette Webber of Purdue won easily, and despite losing the groove on a 3rd attempt record squat of 248 she was awarded another attempt when a spotter touched the bar. She did not waste the second chance as she drove out a very tough lift. She rounded out her total with a 248 DL which did not seem to be her limit on this day.



Donna Wicker with a successful 308 deadlift. Kurlowicz photo

she has not squatted heavier than 260x10 since the Nationals in February.



Terry Pomey ended up with 2 entries in the record book. Kurlowicz photo

181 LB. CLASS Likable Patty Dent of Lamar University totaled a fine 898 to win this class. Juli Gould of Cornell was the tallest in the contest and put together some strong lifts for second.

UNLIMITED CLASS Temple spotter, Sharon Mitnik, was the winner here. She tried some heavy squats and showed great athletic ability after dumping the bar. Good spotting prevented an accident, prevented injury in this case.

In first place team award went to Pat Malone's Purdue team. Strong performances were also made by Auburn and the other universities. The meet took a little over 5 hours, ran very smoothly, and set a successful tone for the entire weekend.

The 1981 National Collegiate Powerlifting Championships left a positive impression in every respect on those who attended. The facilities were excellent: (1) A spacious fieldhouse for the lifting, (2) a 3 platform warm up room with TV monitor (3) a well organized and equipped scoring system, and the lifting was top notch. The sportsmanship and cooperation between lifter and official was commendable, despite strict judging, particularly on squat depth. The spotting was likewise great. Unfortunately Big Bill Whiteknight took a dumped bar across the thigh while trying to protect a lifter. Fortunately, he was only bruised and later returned to the platform. Meet directors Mitch Shipon and Doug Pollard deserve more credit than I could possibly give them for doing a super job in all aspects of running the meet. With the weight classes split into four sessions, it was decided to use one platform for the entire meet to focus attention on one lifter at a time. Local television covered parts of the meet on all three days, but attendance was disappointing until the heavy session. Auburn coaches Jan and Terry Todd commented afterwards that they enjoyed this contest more than most World Championships. Everyone involved shared similar sentiments.

114 LB. CLASS Gary Zeolla of Penn State demonstrated balanced lifting to win the National Championship. His 385 DL was a temporary National Collegiate Record, as Joe Stenfield's previous mark proved quite

vulnerable, with five lifters attempting to break it and 3 succeeding. Frank Provenzano of Virginia Western took 2nd place and now holds the record at 413. 3rd place, Eddie Pearson, also held the mark for a short time.

123 LB. CLASS Tony Tibbault of Kutztown was the winner here establishing a squat record of 407 in the process. His performance was incredible since he won the state collegiate championships in February in the 132s and appeared to have no bodyfat then. Second went to Moriyoishi Nixon of the surprisingly strong Naval Academy, who set a new deadlift mark of 446.



One of USAFAs very best, Vince Jones puts a record DL. Gallagher photo

132 LB. CLASS Last year's champion Vince Jones of the Air Force Academy repeated this year. His deadlift of 512 and total of 1234 are new National Collegiate Records. The total erases an old (1973) Enrique Hernandez record from the books. Last year's runner-up Ken Miller finished second again and missed some attempts that could have changed the outcome. Dave Piro finished third in a very tough and balanced class. Lamar Gant put on a pulling ex-



Jim Panetti of Slippery Rock State won the lightweight. Gallagher photo

HIPC 4

new class, but failed all three attempts among the contingent from Aloha-land that go for a back-up National Team Championship bid in Boise this year. On paper, they are stronger than ever. At 165, Rocky Dale Crain came up with an injury and was not present, and another World class competitor in the person of James House. After falling around the warmup room, much less than his usual self. The suggestion that he go ahead and bench anyway, after all...the fans were there to see some big iron moved, got him pumped up again, enough so that he blitzkrieged 451 out of the way and came very close with an unofficial World Record Bench Press of 485. Had his bomb in the squats last eliminated his the lift. Jim Taylor's buddy and line partner, Steve Baldwin, came and did some good lifting. After just getting back into the mainstream of PL, he's looking forward to much bigger lifts in the future.

Much improved local competition was highlighted in the Midwest. Mike Navarete and Francis Silva had both moved up a class and in the process had moved some mighty poundages. In practice Navarete in fact had toyed with as much as 705 in the squat. The Hawaii State marks in this class, which had been around for several years, were repeatedly demolished and swapped back and forth between each contender. Mike had a solid meet, missing only 3rd attempts of a 650 squat, 413 bench, and 644 deadlift. Francis only took his opener in the squat, but sailed through all three tries in the following lifts...this 429 bench was not a limit, but rather a demonstration of his rotator

ter, more refined on each occasion until now it is a nearly perfect promotion. This years outing lasted only until 9:00PM, the crowd was huge and appreciative, and the trip to Hawaii was once again a special experience for the lifters. The weather was spectacularly beautiful, and everyone seemed to forget about the everyday hassles awaiting them at home. Bus returning, ably assisted. To be sure, it has done it once again!

Locals Bret Wedgerton and Ray Verdonck bailed at 148 after difficulty obtaining an international sanctioned lift to do a Canada's squat. Bret had to come out for the meet in the past and the gods were smiling again, as Ray Verdonck charged to a 66 lb. sub-total lead in what is for him a brand



Francis Silva gives the crowd the Island Salute after a successful DL.

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HAWAII INVITATIONAL CHAMPIONSHIPS 22 MAR 81

148 LB. CLASS	BRET WEDGERTON	490	300	501	1295
	RAY VERDONCK	534	325
	STEVE BALDWIN	540	383	477	...
	JAMES ROUSE	451
186 LB. CLASS	MIKE NAVARETE	644	396	606	1647
	FRANCIS SILVA	606	429	540	1576
	MARK DIMDIUK	793	473	710	2039
	FRED HATFIELD	843*	468	727	2039
	242 LB. CLASS	711	402	733	1906
	CHP MCCAIN	705	518	710	1934
	242 LB. CLASS	705	518	710	1934
	MARY PHILLIPS	799	451	677	1929
	GARY SPRINGER	672	435	606	1714
275 LB. CLASS	TERRY MCCORMICK	799	535	840*	1656
	DAVE SHAW	788	562	742	2122
	JIM DRAPAL	744	484	733	1962
	DAVE WASHINGTON	442	597	727	2237
	DAVE WASHINGTON	595	282	529	820
	WAYNE FEY	903	540	672	2116
	WAYNE BUWIER	705	589	699	1995

Doctor Squat, Fred Hatfield, ecstatically responds to the crowd's applause after another demonstration of why he's earned that title, Summa Cum Laude

hibition, pulling 501 for 8 easy reps. He admitted he was losing his grip or he might have done 15.

148 LB. CLASS Jim Panetti came out of nowhere after the squat to bench a NCR 369 and win the class going away. Bev Casanova of LSU repeated his runner-up performance from last year's meet. Third place finisher Jim Speedy of Texas also took the same place last year. Mark Winnquist of South Dakota took fourth on bodyweight over Matt Clark of Villanova. This weight class was again very deep with a lot of progress over last year's totals.

record 385 bench. (Would someone from the Collegiate Committee please explain why Paul Aston's 413 at the 1979 meet is not listed as the record?)

198 LB. CLASS Joe Grevitt of UNC showed strong balanced lifting and took first here. He was handed by National Champ Steve Knight. 2nd went to Pete Buzzy of Salisbury State, who did a 200 lb. deadlift. 3rd went to Mike Beahm of King College, and 4th to Rowland Huss of Navy. It appears to enter another world for the deadlifts. This class struck at weight in time and got smaller after a couple of bombouts.

220 LB. CLASS Ray Moran had to have the thickest build of the meet and put together a line 1835 total to win. He missed a 766 squat, going for McCain's record. Dino Barbenzo of Bloomsburg lifted well, taking a shot



Ray Moran is one of the fastest rising lifters in America. Gallagher photo

Bill Davis turned this 610 record squat into a sissy weight. Gallagher photo

M. RACHMIEL	272.5	172.5	265	710
H. HUSS	260	150	200	695
B. BAYER	267.5	170	255	697.5
B. MCKENNA	221.5	165	242.5	645
198 LB. CLASS				
R. MORAN	327.5	197.5	307.5	832.5
D. BARBENZO	305	182.5	310	812.5
D. LIGARI	297.5	172.5	285	755
B. BLEADON	297.5	172.5	285	755
B. WILSON	287.5	157.5	270	685
B. NICHOLS	277.5	165	295	692.5
B. FRITZ	237.5	160	275	672.5
C. LAMB	230	200	242.5	672.5
B. GREEN	230	200	242.5	672.5
B. WELLS	230	200	242.5	672.5
V. ECK	227.5	165	242.5	662.5
P. DICK	222.5	152.5	227.5	612.5
242 LB. CLASS				
M. KRUTSACK	367.5	215.5	332.5	915.5
B. THOMPSON	212.5	132.5	250	595
W. POLSENEY	292.5	245*	290	827.5
J. STROMSDORFER	317.5	200	300	817.5
T. BARTOSH	282.5	200	275	757.5
J. JEFFERSON	285	152.5	277.5	715
R. GUMBARRE	252.5	175	252	682.5
R. BALL	242.5	140	272.5	655
R. HEBOLT	240	155	240	645
275 LB. CLASS				
T. INDAVER	330*	235	340	925*
B. TEMPEY	322.5	200	327.5	850
J. LUDWIG	282.5	197.5	300	780
C. JOVLACE	315	175	297.5	777.5
J. BENNETT	295	175	297.5	777.5
W. SLUSH	271.5	142.5	295	645
SHW	330	210	312.5	842.5
J. WARE	295	282.5	322.5	820
R. LOBINS	305	217.5	312.5	835
R. LOBINS	305	217.5	312.5	835
D. BETTINO	282.5	210	292.5	785

Ray Perna en route to a Collegiate record squat. Gallagher photo

165 LB. CLASS The best battle of the meet was won by George Herring of Auburn on bodyweight over Ray Perna of Middlesex Community College in New Jersey. Herring lifted 15 lbs. heavier than Perna. Herring built the former Roger Estep. Herring also held the squat record briefly and came back with what was called a



Grevitt to win. Gallagher photo

solitely to win. Gallagher photo

NATIONAL COLLEGIATES 19-21 March, 1981

Women's Division

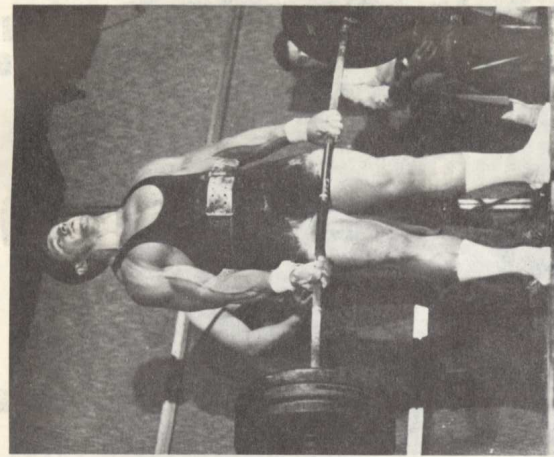
97 LB. CLASS	J. WEBER	112.5	42.5	112.5	267.5
	S. ALISON	105	42.5	110	245
105 LB. CLASS	D. WICKER	115	47.5	140	302.5
	D. JONES	97.5	40	115	252.5
114 LB. CLASS	M. VANGRANTIS	105	47.5	122.5	275
	M. FOLK	75	37.5	97.5	210
123 LB. CLASS	T. EASTERNWOOD	97.5	30	92.5	180
	M. YONKINS	105	42.5	110	245
132 LB. CLASS	K. MILLER	197.5	127.5	220	545
	D. PHOENIX	205	140	192.5	537.5
148 LB. CLASS	D. WAUGH	185	125	195	505
	D. CARLSON	187.5	107.5	182.5	487.5
165 LB. CLASS	M. RODRIGUEZ	180	97.5	197.5	475
	E. JOHNSON	167.5	110	177.5	455
181 LB. CLASS	R. MALLASSAN	170	110	167.5	447.5
	E. SHEEHAN	185	97.5	175	427.5
198 LB. CLASS	B. WHALEY	160	90	172.5	422.5
	T. HENDERSON	140	82.5	187.5	412.5
	R. QUARLES	120	107.5	182.5	412.5
	E. MATTACOTTA	150	90	165	405
148 LB. CLASS	J. COURTNEY	150	90	165	405
	V. SPERRA	142.5	82.5	172.5	397.5
181 LB. CLASS	J. PANTHANA	227.5	132.5	230	600
	J. SPEEDY	230	145	230	600
	M. WINQUIST	222.5	130	220	595
	M. WURST	120	40	122.5	282.5

