LONG JUMP

Barbara Crousen
McMurry University

LONG JUMP OUTLINE

- APPROACH
- TAKE-OFF
- FLIGHT
- LANDING
- DRILLS

THE APPROACH

- THE MOST IMPORTANT ASPECT
- FORCE APPLICATION PREDETERMINES WHAT HAPPENS IN THE AIR
- DEVELOP PROPER VELOCITY
- DEVELOP MOMENTUM
- PUTS ATHLETE IN GOOD TECHNICAL POSITION
- 14-22 STEPS BASED ON ABILITY

APPROACH CONSISTENCY

APPROACH PHASES:
*DRIVE
*ACCELERATION
*TRANSITION

NUMBER OF STEPS IN THE APPROACH:
15 STEPS: COUNT 6-5-4
16 STEPS: COUNT 6-6-4
17 STEPS: COUNT 7-6-4

THE FIRST NUMBER=**DRIVE PHASE**
THE SECOND NUMBER=**ACCLERATION PHASE**
THE THIRD NUMBER**=TRANSITION PHASE**

DRIVE PHASE

- ODD STRIDE PATTERN=FIRST STEP WITH THE STRONGEST FOOT
- STANDING STARTS REDUCE INCONSISTENCIES
- 17 STEP APPROACH=7 DRIVE STEPS (COUNT THEM ALL!)
- DRIVE PHASE=SLIGHT BODY LEAN, LEVEL HEAD, EYES DOWN
- BODY BECOMES ERECT AS EYES BECOME LEVEL
- KNEE DRIVES WITH DORSI FLEXED FOOT DRIVING BACK INTO THE RUNWAY
- ALIGNMENT OF HEAD, SPINE, AND PELVIS
- EACH STEP INCREASES STRIDE FREQUENCY

ACCLERATION PHASE

- IN THE 17 STEP APPROACH=WILL BE 6 STEPS
- UPRIGHT SPRINTING POSITION
- HEAD, SPINE, PELVIS IN PROPER ALIGNMENT
- NOT LEANING (BACK OR FORWARD) AND NO BUTT BACK
- INCREASE STRIDE FREQUENCY
- DRIVE THE THIGH UPWARD TO A FLEXED POSITION
- (SO THE LOWER LEG IS PUSHED DOWN TO EXTENSION)

TRANSITION PHASE

- ALWAYS A FOUR COUNT
- PREPARATION FOR JUMP
- MUST ACCELERATE! FASTEST STEPS! NO CHOPPING!
- PENULTIMATE STEP PROVIDES DESIRED PARABOLIC CURVE
- RUN OFF BOARD
- MAINTAIN GOOD POSTURE, HEEL LEAD WITH ROLLOVER, DYNAMIC ARM ACTION FOR BALANCE AND WORK ON DISPLACEMENT OF HORIZONTAL VELOCITY

APPROACH ACCURACY

CHECK MARKS:

- ATHLETE CHECK
- COACH'S CHECK

(27-32FT MEN) (24-29 WOMEN)

COACH MARK INFORMATION:

- On Check/Over Board=Striding Out
- Over Check/Over Board=Move Back
- On Check/Behind Board=Don't Move Up But Rather Attack The Board! (Probably Decelerating)
- Behind Check/Behind Board=Move Up Or Make Drive Or Acceleration Adjustments

COMMON APPROACH MISTAKES

- IMPROPER FREQUENCY (PUSH OUT AGGRESSIVELY)
- BOUNDING DURING DRIVE
- RUNNING TOO HARD TO START DRIVE PHASE
- JOGGING DURING DRIVE PHASE
- DECLERATION
- PLANTAR FLEXION
- REACHING AT THE BOARD (HAMSTRING/LOWER LEG PROBLEMS!)

THE TAKE-OFF

- LAST TWO STRIDE SET UP THE TAKE-OFF
- PENULTIMATE=SLIGHTLY LONGER AND FLAT (TO HELP LOWER THE CENTER OF MASS)
- LAST STRIDE=SHORTER! (RISING CENTER OF MASS! MID CALF HEEL RECOVERY! FOOT PLACED FLAT AND SLIGHTLY IN FRONT OF THE JUMPER'S BODY)

COMMON TAKE-OFF MISTAKES

- STAYING ON THE BALLS OF THE FOOT! (NOT FLAT FOR LAST TWO)
- NO PENULTIMATE! (NO LOWERING OF THE CENTER OF MASS)
- OVER STRIDING TO REACH THE BOARD
- MISTAKES IN THE APPROACH=POOR TAKE-OFF

FLIGHT PHASE

- UPRIGHT POSTURE
- EYES FOCUS SLIGHTLY UPWARD
- TAKE-OFF FOOT ACTION (FOR HITCH)
- FREE LEG ACTION (FOR HITCH)
- ARM ACTION (RIGHT AND LEFT)

