

Fundamentals of Field Events

Throws

2013



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Pacific Association Code of Ethics for Officials

- Be professional, positive, calm, in charge, and diplomatic.
- Be punctual and honor your commitments and assignments.
- Keep the safety of the athletes, officials and spectators in the forefront at all times.
- Approach your assignment as a means to ensure a fair competition for all athletes. Know the rules for the events that you are officiating and apply all rules objectively and courteously.
- Cooperate with Meet Management
- Come prepared with your own officiating materials and tools: rulebooks, lunch, drinks and rain gear.
- Dress appropriately; be aware of the uniform of the day.
- Approach each of your meets as if it were the most important meet of the year - for the athlete(s) it may be.
- Start on time and keep things moving without rushing.
- Never yell at, hamper, embarrass or berate a fellow official, an athlete or a spectator. Do ignore spectators or coaches critical comments.
- Do not smoke, drink alcoholic beverages, chew tobacco or use drugs while officiating.
- Do not use your cell phone or other electronic devices for personal purposes while officiating.
- Do not expect personal compensation.

The Pacific Association uniform is generally consistent with the National uniform.

- The Outdoor uniform is consistent with the National Summer Uniform and consists of a khaki pants/skirt/shorts, white shirt/blouse, white socks and white shoes. The red/blue national polo shirt should be reserved for the national championship meet.
- Your hat, which is part of the uniform, is not an advertising implement for pin collectors. It should only contain your officials' certification pin.
- Please wear your USATF uniform at all invitational meets, regardless of the level. It is not appropriate to wear any other uniform than our association's uniform. There is only one exception; the organizing committee of a major meet may request you to wear a uniform they issue (i.e....a polo shirt and/or hat they supply).

Adopted by the Pacific Association Officials Committee's Executive Committee, 9 June 2006.

Safety Considerations

- Throwing events are inherently dangerous. All throwing, including warm ups should be supervised and from the ring or the runway. If you see athletes throwing without supervision or outside the ring/runway, stop them even if they are not part of your event.
- Meet with officials before event to discuss safety. Remind all of conducting event safely.
- Eyes on Circle/Arc at all times. Wait until competitor is not throwing to bend over to pick up implement.
- Officials and retrievers should spread out.
- Make sure that field officials are watching ring/runway during warm-ups and competition.
- Officials/retrievers only in sector. Athletes should not retrieve in sector. Athletes and others should watch ring/runway if walking out along sector to pick up implement.
- Carry implements out of sector, do not throw back.
- Officials should not use cell phones while in field.
- Officials and retrievers should spread out with retrievers standing beyond the officials.
- Field personnel for long throws should stand to one side or the other of sector. Discus and Javelin can skip. Move to right or left from direct line of implement's flight. Flight of Discus can have a curve. As seen from the field, the curve for a right (left) hand thrower will tend to be to the right (left) of a straight line.
- Javelin flight can have a slight curve. As seen from the field, the curve for a right (left) hand thrower will be to the left (right).
- Stand outside circle made by hammer and handle as it lands (at least 10 feet from estimated landing spot.)
- Cage netting should be intact. Holes should be repaired with cable ties. Net should be loose enough to absorb hit of implement but not so loose as to allow implement move netting into officials or athletes. Every one near net should stand at least 6 feet from net. Netting should be held down to ground. Hammers can go under netting if let go during turns.
- Athletes should stand well away from cage opening during warm up and competition. For some cages, the implement can bounce off the front post backwards outside the cage.
- Rings can be slippery, particularly if wet. Sometime wet rings can be dried with towels. Athletes should be warned they may have to modify their technique. A competitor with good technique can adjust to handle a slippery ring. Others have a harder time.
- Location of spectators should be controlled by flags along sectors and barriers near ring. NCAA recommends a 55° angle as an implement danger area. Some older cages as might be found at high schools could have an even larger danger area.
- Look both directions when crossing track so as not to be hit by a runner on the track.