Men's Division

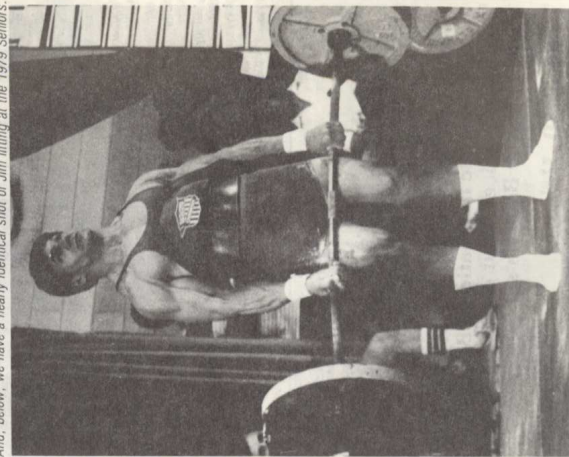
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J. MCCUTCHEEN	127.5	85	147.5	340
114 LB. CLASS				
G. ZEOLLA	157.5	92.5	175	425
E. PERSANO	137.5	77.5	171.5	386.5
T. THIBAUT	127.5	77.5	170	375
K. JONES	135	85	145	365
V. HORNE	137.5	80	145	362.5
M. CASANOVA	137.5	80	145	362.5
K. MCGONIGAL	155	112.5*	160	387.5
K. KELLEY	95	82.5	137.5	315
123 LB. CLASS				
A. THIBAUT	185*	105	177.5	467.5
M. YONKINS	137.5	97.5	162.5	407.5
M. YONKINS	137.5	100	165	382.5
132 LB. CLASS				
J. JONES (BL)	195	132.5	232.5	560*
V. JONES (BL)	195	132.5	232.5	560*
K. MILLER	197.5	127.5	220	545
D. PHOENIX	205	140	192.5	537.5
D. WAUGH	185	125	195	505
D. CARLSON	187.5	107.5	182.5	487.5
M. RODRIGUEZ	180	97.5	197.5	475
E. JOHNSON	167.5	110	177.5	455
R. MALLASSAN	170	110	167.5	447.5
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M. WURST	120	40	122.5	282.5

in Madison, Wisconsin. Once again, victory was teasingly close...he missed a 755 squat which he should have made, which forced him to 810 in the deadlift for the victory, which was a bit much, instead of moping and sulking. Jim put those 22 extra pounds of muscle to work and in January of this year, cracked the 2000 barrier and set a World Record deadlift in very convincing style. He squatted a solid 744, came up with 771, which he lost on time, benched an improved 460 and deadlifted the WR 815 rather easily.

At this time, Jim is on a long range training cycle for the Seniors, and though many will be watching for another big deadlift, the real surprise may come in the squat and bench where those who know him say he is on schedule for 800 and 500 in Corpus Christi. With names like Pacifico, Hall, Dimiduk, McCain, etc. all possible factors in the outcome, the 2200s are extremely competitive, but the threat of Jim Cash will not be discounted by wise contestants. As



CONSISTENCY OF FORM...on the top we see Jim at the 1980 Senior Nationals. And, below, we have a nearly identical shot of Jim lifting at the 1979 Seniors.



Drug Free Meet Denis Ference reports that Lanny Shepard's Enterprise Natural Open meet on Feb. 27 and 28 was definitely legit. The first class winners went to the Police Station after the meet and took a polygraph or voice stress test. They were asked questions about the use of drugs prior to the meet, and if the results were positive the lifter did not receive his award. Denis expressed hope that there could be many more contests such as this, and hopefully a Drug Free National Championships in the near future. I can report that groundwork is being laid for a drug-free organization to serve the aims of Denis and lifters of similar feeling regarding drug use in our sport.

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DISCRIMINATION? Happily, Jim Williams is back training again, reportedly benching 600 on Feb. 28th, but he is very upset about a few things. After reviewing Terry Todd's book *INSIDE POWERLIFTING*, Jim points out that although Mr. Todd (consistently introduced on CBS Sports Spectacular as having set over a dozen World Records) is credited with breaking World Records himself back in 1965 (namely the mark of 600 Peopies, who was certainly several weight classes lighter than Todd), Jim's title was as being the best before the World Records were official. Jim did his 675 at the 1972 World Record meet. Also in Todd's book, on page 67, the sport of Powerlifting (who is without challenge the greatest lifter in the history of the sport) is credited for the last decade) is credited for World Records going back to the 1960s as far as for his 675 bench at the 1972 World Championships... Jim heads that back strongmen have been under-represented at the Worlds Strongest Man Contest. Finally, he emphasizes his determination to bench 700 in a major meet outside his home turf, in the near future.

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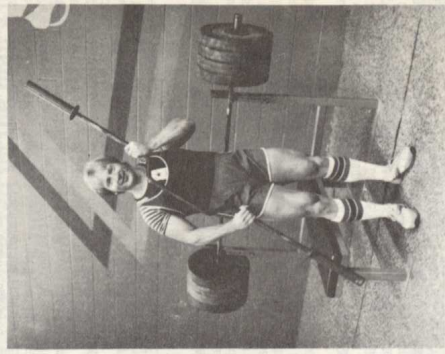
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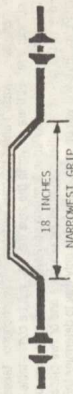
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The Training Philosophy of Larry Kidney

by Training Editor, Ron Fernando

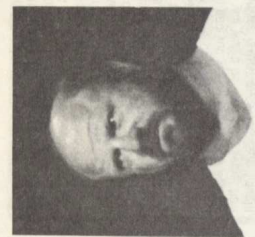
The year 1981 will usher in the first official World 275 lb. Champion. Since its inception, the 275 weight classification has seen a variety of muscular athletes from the lightly muscled Dave Shaw to the swaggering grandeur of Doug Young and of course, the mighty Larry Kidney himself. The great Ernie Hackett notwithstanding, I feel that Larry has the inside track to the 1981 Numero Uno spot which will all come down in mystical Catalonia, Spain.

Through a veteran of the power wars for over a half century, or so, has never been given his just reward (publishers' note: that is). So, with my usual flair for the dramatic beginning, I will examine the personage that is Larry Kidney, the most successful muscular gentleman who has some very sound theories on cycling, maxing out, and supplementary exercises.

In reality, Larry has been pushing World record weights for YEARS. Still there was a time where he seemed to be virtually snail-like one solid year of bomb out after another. Most lifters would have made lame lame excuse about their sacroiliac and hung it up, but not Larry. He stuck in there and eventually went on to claim Senior National honors, and numerous world titles. Larry feels the biggest problem he has had over the years has been drumming up a potent psyche - he has no fear of the gargantuan poundages he effortlessly hoists both in training and in the meets, but he feels that if he could plumb deep into the wellspring of human determination, he could practically lift whatever he wanted to. Larry has a busy and extremely hectic schedule - he is the proprietor of Kidney's Body Shoppe, an outstanding training facility in Chino, California. Additionally, he works nights as a security guard at the local Alpha Beta grocery store, and is ALSO studying for the bar exam!

(Don't forget, folks, he has to train every once in a while, and oh, yes - there's that small thing called his family.) Therefore, the training theories which I am about to analyze can be pursued by virtually anyone with a few hours to spare per week.

THE PROGRAM
Larry is a firm believer in cyclical training, he regards his training as a true athletic science - cyclical training does not only ensure a steady degree of success, but will also bring you towards injury prevention. It is with this type of training that Larry brings his squat from a pre-season low of a measly 500 to 900 plus in little as five weeks. Of course, he has had a lot of extra strength 'in the bank' which he can draw on - this has been built through years of hard work. Larry wanted me to emphasize that THERE ARE NO SECRETS - only sound theories.



Larry squatting at Billy Superstar Graham's U.S. Invitational last December.

Larry focuses some mind energy on the bar at the Hawaii Invitational. powerlifting in the entire sport: 'John in essence you really have to handle what you've got, you've got to get the lift, and you couldn't hit him with a 2x4 and it wouldn't phase him at all. If I had that type of ability, I would squat 1000 lbs....'

The maximal weights are saved for the Saturday session. Here he goes by 'feel' or better put, he trains according to Dave Shaw! If any of you remember him at the WORLD'S STRONGEST MEN contest telecast last year, you may recall that although he did not finish in the top three, he placed second in the Silver Dollar lift. This was nothing more than a standard block-deadlift from knee height with straps. Shouting 'Let's get one for the little guy', Larry hauled up 900 plus pounds with no undue strain and barely failed with 926. This portends immense back and trap strength, which is very evident by just glancing at his goniometer set of traps. He practices a lot of OVERHAND STRAP deadlifts ala Pacifico because he feels this allows for better trap-shoulder development as well as injury prevention. An 826 pull from the mighty Kidney! I'd stake my weekly allowance on that one!!

ASSISTANCE EXERCISES:
Larry is a firm believer in the basic auxiliary exercises. On Monday following the benches, he will do heavy Press Behind the Neck's (max-400x1-300x5) plus E-Z curls, Hammer curls, and tricep pushdowns. Following his leg days, he will do quad and hamstring as well as upper back exercises (Bent rows & pulldowns, to tighten up that vital region).

SUNDAY
MONDAY: Heavy Benches, Press Behind the Neck, E-Z curls, Hammer curls, Tricep pushdowns.
TUESDAY: 50 percent squats up to a set of 5-10. Heavy deadlifts up to a single. Thigh extensions, Hamstring curls, Upper back work.
FRIDAY: Medium Heavy bench (up to 460x5), Assistance work same as Monday.
SATURDAY: Heavy Squats.

of the school that if you expect to see someone lift big weights, then he or she will have to have a lot of protection in order to avoid injury. In the early phases of his cycle, Larry will squat in a pair of sweat and Super Wrap; later on he will don the Superstret and the Elite Wraps. Regardless, he feels he could go virtually as heavy without all the gear, but PSYCHOLOGICALLY it would be demoralizing.

BENCH
Like the Squat, Larry will Bench Press twice a week. Many people tend to forget the fact that Larry is a 560-575 lb. bench lifter, which isn't bad for a 275 pounder. He has a 560-575 range for two years now, and I have been stuck with something's got to give. I feel that my strength runs in cycles - I just take that one of these days it will just take off. The Benches are done on Monday and Friday - Monday for a very heavy single and Friday for a moderately heavy set of five with around 460. I have to be very careful so as NOT to overtrain this portion of the bench. Overtraining leads to injury.