COMMON FLIGHT MISTAKES

- BODY OVER-ROTATES
- NO KNEE DRIVE WITH FREE LEG
- NO STRAIGHTENING OF FREE LEG
- EYES DOWN
- HEAD THROWN BACK
- NOT LIFTING FEET AT LANDING
- TAKE-OFF MISTAKES=FLIGHT MISTAKES

LANDING PHASE

- DOWNWARD SWEEPING ARMS (PAST LEGS TO RAISE LEGS)
- HEELS CONTACT, KNEES FLEX TO CUSHION
- ARMS BROUGHT FORWARD TO ASSIST FORWARD MOMENTUM

COMMON LANDING MISTAKES

- OVER ROTATING
- INCORRECT USE OF ARMS
- FALLING BACK ON THE BUTT!
- FLIGHT MISTAKES=LANDING MISTAKES

LONG JUMP DRILLS AND EXERCISES

- REMEDIAL DRILLS
- BALANCE/POSTURE/STRENGTH DRILLS
- PENULTIMATE DRILLS
- SAND/BOX DRILLS

REMEDIAL DRILLS

- STANDING LONG JUMP
- THREE CONTINUOUS DOUBLE-LEG JUMPS (WITH SAND LANDING)
- 2 X ALTERNATE LEG BOUNDS
- RRLL: SAME
- RRLLRRLL: SAME
- ALB, SLB (WORK TOWARDS GREATER DISTANCE)
- STANDING LONG JUMP (LAND)
  - STANDING LONG JUMP (LAND/SQUAT)
  - STANDING LONG JUMP (LAND/SQUAT/BUTT TO HEELS)
  - STANDING LONG JUMP (ALL TOGETHER)
- FOOT EXTENSION HOPS (HEEL ROLL OVER, CYCLE INTO SAND):
  - SINGLE LEG FOOT EXTENSION HOPS
  - ALT. LEG HOPS
  - RRLLRRLL
  - LATERAL HOPS
  - 3 HURDLE JUMPS

BALANCE/POSTURE/STRENGTH/ FOOT PLACEMENT DRILLS

- CONTINUOUS DOUBLE LEG HOPS (WORKING ON ARM ACTION AND ROLLOVER LANDING)
- CONTINUOUS SINGLE LEG HOPS

PENULTIMATE DRILLS

- WALKING
- JOGGING
- CONTINOUS

SAND/BOX DRILLS

BAREFOOTED EXPLOSIVE JUMPS (IN LONG JUMP PIT)

- MOUNTAIN CLIMBERS
- SQUAT JUMPS
- SIDE-TO-SIDE JUMPS
- UP AND BACK JUMPS
- JUMPING JACKS
- LUNGE JUMPS
- SUMO JUMPS
- NIGERIAN HOPS
- NORDIC JUMPS

SAND/BOX DRILLS CONTINUED

- **SHORT APPROACH (CAN USE BOX OR LAND IN HIGH JUMP PIT)**
- **PHASE 1 DRILL**
- **PHASE 2 DRILL**
- **PHASE 3 DRILL**

EARLY SEASON WORK

- **Monday: Remedial jumps drills, sand drills and approaches, running with the sprinters, strength training, core strength.**
- Tuesday: Penultimate drills, landing drills w/boxes, plyometrics, hill running or bleacher runs, medicine ball/swiss ball training
- **Wednesday: Approaches, short approach phase jumps, technique runs with the sprinters, strength training**
- Thursday: Full approach and jump, sled pulls, parachute runs, weighted vest runs, low hurdle running
- **Friday: Premeet workout – warmup, penultimate drills, 3 run throughs, 3 phase jumps**

MID SEASON WORK

- **Monday: Remedial jumps become more dynamic, sand drills more explosive, penultimate drills, approaches - work on consistency, ½ sprinters workout, strength training, more dynamic and explosive incorporate plyometrics.**
- Tuesday: Phase jumping with boxes landing in sand or on high jump pad, hill running or bleacher runs w/ weighted vests, swiss ball/medicine ball training
- **Wednesday: Approaches, short approach phase jumps, ½ sprinters workout, rhythm running, strength training**
- Thursday: Full approach and jump, sled pulls, parachute runs, low hurdling, ½ sprinters workout
- **Friday: Pre-meet workout: warm up good, penultimate drills3 run throughs, 3 phase jumps**

LATE SEASON WORK

- **Monday: Approaches, landing drills, ½ the sprinters workout, strength training, core strength and balance**
- Tuesday: Phase training w/boxes, rhythm running: run-run-jump, low hurdling
- **Wednesday: Speed bounds, short approach phases, work total jump, rhythm running simulating approach, ½ sprinters workout, ½ sprinters workout**
- Thursday: Full approach and jump, ½ sprinters workout
- **Friday: Pre-meet workout : Warm up, penultimate drills, 3 run thrus, 3 phase jumps**