

20th NACACTFCA Congress Report

October 14-17, 2010 - Houston, Texas



Congress Presenters (l-r): Vitaly Petrov, Lyle Knudson, Victor Lopez, John Godina, and Tom Tellez

The North America, Central America, and Caribbean Track & Field Coaches Association celebrated its Twentieth Anniversary Congress in Houston, Texas on October 14-17, 2010. Terry Crawford of USATF gave the Keynote on Coaches Education and Women in Coaching, and presenters included Lyle Knudson (USA), John Godina (USA), Tom Tellez (USA), and special guest Vitaly Petrov (RUS / ITA). Fifty-four participants attended the congress and over seventy persons were involved all told, representing Canada, USA, Mexico, Central American and Caribbean nations, with a particularly large number from Mexico, and the biggest contingent of more than thirty coaches from the USA. There were participants and speakers from four continents and 14 nations, including two South Americans coaching in the Middle East. Unfortunately, budget restraints prevented NACAC from providing scholarships for coaches from the region to attend again, but Terry Crawford and USATF funded six scholarships for USA coaches to attend and hosted the Welcome Reception on Thursday evening. *Nordic Sport* and *Mondo* once again were wonderful sponsors, providing portfolios, pens, bags, water bottles, T-Shirts, and polos, as well as hosting each of the lunches respectively. A tremendously successful congress enhanced by the hospitality and facilities provided by the Marriott Medical Center and by Rice University! A new format of Friday lectures at the hotel and Saturday practical sessions at the Rice track one block away proved very successful, aided by the wonderful fall weather. In addition, Texas flavor was added by having both the *Nordic* and *Mondo* lunches at the Rice track, providing Tex-Mex fajitas on Friday and Texas barbecue on Saturday. The presenters and participants have given rave reviews, so it seems the congress was another great success from a coaching education and professional development standpoint, as well as developing the social and professional camaraderie among coaches internationally. Native Texans commented often about how wonderful it was to meet and talk with coaches from other regions.

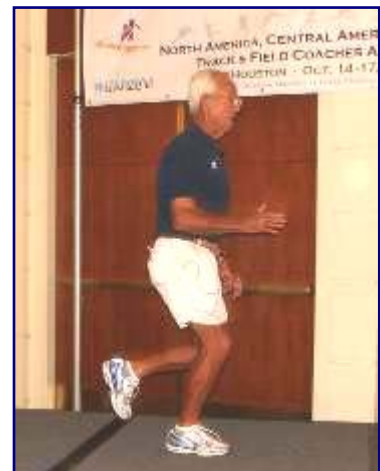
Presentation Abstracts follow...



PRACTICAL APPLICATIONS OF ATHLETICS TRAINING AND TECHNIQUE

The common thread in every lecture delivered at the 20th Congress was Stability! Stability in the throws, sprinting, vaulting, distance running, in everything. Comprehensive training and technical development was the other main theme. Petrov stressed the need for posture and stability in the pole vault approach, Godina focused on stability throughout the rotational shot, Tellez hammered on the posture and stability of the sprinting cycle, and Knudson even focused on the development of postural strength and efficiency in distance movement. It was striking that all presenters hit on the importance of forces moving into the ground, whether in the middle of the ring, on the vault runway, during a sprint, and even when producing forces actively to create velocity in a distance race. Pushing and not pulling is the key to forces and power in athletics! Knudson summed it up best – all sprint, jump, and throws coaches have something to teach distance coaches: power and speed are vital in athletics, and just as much in distance events. To paraphrase the old distance running poster of the 1970s, “The race does not always go to the swiftest, nor to the one who keeps on running, but to the one who runs the distance THE FASTEST!”

Tom Tellez (USA) – *Sprinting Technique* – Sprinting is a natural thing, but only if one allows the body to work naturally. No pawing, no reaching, no pulling, just picking the feet up and putting the feet down. The sprint cycle requires only driving the hip and foot into the ground and this sets up the natural recovery, the tighter the heel on recovery the faster the turnover. It is vital that the sprinter plant the full foot and not land on the toe – the heel can hit as well, but the contact is full and allows for the stretch reflex in the foot and ankle and Achilles. Tellez used video of Olympian Joe DeLoach as well as video of Joe DeLoach’s young son to portray this. The natural progression of mechanics from walking to jogging to running to sprinting was described and easily seen in the video. Arm action, contrary to what some say, is vital to the sprint motion. It sets up the rhythm and range of the stride, and Tellez demonstrated the proper angles of the forearm as the length opens on the foreswing and closes on the backswing. Tellez also showed his excellent abilities of demonstration, as he detailed movements on the presentation stage and on the Rice track. On Saturday, Tellez took the participants completely through the development of technical sprinting, the block start, and the development of the penultimate step in the long jump.



John Godina (USA) – *Power from Stability: The Rotational Shot Put* – Stability is vital in every portion of the rotational shot. It is necessary prior to the initiation and must be maintained throughout the entire movement. Balance, positions, and movement in the shot are all stability dependent. Godina also focused on the importance of forces into the ground to produce results in the shot, noting that at only two points in the rotational shot is the application of forces from the ground up necessary – at double support, the only place where forces can be produced, and those forces are all pushing forces. Stabilizing muscles create a working platform for the movers. Throwers must learn to wait at single support and learn that nothing can be done in flight! Extension at deliver drives the body up as well as creating rotation by driving the left hip back and the right hip forward. Accordingly, Godina identified the main muscles which stabilize and those which create movement power and described the best ways to train and integrate them into the whole rotational motion.