Rules for Throws

Rule Books

Can be purchased from Pacific Association USATF or from rule maker.
PDF files for International Association of Athletics Federations (IAAF), USATF, NCAA,
and High School rule books can be accessed at
<http://www.usatf.org/groups/officials/resources/rules/>

General Rules for Throwing

Foul if after commencing throw and prior to its completion, competitor:
Does not start from stationary position within circle.
Touches top of iron band, top of stop board, on painted circle, or on runway lines or
on inside edge of iron band or stop board.
Touches any part of body outside circle or runway lines.
Improperly releases implement.
Causes implement to land on or outside sector lines.
Leaves circle or runway improperly or before implement lands.
Does not start throw within the 1 minute time limit (must be completed).

Shot Put

Put from shoulder with one hand only.
At start, shot should be in proximity of neck or chin and should not drop below this
position during act of putting. Shot must not be brought behind the line of the shoulders.

Discus Throw

There are no specific instructions for throwing the discus.

Hammer Throw

The hammer head may be laid on the ground inside or outside the circle before the throw.
During the throw, the competitor may assume any starting position and shall use both
hands holding the handle.
A throw may be interrupted and restarted if no foul has been committed if restarted
within the time limit.
A throw may be interrupted if the head hits the ground and restarted if no foul is
committed and restarted within time limit.

Javelin Throw

Javelin must be held by the grip with one hand only so that the little finger is toward the
front and the thrower's last contact is with the grip.
At no time until the Javelin is in the air may the competitor turn completely around so
his/her back is toward the throwing area, unless returning to starting point for a
restart.
The javelin is thrown over the shoulder or upper part of the throwing arm, not slung or
hurled.

THROWS RULES COMPARISON - 2013 - Page 1 of 2

Rule	GOVERNING BODY		
	IAAF	USATF	NCAA
THROWING AREA DIMENSIONS-CIRCLE			
SP, DT, HT SECTOR SIZE/ANGLE	34.92° from center of circle (5 units along sector lines, 3 units across). Sector lines .5 cm wide, on outside edges of sector.		
CIRCLE - SHOT PUT & HAMMER THROW	2.135 m inside diam		
CIRCLE - DISCUS	2.50 m inside diam		
SHOT PUT STOP BOARD	Length 1.15-1.21 m, Width 11.2 cm, Height 9.8-10.2 cm	Length 1.21 m, Width 11.2 cm, Height 10 cm	Length 4 ft (1.22 m), Width 4.5 in (11.4 cm), Height 4 in (10 cm)
CIRCLE RING	Band iron, steel, or suitable material. 20±6 mm high. Top set at ground level. Circle below ground level.	Metal ring. 19±6 mm high. Bottom set at ground level. Circle at ground level.	Metal, wood, or plastic band. 0.75 in (1.9 cm) above level of circle. 2 in (5 cm) painted circle as alternative for hard material circle.
1/2 CIRCLE LINES	75 cm each side, 5 cm wide located in front half of circle		
THROWING AREA DIMENSIONS-JAVELIN THROW			
JAVELIN SECTOR SIZE/ANGLE	28.95° from 8 meters behind arc (2 units along sector lines, 1 unit across). Sector lines .5 cm wide, on outside edges of sector.		
JAVELIN RUNWAY	Min length 30 m (33.5 m when possible)	Min length 30 m (C'Ship, 33.5 m)	Min length 120 ft (36.5 m)
JAVELIN ARC & RUNWAY	8.0 m radius arc, 4 m width		
JAVELIN ARC EXTENSION LINES	75 cm each side, 7 cm wide		
MEASUREMENT			
DEVICE	Fiberglass tape, steel tape, certified electronic measuring device (laser)		
ZERO END OF TAPE	At edge of mark closest to circle or runway arc		
READ DISTANCE	At inside of sbp board, ring, runway arc		
UNITS	Meters and centimeters to next lesser cm	Meters and centimeters to next lesser cm. Announce meters and feet and inches	Feet and inches (meters and centimeters) to next lesser 1/4 in (cm) for SP and next lesser inch (even cm) for DT, HT, JT
COMPETITION			
UNIFORM/JEWELRY	Clean and worn so as not to be objectionable. Non-transparent material. Same color front and back.	School issued tops and shorts, deemed not objectionable. Top covers entire torso. Solid color undergarment.	No jewelry except medical alert/religious medals (taped to body). School issued full length track bp (to waist or below) and track bottom (worn above hips). Solid color undergarment (differently colored stitching allowed).
SHOES	Not required. Javelin: 11 spikes, 12 mm or less in length for synthetic runway, 25 mm or less for non-synthetic runway.		Required. Spike configuration not specified.
WARM-UPS BEFORE FLIGHTS INCLUDING FINALS	Games Committee	Time or number of attempts-Determined by Games Committee for each flight. Max 2 warm-ups/turn	Length-Determined by Games Committee; Max 15min/flight including before Finals.
LATE ARRIVAL AFTER COMPETITION STARTS	Not Addressed	Take remaining trials - if entered	Cannot compete
ABSENCE FROM COMPETITION	May be excused one round at a time. Order changed within one round only.	May be excused one round at a time. Order changed within one round only. For Youth, order may be changed for preliminaries and for finals.	Order of throws may be changed for preliminaries and for finals.
IMPLEMENT OWNERSHIP LOST	Yes	Yes (Except Youth Jav & All Master)	No. May use another's with permission
PERSONAL ELECTRONIC DEVICES	Not allowed		