DEADLIFT.
Larry predicts nothing short of a WORLD RECORD DEADLIFT this year (Watch out, Dave Shaw!) If any of you remember him at the WORLD'S STRONGEST MEN contest telecast last year, you may recall that although he did not finish in the top three, he placed second in the Silver Dollar lift. This was nothing more than a standard block-deadlift from knee height with straps. Shouting 'Let's get one for the little guy', Larry hauled up 900 plus pounds with no undue strain and barely failed with 926. This portends immense back and trap strength, which is very evident by just glancing at his goniometer set of traps. He practices a lot of OVERHAND STRAP deadlifts ala Pacifico because he feels this allows for better trap-shoulder development as well as injury prevention. An 826 pull from the mighty Kidney! I'd stake my weekly allowance on that one!!

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TIBBITS I hear that Ed Cangemi, still at 132, squatted 525 recently, without even pulling the straps up on his suit. He's looking for 600 GALVIN, 1981, in Michigan. RALPH and tried 560...Fred Hatfield is not the only 150 who's hot in New Orleans. **Burdy Wilson** is getting his bench back together and his squat is going very well...He would be interesting 900 soon. **Phonon** from **Norma** should be good for 105-125 722.1866 in his next meet (1981) **Joe Earl Bradley**, who is at 140, might be expanding 700 in his squat. 425-440 in the bench, and a 600 deadlift in his next competition.

Mo-States Keith Hartman is missing out on the straps. I put on a up flight on May 9/10. I understand that he has invited Kaz to put in a guest appearance.

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Startin'

A special section dedicated to beginning lifters.

Beginning Powerlifting
by Randy Wilson... (You will recall Randy's name as the winner at the North Americans and the Junior Nationals last year. He has made great progress recently and his advice is well worth listening to.)

I've read all of the PL USA "Starting Out" columns -- choosing equipment, starting weights, 2nd and 3rd attempts, losing weight, mental prep work, picking preparation. The main thing to remember is to TAKE YOUR TIME! Young lifters, aged 13-20, need to train differently than do older, more mature lifters. Also, some lifters mature earlier than do others, and this becomes important in adjusting your training program.

All young lifters need to build a base -- a solid foundation -- for later heavy lifting. Strengthening and conditioning the muscles is vitally important for a lasting career in powerlifting (or any other sport for that matter). At first, 4-5 sets of 8-10 reps in all three powerlifts should be done regularly. This is especially important in deadlifting since the lower back is so often the deciding factor in whether a young lifter stays in the sport and is able to achieve his or her true potential. Lower back injuries are the most common of all injuries, and often the most debilitating.

This type of base-work should be performed for at least 6 months. It may very well insure injury-free lifting for years to come. These strength building sets of 8-10 reps in the basic movements to strengthen the tie-in muscles -- the stabilizers and "helping" muscles. I would suggest the following exercises be done by beginners -- they represent all of the major muscles in the body which collectively afford the solid foundation so much needed before the onset of heavy lifting.

1. Military press or behind the neck press.
2. Curls (regular grip and hammer curls)
3. Tricep extensions.
4. Dumbbell presses, seated and supine
5. Lat pulldowns.
6. Bent rows
7. Hyperextensions.
8. Crunches.

Not all of these exercises need to be performed during each workout, but should be incorporated when possible. At least one or two exercises should be done for each of the major muscle groups. Bodybuilding exercises, of course, build muscle -- this also helps reduce bodyfat, and provides room for more muscle, which enables you to be a stronger lifter.

For the squat, do the bar high on the traps, and the body upright (lowering the bar and leaning into the lift, as most competitors do squats do allows for greater leverage, but less leg development). The deadlift should include at least one day a week performing the movement from a 4-in. block in stiff-legged fashion to strengthen the lower back. The bench press involves three important muscles -- the pectorals, front delts and triceps. Each of these muscles should be exercised separately at least twice a week.

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I suggest not entering a meet for at least 6 months, and preferably a year, to allow your foundation to become truly solid. I know a year seems like a long time, especially when the competitive urge is strong. I promise you that you'll be very glad you waited. I speak from experience. My first 2 years in the sport were spent healing my back, because I was in a hurry. And, when I finally decided to take the time to build a solid foundation, my lifts progressed rapidly and did so because of my being injury free. To illustrate, from a bodyweight of 242 in Nov, 1977 and totaling 1,400 pounds, I was able to progress to a bodyweight of 259 in June 1980 and totaling 2023. Two and a half years may seem like a long time, but the gains would never have amounted to what they did if I were constantly plagued with injuries.

Another example of proper beginning training can be seen in Ron Noonan's meteoric climb to the top. Ron weighed 135 in 1978, when he began to prepare to lift. He could barely squat his weight. In 1980, Ron won the National Teenage Championships in the 181 lb division with 5 National Teenage records -- his 2nd meet ever! In his 3rd meet, he broke 7 American teenage records, and PL USA ranked him 14th in the top 100 lightweightweights. His current lifts in training are 675 x 3, 410 x 3, and 640 x 3 -- he's currently peaking for his 4th meet ever.

There are other stories like Ron's but in our gym we attribute such success to proper preparation. To NOT BEING IN A HURRY to be the best. Everyone wants that, but few ever achieve it, and most of these who don't can't because of injuries from improper preparatory training. Ron spent two years preparing to lift -- that's two years before ever stepping on a platform!

There are certainly many things that beginning powerlifters must remember and account for in their training and meet preparation, and building a solid foundation first is, in my mind, the most important.

Good luck and good lifting, RANDY WILSON

I have been competing 4 years and I have been to four National meets. The National Collegiate three times and the Juniors once. I would first recommend every beginning powerlifter, as well as bodybuilders and weightlifters, to purchase a copy of Bill Starr's "The Strongest Shall Survive". This book provides a wealth of knowledge. It covers every facet of the weightlifting game. Some of the subjects covered are Nutrition, Sleep, Training and it even touches upon the usage of drugs. Drugs such as speed, downers, steroids, etc. Bill really spells it out in no nonsense layman's English.

To become a good powerlifter requires that an individual do several things. First, you must regulate your life. The mark of a professional is consistency. I believe that the body responds optimally to a regular pattern. Try to eat at the same time every day, train at the same time, and go to bed at the same time. Once you gain control of your life through discipline, your progress will be consistent.

Second, you must strive to learn more about your own limits and capabilities as well as your sport. Experiment with routines and get a feeling for your own recovery time. Find out what your body responds best to. Don't be afraid to talk to the big name lifters. If you see someone standing in the hall before a meet, go up and talk. Most of the big name lifters love to talk about the game as much if not more than you do.

Third, be patient. There are no shortcuts. If you work hard and are sincere about your training, your time will come.

Jack O'Brien
Oklahoma USFF Chairman

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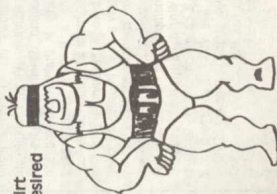
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VICKY GAGNE...Climbing Powerlifting's Stairway to Heaven

by Ron Fernando, PL USA Training Editor

She appreciates the simple joy of lifting a super heavy weight - or the explosive psyche of a record attempt. In short - she truly loves her sport. She is very fortunate in a number of ways. First and foremost she has been blessed with a sturdy bone structure, one that has allowed her to carefully build a solid physique - and an abundance of natural strength. Vicky Bench pressed 135 lbs the first time she stepped on a weight (at age 17) and three years later, after a 107LB LAYOFF came with a few times of locking out a 300 lb deadlift. Strength like that comes but to few instances - Paul Anderson, Mike Briggs, and now Vicky Gagne. The Blessings, bless their pink hearts, would have called her a Chudo Pirouy - roughly translated means "wonder of nature". Vicky is also very fortunate to have parents that not only support her lifting endeavors but provide her with some of the best training facilities this side of Gold's Gym AND provide her with personalized, DAILY coaching. The Gagnes do not have to hire such a coach, incidentally - as he is none other than her father, Bernie Gagne. Bernie is extremely proud of his daughter, and rightly so. He has several thick scrapbooks of her lifting and other athletic endeavors (Vicky also excels at softball and is a record-setting shot-putter on her Junior College track team). Bernie keeps careful track of his daughter's training - the shelves on the garage gym are stacked with old spiral notebooks of Vicky's first workout sessions to her most recent. I feel that despite all of the sudden attention being heaped on her, she is a normal 19 year old girl with all of the aspirations, dreams and desires of any other teenager plus some added extras, one of which is obviously to beat the Australian Amazon, Bev Franks. Vicky feels that their confrontations will be a classic showdown - down to the last Deadlift! Both of them feel like writing to the people at the Guinness Book of World Records in order to set them straight - it seems like Mr. McWhirter may have been misinformed as to who the strongest Woman in the World is.....

VICKY'S ROUTINE

As is the case of most champion powerlifters, her routine stresses two major axioms: CYCLING AND SIMPLICITY. She trains on a basic three days per week schema, working Benches three times, Squats twice and Deadlifts once. As far as assistance exercises are concerned, they rarely if ever record them since they are always engaging in some sort of adjunctive work or another - shot put, discus, javelin, plus a few turris around on the universal gym during the free hours at school. PLUS HER REGULAR POWER ROUTINES - amazing! You have to remember that Vicky is not only immensely strong - she has



VICKY GAGNE...pulling herself into the Number One spot in Women's DL history

the boundless energy of a teenager which allows her to pursue many of her activities. Vicky's hobbies are pool playing, gardening and boys (not necessarily in that order) and she maintains a B plus average as a Business major at Harbor Community College. Vicky would be doing a very nice young lady a major injustice if I failed to make mention of Vicky's very capable training partner, herself a National champion and most probably the next World Superheavyweight Women's champion - Wanda Sander. Wanda, like Vicky, is a large-boned immensely strong youngster (19 years old) and has the capacity for almost unlimited work. She is shy and soft-spoken while Vicky is bubbly and outgoing but at the Women's Worlds this year in Hawaii - her lifting will shout forth loud and clear - America's best wishes to with both of them. The poundages outlined are what were used one month before Nationals. As previously stated, assistance moves were done sporadically but the girls did concentrate on such basics as

Wanda is similar except with slightly less weight.

8 JAN. BENCHES 135x10 175x6
225x3x3x3x3 P on all 150x20B
SQUATS 135x10 225x6 295x5
300x5x5x5 440x6PAR, 470x6PAR,
500x5PAR.

11 JAN. BENCHES 135x10 175x6
225x5x5x5x5x4 220x3 D. LIFTS
135x10 225x6 295x5 385x3 435x3
370x5x5

13 JAN. BENCH 135x10 175x6
210x5x5x5x5x5 155x10N, 165x10N
SQUAT 135x10 225x6 295x5 360x3
410x2 430x1 360x5

15 JAN. BENCH 135x10 175x6
230x3x3x3x3x3 155x10N, 165x10N
D. LIFTS 135x10 225x6 295x5 390x3
440x3 385x5

18 JAN. BENCH 135x10 175x6
235x3x3x3x2x1 155x15B, SQUAT
135x10 225x6 295x5 365x3 415x2
365x5



The proud coach and father of Vicky, Mr. Bernard Gagne of Carson, CA.

A very skilled Wanda Sander, on the victory stand in West Lafayette, IN.