The practical sessions were spent integrating postural stability with motion, as well as teaching training exercises to strengthen the muscles needed for stability. Although the rotational shot was the primary concern of Godina's remarks and teaching progressions, he did stress the importance of many of the same exercises and principles for the discus throw and the traditional glide shot put, and he did note some important differences in technique and preparation. One core principle of the rotational shot that Godina stressed was the primacy of vertical forces: the legs drive into the ground to create vertical forces and the focus of the release is vertical as well. Many of the exercises with medicine balls and the shot were constructed to teach the feel and timing of the vertical motion of the release, beginning from ground up through the ball!

Lyle Knudson (USA) – *Systematic and Comprehensive Distance Training* – Dr. Knudson began his presentation by saying that all distance coaches ought to spend some time with sprint coaches and other coaches and learn about the importance of speed and power. Distance running indeed is premised on the need for speed at any particular distance, but as Knudson noted, American distance coaches have long been wedded to the philosophy of more long, slow distance in training. Knudson's main premise was that the speed desired in racing needs to be trained in the athlete. Long slow distance training makes a long, slow distance runner. Only by realizing that the body



adapts to every bit of training will coaches and athletes be able to incorporate more speed of pace training, as well as power and strength training, into the program. Stability is vital for running efficiency and the creation of forces on the ground that lead to fast training. Also, the faster the maximum speed of the athlete, then the better off the athlete when running at a percentage of maximum speed in any particular race of training session. I.E., an athlete who has more speed will be able to hold a faster pace at 90% effort than a slower athlete! Knudson's program is based on training athletes in two week cycles in

which the athlete trains at 5 different paces: Over Distance, Under Distance, Over Over Distance, Under Under Distance, and Race Distance. An athlete running 3000 meters on the track, for example, would train at paces and training volumes of 5K OD, 1500m UD, 10K OOD, 800m UUD, and 3K RD. On an OD day, the training would include 5000 meters of runs at 5K pace – ex. 5 x 1000m, 6 x 800m, even 25 x 200m. Recovery and other training days would consist of weights, circuits, and Anaerobic Threshold Runs, which combine aerobic and anaerobic threshold paces – 6 minutes aerobic pace straight into 12 minutes AT pace and then 6 minutes aerobic pace. All warmups and flexibility exercises are dynamic and progressive, and warmdowns are dynamic and often in reverse order – faster to lighter – and only after warmdown are static exercises used.

Vitaly Petrov (ITA / RUS) – Pole Vault Methodology – Petrov arrived from two days of travel and missed flights just in time to launch into a typically passionate and informative presentation on the training and development of a pole vaulter. Again, stability of posture is the basis of any movement, and the most important technical development is the sprint motion in order to successfully develop the speed and position for a successful plant and vault. He discussed his training program of technique and general conditioning emphases from a beginner to an elite level vaulter, focusing on



gymnastics, running, vaulting technique, and multi jump exercises to strengthen the running and jumping ability. Petrov showed extensive video of Isinbayeva performing basic core exercises, gymnastic exercises, special equipment exercises, and running and takeoff exercises that are the basis of his program of training. He continually stressed that the coach and vaulter must understand what the gymnastics, posture, pole carry, and takeoff motion really are. The problem, according to Petrov, is that any ten coaches or athletes will give ten different answers when asked how to plant or how to takeoff or how to carry the pole! He particularly argued that the plant motion takes place over the last two strides, but a note is that this includes the last 3 touchdowns (left – right – left) which comprise the final two strides leading into the takeoff. Another issue of note is that Petrov and his training partner Vincenzo

Canali, a gymnastics coach, train vaulters to stabilize hips and abs, while remaining relaxed and hollow in the chest to allow the shoulders to open up on takeoff and create good position for the body to swing naturally. If the athlete drives a stiff chest forward into the vault, the shoulder girdles are closed off and the natural swing dies. He worked with several collegiate vaulters from Rice University on Saturday to teach these important positions, and Petrov was gracious enough to spend Sunday at St. John’s School with 35 high school and middle school vaulters, where he took them through basics of core stabilization, proper running with stabilized core, proper plant motion, and ended up with dynamic takeoffs into the sand and the pit.



Summary by Richie Mercado, Secretary NACACTFCA

Presentations will be available soon at www.nacactfca.org, or in future NACACTFCA Technical Bulletins online



Terry Crawford with Rice's Jon Warren and Lyle Knudson



Tom Tellez teaches the block start in his classroom



Vitaly Petrov teaching the takeoff in the pole vault



John Godina demonstrates rotational shot technique



20th Congress Participants at Rice University

See you in Merida October 6-9, 2011!

“Preparing Junior Athletes for the Senior Level”

Tentative lecturers for 2011 include Raul Barrera (MEX) - Sprints, Santiago Antuñez (CUB) - Hurdles, Carlos Cavalheiro (BRA) - Distance, Peter Pratt (BAH) – Jumps, and Mac Wilkins (USA) – Throws