Modified from Throws Rules Comparison, USATF Best Practices, Jan 10 (Credit: B. Buttermore)

THROWS RULES COMPARISON - 2013 - Page 2 of 2

Rule	GOVERNING BODY		
	IAAF	USATF	NCAA
COMPETITION-CONTINUED			NFHS
SUBSTANCE ON HANDS	Yes (HT & WT-on gloves)		Not addressed
SUBSTANCE ON IMPLEMENT	Shot & Discus	HT & WT only-fingers open	Not addressed
GLOVES		HT & WT only-fingers open	No (HT not addressed)
TAPE ON HANDS/FINGERS	Yes but no 2 fingers taped together. Youth: no tape except for open wound. Taping wrist is ok.	HT & WT only-fingers open	No (except for open wound). HT not addressed. Taping wrist is ok.
MARKS ADJACENT TO CIRCLE	1 temp marker for own throw		Not addressed
MARKS ADJACENT TO RUNWAY	1 or 2 markers; no chalk/indelible marks		Not specified. L/J/T J specifies 1 or 2 markers.
START OFFICIATING FOR FOULS	After stationary in ring or on runway before starting attempt		
IMPLEM. HITS CAGE, LANDS IN SECTOR	Fair		Foul
FOUL-DURING ATTEMPT FROM CIRCLE	Touch outside ring, on top of ring, on top of stop board, or on inside edge of ring or stop board	Touch outside ring, on top of ring, on top of stop board	Touch any surface outside ring. Touch top or end of stop board
FOUL-DURING ATTEMPT FROM RUNWAY	Touch lines marking runway or area outside	Touch foul line, run-up lines, or area outside	Touch on or outside runway or foul-line arc
SHOT PUT, DISCUS, HAMMER MUST LAND	Inside sector, on line is out. Hammer handle and wire can land outside sector.		
JAVELIN MUST LAND	Tip first inside sector (Youth: any part first lands inside sector, mark first touch)	Tip first inside sector	Any part first lands inside sector, mark first touch
INTERRUPT THROW, LEAVE CIRCLE/RUNWAY	Yes, Must leave from back half or behind arc	Not addressed	Not addressed
LEAVE CIRCLE AFTER THROW	After implement/lands: from back half of circle. First contact outside ring is considered leaving.	After implement lands: from back half of circle.	After implement lands, be under control & call "Mark": from back half of circle
LEAVE RUNWAY AFTER THROW	After implement lands: from behind arc & extended lines or after moving 4 m from arc. First contact outside ring is considered leaving.	After implement lands: from behind arc & extended lines	After implement lands & official calls "Mark": from behind foul line arc & extended lines
FLIGHTS			
QUALIFYING-NOT PART COMPETITION	Yes if large field. 12 to competition	C-ships: Yes if > 15 throwers. 12 to competition	Not addressed
USE FLIGHTS IN ROUNDS 1-3 (PRELIM.)	Not addressed	First 3 throws if > 15 throwers (Masters if > 12).	Yes 4 to 12 throwers/flight
NUMBER TO ROUNDS 4-6 (FINALS)	8	8/9 depending on number of lanes on track	Scoring places + 1 (must have valid mark)
TIES FOR LAST ROUNDS 4-6 POSITION	Break ties unless exact	Reverse of performance in first 3 rounds. Open Ch'ships reverse before final round	Ties qualify for finals
ROUNDS 4-6 (FINALS) ORDER	Reverse of performance in first 3 rounds. Reverse before final round	Reverse of performance in first 3 rounds. Open Ch'ships reverse before final round	Reverse of performance in preliminaries
NUMBER OF COMPETITION THROWS (TRIALS)			
MORE THAN 8/9 IN COMPETITION		3 throws for all. 3 throws for top 8 or 9 (4 throws for all if decided by games committee)	
8/9 OR FEWER IN COMPETITION	6 total [3 (fair throw not required), reorder, 3] (4 throws for all if decided by games committee)	6 total [3 prelim (1 attempt required), reorder, 3 final] (4 throws for all if decided by games committee)	3 prelims (1 fair throw), 3 finals (4 throws if decided by games committee)
COMBINED EVENTS		3	Not addressed
TIME TO INITIATE ATTEMPT			
2 OR MORE THROWERS		1 Min	
CONSECUTIVE THROWS		2 Min	2 Min
COMBINED EVENTS-2 OR MORE		1 Min	
COMBINED EVENTS-CONSECUTIVE		2 Min	2 Min
TIME EXPIRATION WARNING METHOD	Clock and hold up yellow flag w/15 seconds left	Clock and hold up yellow flag w/15 seconds left, attend drop flag, verbal	Clock, or hold up yellow flag w/15 seconds left