21 JAN. BENCH 135x10 175x6
225x5x5x5x5x5 155x4B D. LIFTS
135x10 225x5 315x5 400x3 450x3
400x5 510x5PAR, 560x3PAR

23 JAN. 135x10 185x5 240x3 245x2
235x3x3x3 155x18B SQUAT 135x10
225x6 295x5 340x5x5x5x5

26 JAN. BENCH 135x10 185x5
220x3P 225x3P3x3P3P3P 175x9 N
185x7N SQUAT 135x10 225x5 295x5
370x3 435x1 450x1 385x5

28 JAN. BENCH 135x10 185x6x6
210x5x5x5x5 P 155x19B D. LIFTS
135x10 225x6 315x5 405x3 460x3
405x5 530x3x3PAR, 500x5PAR

30 JAN. BENCH 135x10 185x6 235x3
250x3P 235x3x3x3x3 180x9N 190x6N
SQUAT 135x10 225x6 295x5
345x5x5x5x5

2 FEB. BENCH 135x10, 185x6,
215x5x5x5x5x5 SQUAT 135x10,
225x6, 375x3, 420x2

4 FEB. BENCH 135x10 185x6
230x3P3x3P3x3P3P D. LIFTS
135x10 225x6 315x5 415x3 470x3
410x5 530x5PAR

Well, that's it. Vicky is the first teenager to break 1000 lbs and the 1100 lb mark, and should break the 1200 mark at the Worlds when she lifts against Bev Francis. Both Wanda and Vicky are only 19 years of age. Vicky's biggest problem is making weight since she is 5 feet 7 inches tall with a large frame. What is needed in the near future is a new class for heavy girls that are now starting to really grow and to encourage others to do the same with a greater choice of which class is right for them.
/s/ Bernie Gagne

WANDA SANDERS PROGRESS CHART
SANTA CRUZ
4 MAY 80 (187) 225 125 265 615
POLICE ACADEMY
15 JULY 78 (197) 240 145 325 700
17 AUG 80 (188) 380 215 410 1005
MEN'S MEET, GRANADA HILLS
8 OCT 78 (206) 255 150 325 730
SAN PEDRO YMCA MENS
27 DEC 78 (207) 290 160 350 800
STATE MEET, SAN FRANCISCO
28 JAN 79 (208) 292 165 341 739

SANTA CRUZ
24 MAR 79 (188) 335 195 405 935
NATIONALS, MASHUA, NH
20 MAY 79 (181) 330 192 402 925
WOMEN'S REGIONALS, CONCORD
27 OCT 79 (181) 360 200 400 960
NATIONALS, CULVER CITY, CA
27 JAN 80 (183) 374 209 435 1019
WORLDS, LOWELL, MASS
4 MAY 80 (181) 374 187 429 982
VENICE BEACH
15 JULY 78 (197) 240 145 325 700
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STATE MEET, SANTA FE SPRINGS
23 AUG 80 (181) 374 214 424 1014
IRON MAN & WOMAN-SAN JOSE
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NATIONALS, INDIANA
8 FEB 81 (218) 424 242 462 1129

SANTA CRUZ
24 MAR 79 (206) 315 175 375 865
NATIONALS, MASHUA, NH
20 MAY 79 (201) 314 181 363 859
REGIONALS CONCORD, CA
27 OCT 79 (209) 350 195 390 935
CULVER CITY NATIONALS
27 JAN 80 (214) 341 209 363 914
STATE MET, SANTA FE SPRINGS
23 AUG 80 (221) 325 181 347 853
IRON MAN & WOMEN-SAN JOSE
6 DEC 80 (217) 402 220 407 1029
NATIONALS, INDIANA
8 FEB 81 (218) 424 242 462 1129

VICKY GAGNE'S PROGRESS CHART
POLICE ACADEMY, LA
30 APR 78 (183) 250 140 280 670
SANTA CRUZ
19 JUL 78 (181) 265 150 315 730
POLICE ACADEMY
17 DEC 78 (181) 270 160 325 755
SAN PEDRO YMCA
27 DEC 78 (181) 315 175 360 850
CALIFORNIA STATE SF
28 JAN 79 (183) 319 181 374 876
SANTA CRUZ
24 MAR 79 (188) 335 195 405 935
NATIONALS, MASHUA, NH
20 MAY 79 (181) 330 192 402 925
WOMEN'S REGIONALS, CONCORD
27 OCT 79 (181) 360 200 400 960
NATIONALS, CULVER CITY, CA
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Vicky, with one armful of loot from the Nationals and the other around Bud Mucco, coach of the Olympic Health Club, winner of the Team Trophy.

Nutrition Corner

BY JACK DIGANGI

ZINC

The latest rage in popular nutrition is not really all that new. In the 50s, Zinc was found to be necessary for human function. It is second only to iron in quantity by the body.

Zinc is widely spread throughout the body. It functions as an essential component for certain nutrients, as a co-factor for enzymes and as a structural component for certain proteins. Zinc, along with vitamin C, iron and protein, is a necessary component of the connective tissue, collagen. Collagen is that fibrous tissue which binds the cells together. As a co-factor, zinc is a part of many enzymes - those keys to unlocking vital reactions.

Any growth increase would increase the need for dietary zinc. Pregnancies, young children, and lifters during the growing season all require increased zinc. Zinc has been linked with taste and appetite disorders. This is still under investigation.

Sources include just about all foods. Generally, the animal sources such as organ meats, liver, oysters and muscle meats contain more zinc than do the plant sources.

Fiber seems to chelate or bind-up zinc in the body. An overabundance of fiber, therefore, may cause a lowered availability of zinc.

My suggestion for acquiring the R.D.A.s 15 mg. of zinc daily is to follow a balanced diet - keeping your protein intake about 15-25 percent and your vegetable and fruit intake about 50-55 percent.

Could zinc supplements increase your sexual capacity, stimulate hair growth, improve your sense of taste or add 30 lbs. to your bench?? Unfortunately,.....

Strongly yours,
Jack Digangi, R.D.
Administrative Dietician

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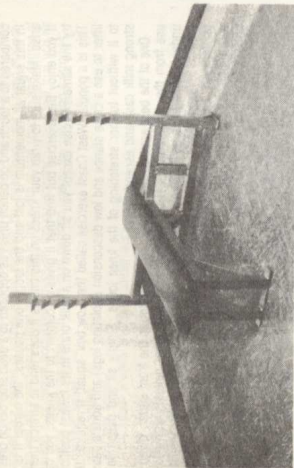
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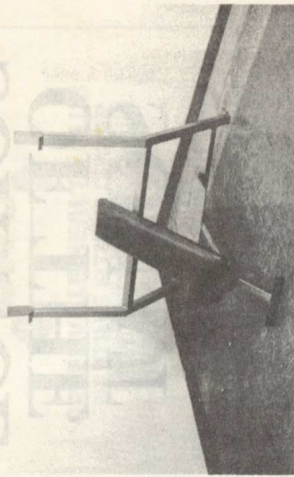
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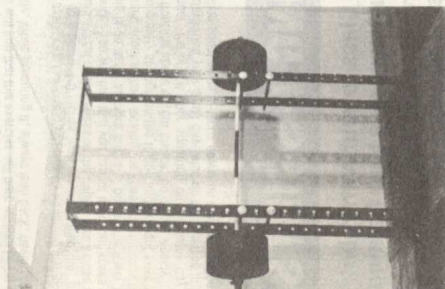
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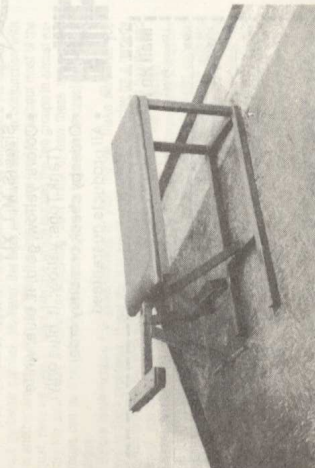
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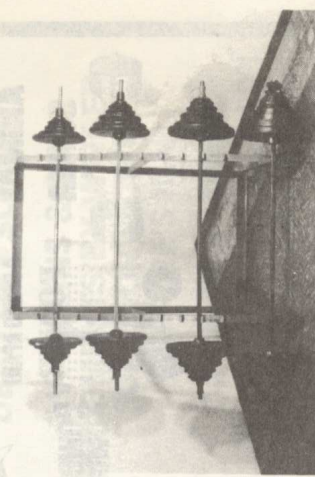
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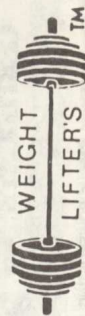
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SCIENCE OF THE SQUAT

by Pete Vuono

By popular acclaim, Pete Vuono is following up his well-received series on the bench press with a series of articles dealing with squat training. These articles represent a condensation of years of reading and evaluation, and should prove very useful for lifters of all levels of capability. If you wish to correspond with Pete his address is 342 Forest Ave., Brockton, Massachusetts 02401.

4. THE OVERCOMING OF STICKING POINTS—Sticking points (or an area in the squat where one cannot breakthrough to ascend) are caused by a variety of reasons but some important ones are: a. because the muscles involved in that particular phase of the squat are weak, or b. because that particular area of sticking is in an area of poor leverage. Whatever the reasons are, they can possibly be eradicated through one of the following techniques: A. making the squat more difficult by changing the angle or by using a special device, or B. isolating the weak muscle involved in sticking by using assistance exercises which work the muscles involved in a similar but different angle than that of the competition squat. We will explore both techniques separately.

A. MAKING THE SQUAT MORE DIFFICULT—There are several exercises that you can do to make the squat more difficult and consequently strengthen your squat. First, simply take a light weight out of the squat rack and do squats with a close stance, bar up high on the trapezius muscles and go all the way down keeping the back straight. This is the "Olympic squat" and isolates the legs requiring less usage of lower back and hips and forces the lifter into lower depth, therefore making this lift much harder. Another

exercise is the "Pause" squat. This exercise duplicates the above except the lifter comes to a full stop at the bottom and pauses briefly before ascending. It can be compared to all momentum and go bench press as opposed to a dead stop bench press. In this squat all momentum is lost and the longer one pauses, the harder it is to arise. Make sure to wrap your knees on this one as it does tend to stretch them. If you enjoy this exercise but find that it gives discomfort to the knees, you can try the same exercise except you sit down on a milk crate in its lowest position. This is a popular "West Coast" exercise called the "Low box" squat. It requires the lifter to use a close stance and low descension (isolating legs) and adds a pause to it without turning, stretching of the knee joints. Simply sit and pause on a strong milk case and ascend at will.

One of the best assistance exercises for squatting is the front squat, given to us by the olympic lifters. Hold the bar across the front deltoids with palms under the bar grasping it. Take a close stance, this isolates the legs because it is difficult to lean forward. If you do lean forward, you'll lose the lift, having the bar fall forward. When more quadrep isolation there are 3 front squat variations warranting explanation. The first is, a front squat with the hands and wrists wrapped on top of the bar and lean under it. This makes the average slight even more so to the legs. The second, developed in the West Coast, take the bar off the rack in a front squat position, wrap your hands under the bar grasping it. Descend as usual but upon ascending, thrust the hips forward and lean back slightly. "Step squat" it, too, was developed in the West Coast. Put heels on top of the bar. Now lean back and put hips forward conceiving body forward. Keep this position and start squatting. You will find that this exercise will burn without using weight so start slowly and lightly. While executing it, always lean back, never come forward.

For a few other squat assistance exercises, you may try squatting olympic style with heels propped up on a board 4-6 inches high. This is called the "incline" squat and once again puts a great deal of stress on the thighs. Use a close stance of about 11-12 inches wide. You will find that you cannot lock your knees due to the extreme incline. This is an asset as more stress is put on the lower thigh. Finally, doing an olympic squat without locking the knees (Continuous tension squat), can also serve to greatly strengthen the thighs and prevent knee injury. Choose one exercise from the above of your choice. Do it once weekly in addition to your regular squat. Perform it after squatting on the same day or on another day at least 3 days from your squat day. Also do the exercise in higher reps than your competition squat so as to focus power on the competition squat only.

B. DEVELOPING THE MUSCLES INVOLVED—

Before utilizing various assistance exercises which develop the squatting muscles one must find out exactly which phase of the squat is weak and know which muscles are involved in this weak phase. If your squat sticks from below parallel to a couple of inches above parallel, the quadriceps are in need of work. This will vary with each lifter according to the width of foot spacing and degree of leaning over which both take stress off the quadriceps. If you feel that you do however, need leg strength, you may perform one of the following exercises:

- olympic squat
- barbell squat
- front squat
- front squat (hands on top or under bar)
- step squat
- high squat
- squat with heels on 4-6 inch incline board
- continuous tension squat
- back squats
- squats on isokinetic machines

All of the above exercises can be done in the 1 1/2 inch rep system. This is descending below parallel, coming up half way, going down again and arising all the way up. This constitutes one rep and helps concentrate on the low sticking point of the squat.

