

# Comprehensive Javelin Training



# Runway Drills

- It is important to have a good rapport with the javelin as you come down the runway
- Runway drills are repeated throughout the year so the athlete is comfortable coming down the runway with control of the javelin.
- Athletes need to master the acceleration pattern that works best for them. Runway drills help with developing this ability.



# Approach Run

- Keep javelin parallel to ground
- Prevent tip from rising
- Build up into an even and controlled pace of run



# Multiple Crossovers

- Pace should be even and controlled
- Do not add speed just for the sake of speed
- Hold the javelin steady
- Minimize superfluous movements



# Penultimate Crossovers

- There should be a dynamic drive off the left leg going into each crossover
- This drill constantly repeats the last three steps of the full approach
- Can be done with overweight javelin



# Carioca

- Keep upper body steady while the lower body is doing a lot of work.
- Keep the footwork close to the ground without high knee drive.
- Can be done with overweight javelin



# Approach run with Drawback

- Focus on smooth transition when drawing back javelin
- Decide whether to draw back off of left foot or right foot.
- This slide demonstrates a drawback off the **left foot**



# Crossovers with Resistance Sled

- Attaching the sled to hip provides more functional resistance than a hose drag where the resistance goes through the throwing hand.
- We usually do resistance runway drills first before finishing with regular approaches





# Hurdle Skips into Javelin Throw

- A good teaching drill for those athletes who are flatfooted or slow lack a bouncy runway rhythm



# Seated Overhead (Forward) Throws



- Chris Hill (83.84m):
  - 2kg            12.50 m/s
  - 3kg            10.26 m/s
  - 4kg            9.36 m/s
- Brian Moore (72.95m)
  - 2kg            12.50 m/s
  - 3kg            11.60 m/s
  - 4kg            10.26 m/s



# Standing Overhead (Forward) Throws



- Chris Hill (83.84m):
  - 2kg 14.27 m/s
  - 3kg 12.93 m/s
  - 4kg 11.15 m/s
- Brian Moore (72.95m)
  - 2kg 12.93 m/s
  - 3kg 12.04 m/s
  - 4kg 10.70 m/s

# Medicine Ball Throw from Hips Raised Position



- Chris Hill (83.84m):
  - 2kg                    m/s
  - 3kg                    m/s
  
- Brian Moore (72.95m)
  - 2kg                    13.38 m/s
  - 3kg                    12.50 m/s



# Medicine Ball Throw after Rolling Forward



- Chris Hill (83.84m):

- 2kg                    m/s

- 3kg                    m/s



- Brian Moore (72.95m)

- 2kg                    13.38 m/s

- 3kg                    11.60 m/s



# Double Arm Stand-throw from Wind-up



- Brian Moore (72.95m)
- 2kg                    13.82 m/s
- 3kg                    13.16 m/s
- 4kg                    11.15 m/s



- Chris Hill (83.84m):
- 2kg                    13.82 m/s
- 3kg                    13.38 m/s
- 4kg                    11.60 m/s

# Double Arm Overhead Throw (Forward) from 3-Steps



- Chris Hill (83.84m):
- 2kg                      15.16 m/s



- Brian Moore (72.95m)
- 2kg                      15.16 m/s



# Stand-throw with 1000g ball



- Chris Hill (83.84m):
- 1kg                      20.51 m/s



- Brian Moore (72.95m)
- 1kg                      18.28 m/s



# One-arm Backward Release



# Thoughts on Medicine Ball Training



- 5:1 ratio of double arm throws to single arm throws
- Med ball volume inversely related to javelin throwing volume
- Manage the repetitions per set based upon the ability to maintain the quality of the throws
- Pay attention to the release angle and make sure it is similar to the release angle for an actual throw with the javelin (~30 degrees)

## Men's Release Speed & Distance for Overhead Forward Throw: Adapted from Finnish Performance Tables developed by Kari Ihalainen, National Javelin Coach of Korea

Level	Distance/Speed w/4kg
50m	12.00m/9.7 m/s
55m	13.00m/10.1 m/s
60m	14.00m/10.9 m/s
65m	15.00m/11.2 m/s
70m	16.00m/11.4 m/s
75m	17.00m/11.9 m/s
80m	18.00m/12.3 m/s
85m	18.50m/12.5 m/s
90m	19.00m/12.7 m/s
95m	19.50m/12.9 m/s

# Release Speed & Distance for Chris Hill & Brian Moore

- release speed for Chris Hill with the **4kg** overhead forward throw was **11.15 m/s** which projects out to roughly **65** meters.
- for Brian Moore with the **4kg** overhead forward throw was **10.73 m/s**. This projects out to roughly **59** meters.



## Women's Release Speed & Distance for Overhead Forward Throw: Adapted from Finnish Performance Tables developed by Kari Ihalainen, National Javelin Coach of Korea

Level	Distance/Speed w/2kg
40m	12.00m/9.7 m/s
45m	13.00m/10.1 m/s
50m	15.50m/11.3 m/s
55m	17,00m/11.9 m/s
60m	18.00m/12.3 m/s
65m	18.50m/12.5 m/s
70m	19.00m/12.7 m/s
75m	19.50m/12.9 m/s

# Release Speed and Distance for Colleen Felix

- Release speed for Colleen Felix with the **2kg** overhead forward throw was **9.36 m/s** which projects out to less than **40m**.



Men's Release Speed & Distance for Stand-throw with 1kg Ball: Adapted from Finnish Performance Tables developed by Kari Ihalainen, National Javelin Coach of Korea

Level	Distance/Speed w/2kg	Observed Speed w/1kg
50m	30.00m/ 15 m/s	
55m	32.00m/ 16 m/s	
60m	36.00m/ 17 m/s	
65m	40.00m/ 17.7 m/s	
70m	44.00m/ 18.3 m/s	Brian Moore 18.28 m/s
75m	48.00m/ 19 m/s	
80m	52.00m/ 20 m/s	Chris Hill 20.51 m/s
85m	56.00m	
90m	60.00m	
95m	64.00m	

# Flexibility Training: Skin-the-Cat





# Flexibility Training: Bird's Nest