Modified from Throws Rules Comparison, USATF Best Practices, Jan 10 (Credit: B. Buttermore)

THROWS OFFICIALS AND DUTIES

Officials	Duties		
	Pre-event/warm up	During Event	Post-Event
Head Official	Confirm meet instructions with Meet Management. Obtain flight sheets. Meet with officials. Review safety. Assign tasks. Inspect venue. Confirm sectors. Confirm distance arcs. Meet with athletes. Introduce Coordinator	Watch circle or runway for fouls. 2nd reader. 2nd recorder. Signal fair/foul w/flags. Signals venue is ready. Move Hammer gate.	Review results sheets. Sign results. Deliver to Referee or Scoring Personnel.
Flight Coordinator	Meet with athletes. Bring to venue. Cover rules/methods. Confirm entered athletes with Laser operator and recorders.	Call up athletes (UP, ON DECK, ON HOLD or UP, FOLLOWED BY, THEN). Confirm field personnel are ready. Call X IS UP. 3rd recorder. Watches for legal throw.	Compare results, paper and electronic.
Ring Official 1	Lead out officials. Control ring during warm ups. Track time or number of throws for warm up.	Watch circle or runway for fouls. Communicate with head. 1st recorder.	Compare results, paper and electronic. Sign results.
Ring Official 2	Work with tape puller. Set record cones. Retrieve during warm ups.	Watch circle or runway for fouls. Communicate with head. 1st reader.	Sign results.
Tape Puller	Stretches out tape. Help retrieve.	Pulls tape through center of ring or 8 m point for Jav. Move Hammer gate.	Secures tape. Removes twist. Police area/clean up
Timer	Prepare count-down clock and place so competitor can see it. Help retrieve.	Times 1 minute for trial. Yellow flag when 15 sec left.	Remove equipment. Police area/clean up.
Marker with Tape	Retrieve during warm ups	Marks with tape. Opposite side of athletes.	Sign results. Assist athlete control. Leads athletes off.
Spotter 1	Retrieve during warm ups. Smooth Shot Put or Hammer holes at end of warm ups.	Smooth Shot Put or Hammer holes after throw. Locate and mark landing of implement with screwdriver or skewer. Call sector foul.	Secures implements. Polices area/clean up.
Spotter 2	Retrieve during warm ups	Locate and mark landing of implement with screwdriver or skewer. Call sector foul.	Rear line escort of athletes
Retriever(s)	Retrieve. Carry implements back to circle area	Removes implement from sector. Return to ring/runway	Police area/clean up.
Laser Operator	Prepare equipment. Set reference reflector. Confirm calibration measurement. Shoot circle center and edges. Confirm entered athletes.	Spot reflector. Initiate measurement. Announce measurement.	Compare electronic results to paper results. Check calibration of Laser.
Reflector Holder	Hold reflector at center of circle	Holds reflector at mark in field	Help pack Laser equipment
Point/Flats Spotter	Retrieve during warm ups	Determine point or flat landing for Javelin. Located outside sector at distance of throw	Police area/clean up.
Extra person	Retrieve during warm ups	Convert meters measurement to feet and inches and display on performance board or display feet and inches directly.	Secure performance board.