OTHER EXERCISES:

- low starts on power rack
- leg extensions
- squatting done on one leg
- call exercises
- leg bicep curls

If you are weak from a few inches above parallel to completion, the lower back and hips have command here. Once again, it varies with the foot space width and degree of leaning forward. For this phase, you may try one of the following:

- bench squat to 18-20 inch bench
- wide stance half squat
- squats using touch method
- squats started from middle position of the power rack (emphasis on lower back)
- good mornings from 60 degree to 90 degree angle
- stiff leg deadlift
- hyperextensions

Choose only one of the above exercises for your sticking point. Do the exercise only once per week on the same day of your squat after squatting or alone at least 3 days after your competition squat day. Always do repetitions that are higher than the ones that you do with the competition squat so as to focus power on the competition squat only.

C. THE GOOD MORNING EXERCISE—

It is rare that anyone would devote a whole chapter on only one assistance exercise. However, the good morning exercise or the "bencher" exercise has the potential to increase your squat and deadlift on a one to one relationship. That is, each time the good morning exercise is improved upon, so too could the squat and deadlift automatically. This would greatly help reduce the amount of assistance exercises utilized since it works two of the contested lifts.

The good morning exercise is also very unique in that it is one of the very few exercises which isolate the lower back. The squat emphasizes the legs or all the squatting muscles together. It is difficult to isolate the lower back with one another are much stronger than the legs and are used throughout most of the squat. Here we have an ideal exercise which isolates the two groups in almost exactly the same way as used in squatting. Just think of how these two muscle groups can be strengthened while leaving out the legs and not causing extreme fatigue.

Before implementing the good morning in your routine, make sure that you have no back problems. If you do, it is possible to use the exercise for a remedy for that problem but with extremely light weights only. If your back is healthy and sound, you can be able to handle substantial weights with the exercise.

No matter for what purpose you use it, always stretch thoroughly the upper and lower hamstrings and the entire back and hips. After this warm up, very slowly work into the exercise using the first month to acquaint yourself with the style and feeling of the lift. This is now it is performed: hold the bar one inch below the top of the deltoids. Bend the knees from 10 to 20 degrees to relieve the pressure on the hamstrings. With control, look up and bend over until your back is at a 90 degree angle or parallel to the floor. If you are not sure of your position, perform the lift with a full length mirror in front until you acquire depth perception.

Repetitions are your choice but I would recommend five sets in the following manner: 10, 5, 5, 5, 1, 5. My personal routine has been: 135 x 5, 185 x 5, 225 x 5, 325 x 5, and 420 x 5. Once again, if your back be sound, there is no reason to believe that you cannot work up to enormous poundages. Perform it once per week for 6-8 weeks and see if your squat and deadlift don't markedly increase.



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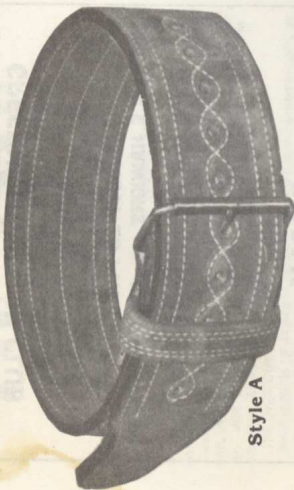
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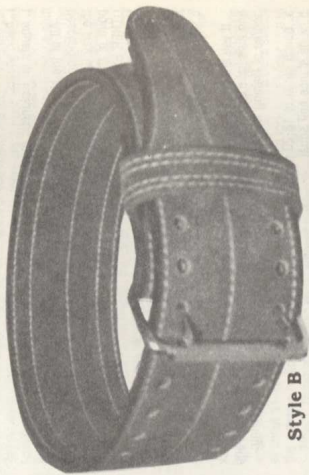
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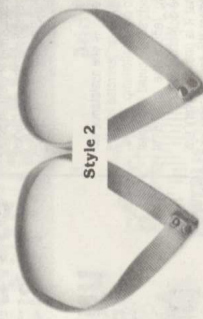
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The Biomechanics of Powerlifting

by Tom McLaughlin, Ph.D.
Director, Biomechanics Laboratory
Dept. HPR, Auburn University
Auburn, Alabama 36830

Dr. Tom McLaughlin's credentials as a researcher in the field of Powerlifting are impressive. He has had articles published in MEDICINE AND SCIENCE IN SPORTS, RESEARCH QUARTERLY, JOURNAL OF BIOMECHANICS, AND THE ENCYCLOPEDIA OF PHYSICAL EDUCATION, FITNESS, AND SPORTS and he has made presentations to such groups as the AMERICAN COLLEGE OF SPORTS MEDICINE, the AMERICAN SOCIETY OF BIOMECHANICS, and the INTERNATIONAL CONGRESS ON SPORTS SCIENCES. Following graduate studies at the University of Illinois at Urbana-Champaign, he became an Assistant Professor at Auburn University, Director of the Interdisciplinary Biomechanics Laboratory, and a Co-founder of the National Strength Research Center, where he is now Director of Biomechanics and member of the Executive Committee.

PART I: 'Biomechanics and the function of biological systems. Since most Powerlifters these days are still mainly biological systems, Biomechanics research involves investigating both the internal forces (muscular, ligamentous, etc.) and the external forces (friction, weight, etc.) that act on the body during a lift. Basically, when it comes to determining such things as the best technique one should use in the squat, bench press or deadlift or how to perform an assistive exercise to best work a muscle group...Biomechanics can be of help.

Over the past two decades, significant progress has taken place in the field of Biomechanics, resulting in a number of technological advances that have greatly simplified scientific analysis. In particular, contemporary Biomechanics research heavily utilizes computer technology, high-speed cinematography, muscle electromyography and force-plate systems.

Using this present day technology, it is possible for Biomechanics research to provide answers to a number of questions of concern to the Powerlifter, for example:

(1) **TECHNIQUE ANALYSIS** - Utilizing high speed cinematography and computer modeling techniques, both two and three dimensional studies can and have been done analyzing Powerlifting techniques. As an example, our laboratory's research film library includes records of the 1974, 1978 and 1979 Senior National Powerlifting Championships, 1979 World Championships and the 1980 Auburn World Series of Powerlifting meets along with training and research session films of Kazmaier and other NSRC athletes. While most studies to date involve analysis of the techniques of top lifters versus beginners and intermediates, we have recently completed an optimization study in an attempt to determine the 'best' technique for an individual in the bench press.

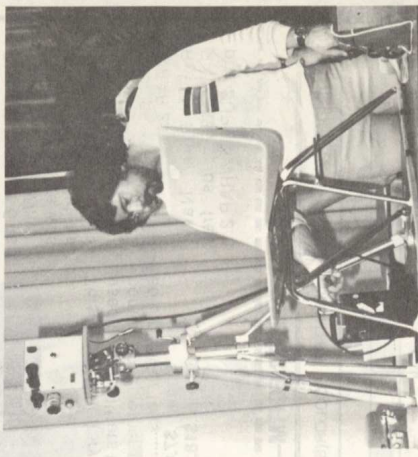
(2) **ASSISTANCE EXERCISES** - Certainly one important question for the

Powerlifter involves how best to train specific key muscles involved in the Powerlifts. However, only limited work has been done to date, mainly incorporating electromyography (which involves monitoring muscle activity) synchronized with cinematography. Possibilities abound here for future research.

(3) **INJURY PREVENTION AND REHABILITATION** - What are the stresses placed on muscles and connective tissue during training? Although little work has been done here to date, future work should ultimately lead to guidelines for the tolerances permissible without injury. Cooperative work with orthopedists and physiologists should also help answer important questions on rehabilitation for the Powerlifter.

(4) **TEACHING/BIOFEEDBACK** - Using biomechanical information as feedback to help Powerlifters learn new techniques, eliminate bad habits, etc. is also a promising area. In our laboratory a system has recently been

Well, those are some of the potential ways that Biomechanics can help answer questions of interest to the Powerlifter. I'll begin next month with a look at the Biomechanics research completed so far on the techniques of the SQUAT.

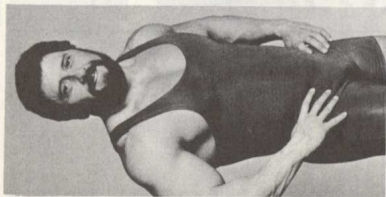


ABOVE: Dr. Tom McLaughlin supervising the setup of high speed cinematography equipment at the World Series of Powerlifting meet, where data was gathered on the actual competitive lifts of Powerlifters for scientific evaluation and research.

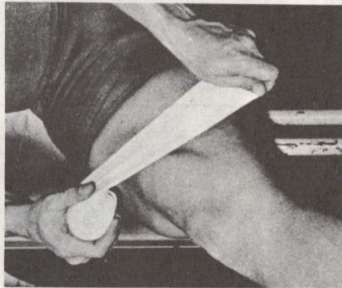
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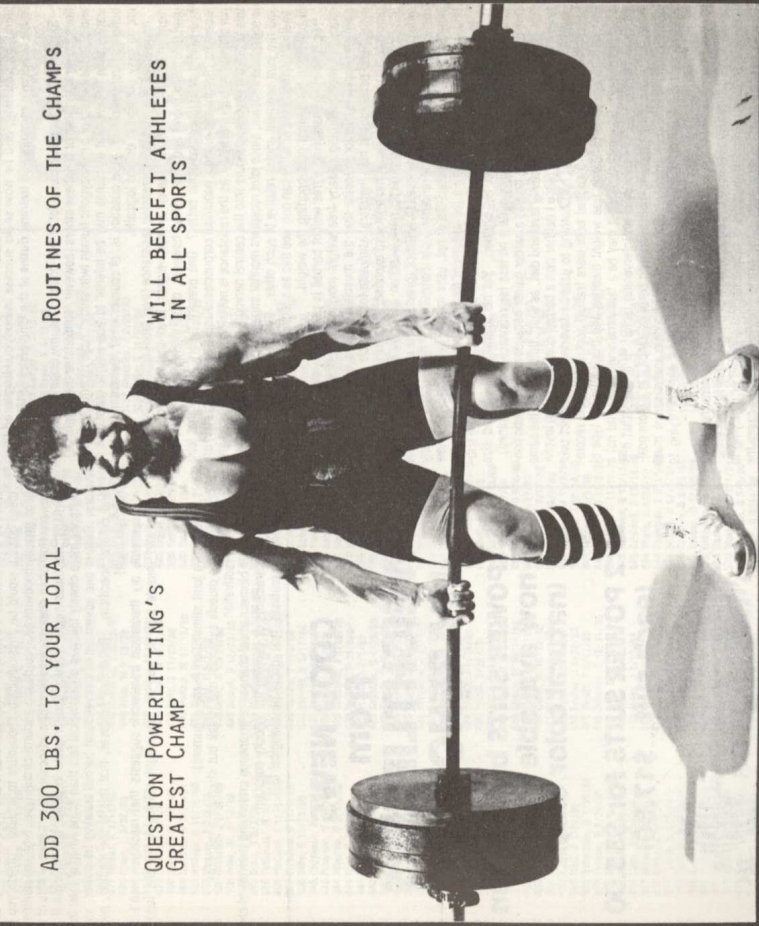
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POWER-RESEARCH

dedicated to bringing Science to the sport of Powerlifting. A Theoretical Framework Do Barbells Build Power and Size Better than Machines?

Jeff Everson, R.P.T., M.S. Director of Training, University of Wisconsin

Many people in PL USA readers, Jeff Everson is in the middle of research that may lead to the long awaited scientific answer to the question raised in the title of this article. His experience encompasses track & field, Olympic lifting, Powerlifting, and he now seeks success in bodybuilding on addition to his academic pursuits and training duties at the University of Wisconsin.

Simply writing this title raises a lot of self-doubt. Yet, my empirical observations, along with those of countless others (however, opinionated they might be), lead me to believe that machines may be inferior to free-weight resistance in building size and power. The question is, of course, why? Believe me, this is not an easy position to defend logically.

Improving a progressively increasing resistance (over time) against a body segment, by machine or by free weights, is all that is essentially required to build strength and size. Why, however, do so many people insist that free-weight resistance and size is better? One present theory argues that joint receptors (Ruffini end organs, etc.) are stimulated by joint compression. This stimulates the nervous system, thus altering the perceived inputs into the central nervous system. This argument is somewhat dubious, since joint receptors monitor joint position, not speed and the joint segment angles, I can only see this as a trainable aspect in the case of balancing the weight or supporting the weight.

The problem of balancing a free weight barbell is primarily a skill phenomenon related to motor learning. Many free weight movements, because balance is such an important factor, require that the muscles operate in more complex synergistic patterns and may therefore, stimulate total muscle development and power to a greater degree. A multiple joint exercise, such as a power clean may invoke a great deal of synergistic muscle action and may more appropriately imitate accelerative forces, as used in athletics (provided the power clean is done correctly). However, this is another topic, completely. Remember, this is any weight lifting move, whether machine or not, uses muscle synergism. As I view this, muscle synergism is only a fair argument for the free-weights. In my monozygotic or identical twin study (to be published), the machine subject was more motivated than his brother. Yet his overall strength and size gains, at first observation, seem quite a bit less (significance to be examined). One cannot logically state that he was a harder gainer because of the genetic control. Both were matched in activity level and diet, as well. Both were at the same level of initial training state. Since neither own a barbell company or am involved in a machine franchise, I had nothing to gain by favoring one subject over another in training. I will state that both were trained according to the recommended literature, as concerns free weight theories and this particular type of machine theory. So, keep in mind, it may be a faulty training theory, and not a faulty machine! I see motivation as an intervening factor. It appears that it is much easier to maintain training motivation with barbells, since it is a more goal-oriented and repetitive activity. For the sake of a fair analysis, we must assume that level of motivation is a common factor since we are trying to demonstrate a training difference.

There are many important factors concerning the muscular system that many people have completely overlooked. Perhaps some of the attempts to alter efficiency resistance, according to guesses of biomechanical changes or by trying to reach velocity production, are steps in the wrong direction. In many cases the body's muscular-skeletal system is not constructed to increase muscle force when and where a particular machine might be loading it differently. This is the body's wisdom of millions of years of evolution in handling dynamic motion. If the muscles can't generate increased force, because the skeletal leverage is more favorable, does it go any good to overload it at that area? For instance, more leg stretching exercises, by pulleys or odd shaped can arrangements, increase the leverage as the lower leg soles an arc up to 180 degrees with the femur. This is not possible at all, as the femoral head is at the end of the range of motion. This is a physiological error. Since a muscle will fire to its maximum where the leverage is the worst (such as 90 degree position in the curl, so the curl should get easier as you approach full contraction, instead of harder, as in some machines). Every EMG analysis I have seen suggests that the quadricep muscles can generate less force as you approach 180 degrees, not more. Another problem overlooked by the biomechanically with persons of different limb lengths. This cannot be corrected by simply adding seat pads because changing the point of axis rotation does not correct limb length discrepancies. If you feel that a biomechanical machine can, then try and fit a 4

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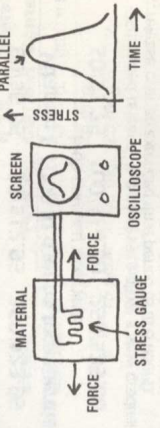
THE REDESIGNED ELITE SUIT

by Chip McCain, designer

Since the initial construction of the Elite Suit, three years ago, many changes and improvements have been made. I would like to take time here to explain on a technical basis the research and methodology used that led to the 'Redesigned Elite Suit' now available.

During the years of research I have done, the following premises were adhered to:

1. A suit is only as strong as its weakest point.
 2. It is the pattern of the suit, not just the tightness, that is of importance.
 3. If the optimum pattern is designed, thereby giving equal tightnesses, the more comfortable suit will be the strongest (by distributing the stress most evenly).
- The original Elite suits were an offshoot of the Spanjan wrestling suits. A diamond insert patch was used which is found mainly in athletic garments where flexibility and ease of movement are more essential. For Powerlifting purposes, a stronger material was used and the suit pattern was redesigned for restrictive hip support rather than athletic movement. I believed this to be the best design on the market at the time, but if the suit was to blow out, it was always at a sharp point of the diamond insert.
- The second phase of the Elite Suit was the innovation of the strip crotch. This design incorporated a strip insert in place of the diamond. The effect was to take away the sharp corners of the previous suit, thereby more evenly distributing the stress in the weakest area. At this point, another change was made. Giving the suit wider straps and side panels further STRENGTHENED the suit. A secondary result of this was to make the suit more comfortable. Refer back to premise 3 and consider the following: The straps and body of the suit transmit the stress down the back of the squatting lifter towards the crotch, the weakest area. The greatest per square inch area of the suit that can be used to transmit this stress, concomitantly, the increased comfort of the suit, complements this.
- The new, Redesigned Elite Suit is the product of highly technical laboratory testing at the University of Texas Engineering Department with my training partner, Dr. John S. Speer, who is a Senior Mechanical Engineering Major. There is a device called a stress gauge that is used to measure stress forces and breaking points of various materials such as metals, fiberglass, etc. Special thin square electrode chips designed for stress analysis are attached to the Elite Suit. Testing these chips are glued to an elasticized fabric which visually displays tolerance points and changes in stress of the fabric. The following is a graphic representation of the equipment used:



Stress gauges were placed at all the strategic seams of the suit and readouts were taken at 10 different depths of the squat, until parallel was reached. From here it was observed not only what seams were the most vulnerable, but at what depths were there changeovers in stress. By tightening some seams and loosening others, a suit was built that would not reach its tolerance point in the full squat position. Again, this made the suit even more comfortable, while of the greatest strength and support. The product of this research is the 'Saddle Seat' crotch, a gradual rainbow seam (hyperbola) across the whole butt, with no sharp corners of quick curves. As a matter of physics, a straight line crotch seam would be the strongest, but as a matter of feasibility, the contour of the buttock cannot be tailored that way.

Much more research has been done with types of fabrics, threads, stitching patterns and seam types. For reasons of product uniqueness, it is slated to leave these innovations unnamed.

I urge you to re-read the three premises I have worked by and try an Elite Suit. I feel all 3 have been accomplished and that the suit is truly scientifically designed for powerlifting.

To PL, Sincerely,

Chip McCain, President
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Two New 'FORMULAS' That Fit The World Records

by Dave Willoughby

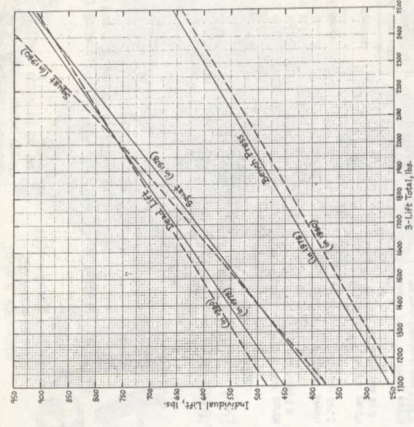
A long time student and practitioner in the Iron Game, Dave Willoughby has often stimulated interest and conversation through his articles in Peary Rader's IRON MAN Magazine, describing all manner of statistical analyses of various strength feats. Here, he relates some recent findings.

Recently, in looking over a list of the current world records in the Olympic lifts, I was struck by the fact that in each of the four lowest bodyweight classes the weights lifted in the Snatch kilograms, proceeded in the same manner as did the nominal bodyweight of each class in pounds, thus:

Bodyweight, lbs	Snatch, kg
114 1/2	111.0
123 1/2	121.5
132 1/2	130.0
148 1/2	147.0

Even closer correspondence, both in the foregoing classes and the next two higher ones (165 1/2 and 181 1/2 respectively) is shown particularly by the mean or typical bodyweight, rather than the maximum or limiting bodyweight, in each class. For example, a contestant in the 60 kg class could weigh anywhere from 126 pounds to 132 1/2 pounds. If he weighed any less than 126 pounds, he might choose to reduce the necessary 2 1/2 pounds or so, and compete in the next lighter bodyweight class. By similar estimations, supported by actual average bodyweights as derived from large numbers of contestants of whom the individual weights were recorded, the mean or typical weights listed in Table 1, were determined.

Relation of each of the 3 contributing Power Lifts to the Total and to each other.



2. Even minor changes through the years in lifting technique (Editors Note: the introduction of new or improved lifting equipment may also be a factor) cause changes in the relative poundages raised in the three Power Lifts. On this graph the dashed lines show the trend of these lifts in 1980, while the solid lines pertain to the year 1978. Note in particular the rapid increase in the poundages in the Squat during this period, along with a decrease in the Deadlift. These documented comparisons show the fallacy of rating performances in Powerlifting over a period of years by a fixed 'formula'.

express the trends in the Olympic lifts and the Power lifts respectively, as closely as is possible, must be evolved. The author invites constructive criticism.

One final comment. To 'rate' any individual weightlifting performance, it should be sufficient, as is done here in Table 2, simply to divide the adopted 1000-point poundage of the lift (or lifts) into the actual poundage achieved. Then multiply the quotient by 1000. Along with being a more simplified procedure, this yields a more understandable figure which the customary 'formula points' which super-heavyweight lifters as is 300 pounds today.

Whether the type of correlation shown here can be applied with equal assurance and 'fittingness' to other lifts of feats of strength remains to be seen. However, that the two graphs (continued on next page)

TABLE 1. 1000 point poundages in the Olympic lifts and the Power lifts, based on the World Records as of November 1, 1980

Bodyweight Class	Olympic lifts, lbs.			Power lifts, lbs.		
	Mean	Snatch	C&J	Total	Branch	D.L.
Normal	114	112.8	243	307	550	1283
	123	120.9	261	329	590	1371
	132	129.0	279	352	631	1460
	148	144.1	319	382	671	1552
	165	159.3	344	435	729	1625
	181	174.3	378	478	769	1687
	198	188.7	394	487	811	1757
	220	210.1	394	498	892	1827
	242	230.4	403	509	912	1877
	266	248.6	412	516	926	1911
SHW	320.0	442	500	1002	907	2490

1. World Records in the Powerlifting totals (upper graph) and the Olympic lifting totals, as related to the mean bodyweight in each class. For details, see text.

Sq. 319.5 = 821.5361 D.L. 578.5 = 854.7763
 B. 319.5 = 736.1751 T. 1444 = 806.2534

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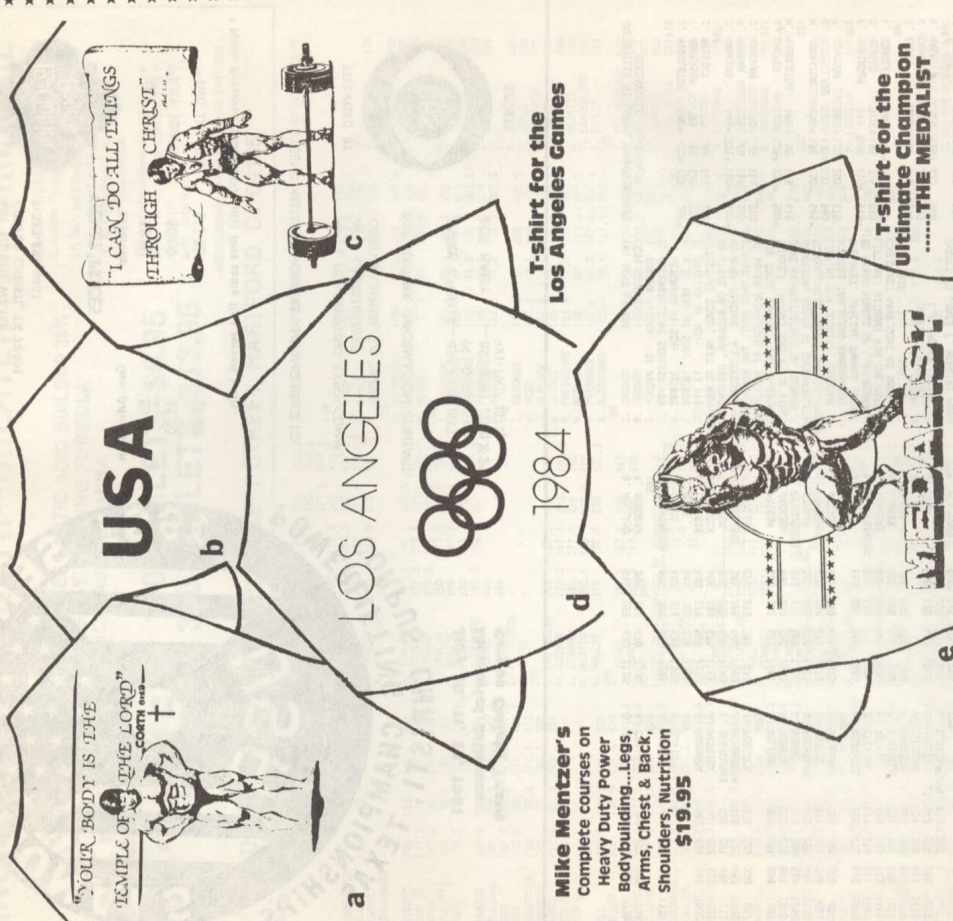
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custom tailoring to your specifications
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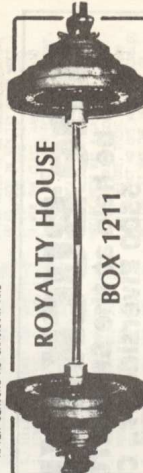
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COLOR CHOICE _____ SECOND _____ TRAINING STRAPS _____
KNEE WRAPS _____

NEW MEXICO CHAMPIONSHIP-2/7/81

J. SUN	225	210*	315	750	J. BASKINS	320	330	370	920
F. GALLEGOS	188				R. STACKPOLE	275	215	400	890
J. GARCIA	350*	210	405*	965*	M. PEREA	310	305	395	915
A. SILVA	325	195	350	970	R. HOLLTON	275	165	350	800
P. EYEBETT	210	190	290	690	M. SHANNON	265			
R. GONZALES	185	165	300	670	A. LEE	375	360	555	1290
M. ROYBAL	215	185	280	660	L. ADAM	370	300	475	1145
M. CIENDELO	185	185	250	620	R. LINCOLN	400	345	410	1065
K. TRUJILLO	380	205	460	1045	J. SCHOFIELD	305	270	405	980
S. DUNN	360*	250	430	1040	M. WELCH	285	215	400	900
P. LUCERO	295	225	365	880	R. MARTINEZ	225	150	345	720
M. DAVIS	225	185	365	775	B. STACKPOLE	545	390	500	1435
V. LOTRICH	240	140	276	--	R. JOHNSON	470	350	500	1320
M. HARRISON	470	245	485	1200	L. SANGREZ	460	345	450	1255
(GUEST)					R. WRIGHT	450	300	500	1250
J. HARRIS	360	230	435	1025	T. LOPEZ	450	330	480	1230
A. ESPINOSA	350	245	415	1020	R. SWELLS	390	305	365	1170
V. BARRELA	325	235	425	985	J. SWELLS	390	315	440	1145
P. CHAVEZ	360	190	425	975	H. BITTINGER	355	300	445	1100
M. MELNDEZ	360	210	390	940	J. BALDING	355	300	445	1100
A. MARTINEZ	285	190	365	840	R. REBER	200	145	270	615
S. LOFTUS	235	200	350	785	J. NUZ	200	140	270	615
J. JOHNSON	215	215	335	765	Z. CERENSEK	570*	390	650	1650*
M. SMITH	145	140	225	515	T. DURAN	440	350	520	1310
M. JEFFERYS	225				G. GLENNY	400	325	500	1225
J. GURILE	225				M. GERULLO	375	255	475	1105
J. SULLIVAN	225				R. GRIFFITH	550	340	550	1440
C. BARNES	450	315	470	1235	J. MCATEE	450	335	460	1245
H. RICHARDSON	380	260	480	1120	R. ROBINSON	475			
L. MC LALLAN	375	235	420	1030	G. PORTER	330	235	425	980
R. GRADY	325	275	420	1020	A. SHULTZ	605	430	620	1655
G. SPECTOR	380	220	410	1010	OFFICIAL NEW MEXICO ASSOC STATE				
M. SULLIVAN	315	225	440	970	OUTSTANDING TERNAGE LIFTER: A. LEE				
D. LEONARD JR	300	255	400	975	OUTSTANDING LMT LIFTER: S. DUNN				
D. SANCHEZ	310	255	400	955	NEW MEXICO LIFTERS ASSOC				
M. WHITE	320	250	380	950	7553 CAPLIN ROAD NE				
M. HARGAS	330	260	340	930	ALBUQUERQUE, NM 87109				



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"I have followed the Pacifico courses on the Bench for 2 years and my improvement has been obvious."
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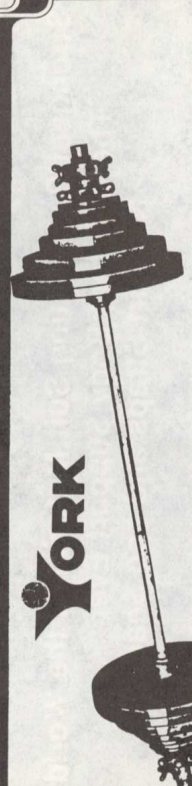
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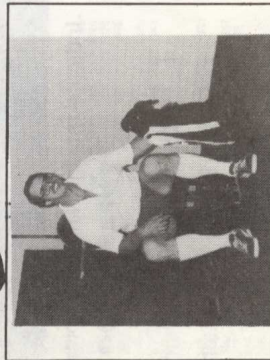


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Supersuit™ II

Natural

Supersuit™

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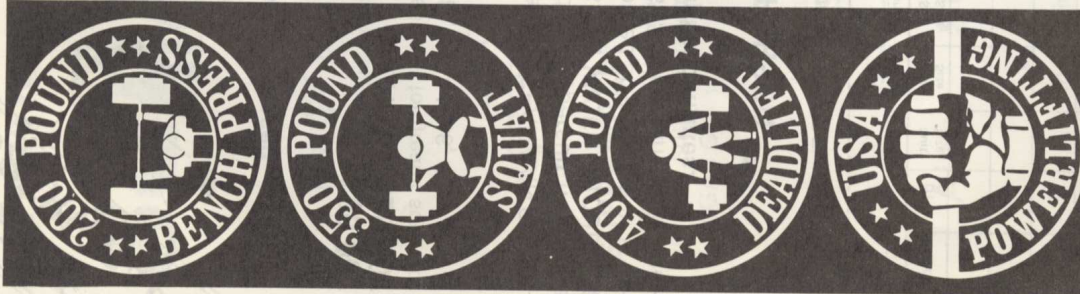
City _____ State _____ Zip _____

Item	(Height)	(Weight)	Suit Size	Suit Size	QTY.	EXT.
SUPERSUIT™ II						
SUPERSUIT™						
SUPERWRAP™ II						
SUPERWRAP™ II						
Special Instructions						
						Total

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800 MOON MEMORIAL--2/21--22/81--FINLAY, OH

114	B. REDDING(F)	107.5	50	124.5	292.5
8	R. WATTLING(F)	67.5	65	32.5	82.5
123	M. MCLEOD	82.5	92.5	140	315
1	A. PAPALIOS(F)	120	35	130	305
132	P. STEVENSON(F)	112.5	45	125	292.5
1	J. HEISLER(F)	105	62.5	112.5	280
148	M. SCOTT	444+6	-	-	-
8	M. AHL	257.5	132.5	257.5	657.5
1	D. SPRAGUE	210	125	225	560
1	G. KANIZILLI	175	125	205	525
1	D. PECK	140	60	137	332.5
8	R. STAM	82.5	85	142.5	310
1	J. BONDERS	75	77.5	127.5	302.5
1	A. JONTI	117.5	112.5	-	-
165	F. BAROSKY	212.5	150	267.5	630
1	L. MACKAY	252.5	157.5	310	620
1	G. MACKAY	252.5	157.5	310	620
1	G. MAJOR	300	155	210	665
1	G. NEFF	194+6	-	-	-
1	T. BOWMAN	194+6	-	-	-
1	M. BRIDGES	340	215	350	905
1	M. STEPHENS	337.5	147.5	257.5	635
1	B. EGLEY	235	155	240	630
1	D. FICKERT	190	122.5	227.5	522.5
1	T. BELONGE	202.5	120	215	545
1	D. BURCHERS	190	140	200	530
1	R. ARMSTRONG	224+6	-	-	-
1	R. BROWN	255	187.5	250	692.5
1	T. POWELL	257.5	167.5	205	630
1	J. CONNER	185	122.5	227.5	540
1	T. SHRIDDER	205	102.5	215	522.5
1	B. LEVISON	224+6	-	-	-
1	M. WAGER	224+6	-	-	-
220	L. PACIFICCO	242.5	240	297.5	880
1	D. DICKE	310	227.5	320	857.5
1	M. WICKERTS	330	220	304.5	852.5
1	R. WILSON	317.5	200	282.5	800
1	R. ZIMMERMAN	290	195	302.5	790
1	G. BURCH	365	160	265	690
1	M. JORDAN	355	165	265	685
1	V. SIMMON	312.5	205	252.5	525
242	O. MILLET	365	212.5	365	942.5
1	M. SPRAGUE	250	195	287.5	732.5
1	L. DOUGLAS	227.5	192.5	245	665
1	J. LINDAUER	227.5	150	227.5	605
1	M. BURCH	222+6	-	-	-
1	D. REED	372.5	197.5	240	810
275	T. TUBER	365.5	205	352.5	920
1	T. PAULUCCI	327.5	205	387.5	812.5
1	T. MARTIN	260	170	277.5	702.5
1	C. YELTON	285	172.5	295	762.5
1	A. COOPER	295	172.5	295	762.5

THANKS TO ASSOCIATE EXECUTIVE FAAS, FOR RESULTS.

CLOSED PL MEET 1/24/81-BELLEFRONTE, PA

114	A. ZENILLA	345	190	410	945
123	C. JACKSON	275	200	325	800
148	T. REYNOLDS	235	200	300	735
1	J. FOSTAR	350	215	430	995
1	J. HIPPS	350	235	390	975
1	T. BELDEN	340	185	325	755
165	S. MANTTO	500	270	530	1300
1	D. DWYER	410	250	400	1070
1	R. BRZYCKI	335	250	390	985
19	S. SOLOMON	475	305	598	-
1	C. LANE	425	300	500	1225
1	M. CARROLL	275	175	315	765
1	B. WENNER	425	300	475	1200
1	M. JACKSON	275	150	360	685
220	SMW	440	225	580	1245
1	J. SELBY	420	265	500	1185
1	C. SUPLEE	300	270	325	895

THE RECREATION DEPT. WOULD LIKE TO MAKE THE CONTEST A SUCCESSFUL TO THANKS TO BOB MILLER AND DONALD STINE OF SCI ROCKVIEW FOR RESULTS.



ABOVE...Larry pulled his adductor on this attempt, which kept him out of the Hawaii meet.



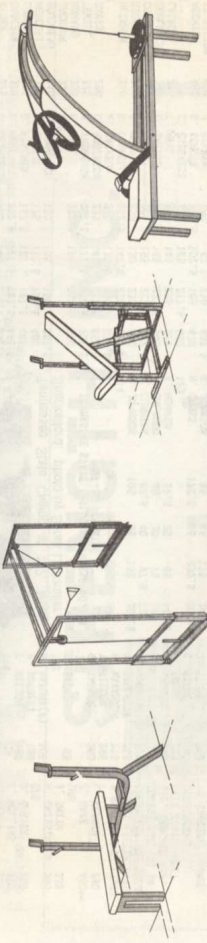
RIGHT...Barb Wedding made quick amends for her Nationals bombout, with 4 Women's World marks

Many of the big names had troubles at this meet. The judging was very precise and bothered some lifters. Bridges missed several big SO attempts, but, as in Phoenix, made up for it in the deadlifts. Steve Daugherty was looking immense prior to the meet and expected much more, particularly in the bench. Mark Chailley was one of the few who really cooked. Larry's difficulties opened the door a crack for Doug Dicke, who tried the winner DL.

BELOW...Yes, Larry was able to deadlift, but has since reinjured his hand while assembling his son's soap box racer. All photos courtesy of John Faas.

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Strong enough to bear the strain...man enough to take the pain!

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SUPERKAL PLUS-PAK
 30 DAY SUPPLY \$18.95

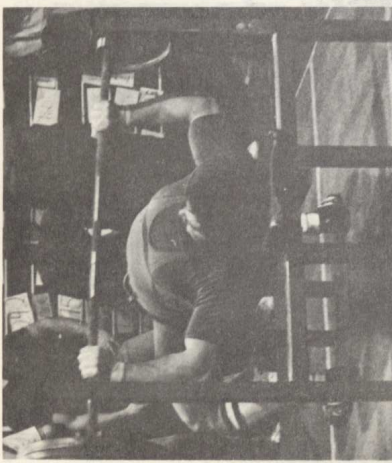
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Tom Hardman weighed a full 274, and drove this 598.2 to completion smoothly. This is Tom's 4th World Record set while under the "duress" of attending medical school at the Medical College of Georgia... apparently all of this adversity has brought out the best in me," says Tom. (photo courtesy of Brother Bennet.)

- MISSISSIPPI UNIVERSITY-2/27/81
 BAY ST. LOUIS, MISS.
- R. HURKES 649 413 440 1396
 T. HARDMAN 137 598 137 877
- SH
- R. ATKINS 485 413 551 1449
 S. ASKE 485 413 551 1449
- MISS. STATE RECORD
- BEST LIFTER: DAVE DAVIS(148),
 358* 209 396 964
 J. SPEER 231 187 303 722
- M. DOBBINS 319 253 402 975
 R. BLAZIE 352 198 341 892
- WORLD RECORD: TOM HARDMAN BENCH
 490 281 529 1300
- D. DAVIS 308 198 435 942
- M. FERGUSON 308 198 435 942
- R. KOBETZ 143 143 661 548
- 181
- J. LAJNER 562 380 600 1543
 M. DOBBINS 556 347 552 1466
 C. OESER 501 246 373 1382
- 749* 435 722 1906
- 881* WITH ATT. MAR 1829
 L. PLUMLEE 617 418 628 1664
- P. BELMER 523 429 589 1543
 R. CRAMFORD 529 336 523 1388
- K. JONES 473 308 501 1284
- 242
- M. MILLER 501 314 501 1256
 D. LOTT 650 435 722* 1807*
- 123
- K. DAVIS 358* 209 396 964
 J. SPEER 231 187 303 722
- M. DOBBINS 319 253 402 975
 R. BLAZIE 352 198 341 892
- WORLD RECORD: TOM HARDMAN BENCH
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- D. DAVIS 308 198 435 942
- M. FERGUSON 308 198 435 942
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- J. LAJNER 562 380 600 1543
 M. DOBBINS 556 347 552 1466
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- 881* WITH ATT. MAR 1829
 L. PLUMLEE 617 418 628 1664
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 R. CRAMFORD 529 336 523 1388
- K. JONES 473 308 501 1284
- 242
- M. MILLER 501 314 501 1256
 D. LOTT 650 435 722* 1807*

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MARINE CORPS RECRUIT DEPT OPEN-7/8 MR/81
 SAN DIEGO, CA (KILLOS)

J. SANKER-97	98*	42.5	128*	82.5	
C. SWIN-123	105	70	132.5	307.5	
S. FARRER-132	82	55	117	255	
C. SCHALOW-148	87.5	47	102.5	237.5	
C. PEASON-148	67.5	40	92.5	164	
D. FLEMING-132	70	37.5	102	177.5	
S. SULLAWAY-132	67.5	35	92.5	195	
123	MUSKIEWICZ	162.5	107.5	182.5	452.5
132	F. HERNANDEZ	157.5	105	205	467.5
133	D. PICOLE	172.5	105	185	462.5
134	C. SARTLOCK	135	97.5	225	457.5
135	F. BAVER	145	100	192.5	337.5
136	L. WELBET	87.5	60	122.5	270
137	M. GIBBY	182.5	130	200	612.5
138	M. LUKAS	170	142.5	170	482.5
139	M. JAMES	185	115	147.5	447.5
140	R. WELBET	155	112.5	167.5	435
141	G. MEVAKER	247.5	142.5	240	630
142	D. WALKER	225	127.5	227.5	580
143	P. REISCI	220	122.5	220	562.5
144	C. WILSON	220	122.5	220	562.5
145	T. CONRAD	190	107.5	210	507.5
146	D. GANGER	162.5	107.5	217.5	487.5
147	D. STEKER	155	120	192.5	477.5
148	P. GERMANY	122.5	112.5	157.5	392.5
149	G. STEVENS	161	160	245	680
150	P. FESSLER	242.5	172.5	242.5	657.5
151	J. RETVA	227.5	137.5	250	615
152	G. WHITTARD	195	125	275	605
153	J. ROYAL	182.5	125	192.5	520
154	J. SANDERCOCK	182.5	125	192.5	505
155	J. KILLIN	177.5	110	217.5	500
156	D. SALLIE	150	112.5	192.5	460
157	D. HUNTINGER	102.5	87.5	151.5	342.5
158	G. FRIED	192.5	122.5	245	640
159	B. BUSH	225	165	282.5	702.5

FUTURE DOCTOR TOM HARDMAN DID A TONK SQUAT AND DEADLIFT. HE HAD COME TO SET A WORLD RECORD BENCH PRESS AND THAT IS WHAT HE DID. HE LIFTED 490 KILOS OR 1080 LBS. LESS STEEL ONE KILLO AND ONE HALF KILO PLATES THE BAR WAS LOADED TO 273 KILOS OR 601 LBS. WITH THE OPERATORS...PUSH FROM COME ON, TOM...PUSH! TOM PUSHED SLOWLY...STEADILY UNTIL THE FINAL RECORDING...HE BROKE A NEW WORLD RECORD! THE WEIGHTS WERE BROKEN DOWN FOR THE FINAL COUNT BY THE 3 JUDGES...HE BROKE THE OUTCOME WAS 598.2 KILOS OR 1320 LBS. A 275 LB CLASS.

THIS YEAR COLOR TELEVISION WAS BROUGHT TO THE MEET. JACK & ANITA WAS GETTING DRAB ONE OF THE NICEST ADDITIONS TO THE MEET WAS THE PRESENTATION OF AWARDS BY THE JUDGES. SELECTED BY THE JUDGES DAVIS. WISH I HAD A PICTURE TO SEND YOU. IT WOULD BE WORTH PUBLISHING...PROBABLY BOOST YOUR SUBSCRIPTIONS...KEEP UP THE GOOD WORK AND GOD BLESS YOU.

/S/ BROTHER BENNET
 PS. GREAT THANKS TO A FINE MAN BEING BROTHER BENNET. FOR RESULTS & REPORTS.

257.5 165 272.5 685
 182.5 122.5 245 550
 167.5 117.5 240 525
 145 105 192.5 442.5

302.5 217.5 297.5 817.5
 295.5 200 300 795.5
 225 187.5 200 572.5
 235 167.5 245 657.5
 232.5 155 260 647.5
 155 65 285 415
 155 65 285 415
 220 122.5 242.5 397.5

222.5 180 332.5 787.5
 200 150 270 675
 237.5 182.5 257.5 697.5

320 182.5 200 602.5
 220 130 282.5 632.5
 182.5 160 250 592.5

275 182.5 300 757.5
 220 130 282.5 632.5
 182.5 160 250 592.5

DEADLIFT RECORD OF 332.5
 J. WILLIAMS 275 180 332.5 787.5
 D. SMITH 200 150 270 675
 M. BURRELL 237.5 182.5 257.5 697.5

DEADLIFT RECORD OF 332.5
 J. WILLIAMS 275 180 332.5 787.5
 D. SMITH 200 150 270 675
 M. BURRELL 237.5 182.5 257.5 697.5

181 MARINE CORPS RECRUIT DEPT OPEN REPORT... All the lifters were happy with the general and the facilities. So once again the San Diego meet proved highly successful. Bill Ernie of Weightlifters Warehouse who placed 4th on the bench was killed in a motorcycle accident on Tuesday after the meet and we were all shocked to hear the news. Bill was a very nice guy and he would like to get it back up to send some reasons and will give anyone who wants it up a new hat, no questions asked. Little Glen Mear came to break his own deadlift record and the best lift in the meet was attempted amid the deafening roar of the crowd, but it was not to be and Glen passed out in the attempt. I'll be heading the California Novice and Masters on May 2 here at the Bases. I'm expecting a good turnout and hope to see you there!

Best regards, ROBBIE
 Thanks to Robbie Roberts for results and report. Robbie's a fitness worker for the sport and the great credit to his efforts with his meet over the past few years.
 PS. There were 1000 lifters at the meet. Bud Wastewick was first place National card holder who is a woman, was willing to fight while 2 men card holders were sealed, but it did not come about.

GOOD SPORTSMANSHIP '81
 California State Championships that I feel is very worthy of an unofficial world record in the bench press and took first place in the 230 lb. class. The record did not come near did his first place total, because Hiro represented the Japanese in the World Championships. Brad Wastewick won first place and definitely deserved it as Brad, the day after the meet, Brad drove from San Diego to Whittier to present his first place trophy to Hiro, since Brad felt he did not deserve it.
 After witnessing some of these arrogant idiots, wandering around making fools of themselves and the sport, it's real nice to run across a lifter like Brad, to add class to the sport. Brad and I, the lifter in the platform. I wanted to take the time to tell Brad publicly how much I respect his actions.
 Glenn Mear, S.P.A. Chairman
 PS. My congratulations to Robbie Roberts for an excellent San Diego open meet. It's a real nice meet under the best conditions. If you're looking for a meet to train for next year, you'd better train for this one. Noble pits in a lot of time and effort and deserves recognition for it.

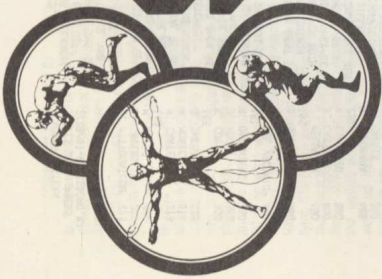
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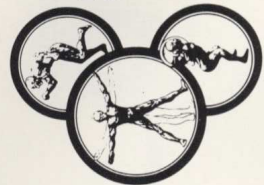
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