Placement of Certified Officials and Volunteers

Minimum number of Officials

Help is often provided by meet management. These helpers may or may not have experience but in any case should be trained as to safety and their tasks.

It may be necessary to ask for volunteers from the spectators. Volunteers should be asked not to coach an athlete or root openly for an athlete.

If one official is available:

Shot Put/Discus Throw/Hammer Throw/Javelin

- Official acts as Head, flight coordinator, ring judge, reader, recorder, timer, flags.
- At least 3 helpers should be found. The most experienced helper should be used as marker with tape in the field and should be trained to determine location of mark and placement of tape end. Flats for Javelin have to be called in the sector or by head.
- The other helpers are used as tape puller and retriever. The tape puller can also change the performance board and move hammer gate.

If two officials are available:

Shot Put/Discus Throw/Hammer Throw

- One official acts as Head, flight coordinator, ring judge, reader, recorder, timer, flags.
- Second official is marker with tape in the field, calls sector fouls.
- Volunteers or meet help are used for tape pulling and retrieving. The tape puller can also change the performance board and move hammer gate.

Javelin

- One official acts as Head, flight coordinator, ring judge, reader, recorder, timer, flags.
- Second official acts as Points/Flats Spotter. Also helps determine location of mark when javelin lands nearly flat or skips. Flat flags (white and red).
- The most experienced volunteer is the marker with tape in the field.
- Volunteers or meet help are used for tape pulling and retrieving. The tape puller can also change the performance board.

If three officials are available:

Shot Put/Discus Throw/Hammer Throw

- One official acts as Head, flight coordinator, ring judge, recorder, timer, flags.
- Second official acts as ring judge, tape reader, 2nd recorder. Alternatively for Discus, is spotter in field and calls sector fouls.
- Third official is the marker with tape in field, calls sector fouls.
- Volunteers or meet help are used for tape pulling and retrieving. The tape puller can also change the performance board and move hammer gate.

Javelin

- One official acts as Head, flight coordinator, ring judge, reader, recorder, timer, flags.
- Second official acts as Points/Flats Spotter. Flat flags (white and red).
- Third official determines location of mark for the javelin and has marker with tape.
- Volunteers or meet help are used for tape pulling and retrieving. The tape puller can also change the performance board.

Throwing Officials' Tasks

Pre-Competition

Prior to arrival on competition day:

1. Find out what rules are being used. Review the appropriate rules.
2. Find out if other certified are available and if other help is supplied.
3. Check personal equipment: tapes, rule books, field measuring rod, flags, stop watch, etc.
4. If possible, visit venues to look at sectors and cages before the meet. If sector measurements are incorrect, work with people laying out sectors to correct. The acceptable error for the cross sector distance is $\pm 0.1\%$ ($\pm 1/1000$ of distance). Instruct them as to how to lay out the sectors. Have netting repaired if necessary.

After arrival:

1. Check with meet management for specific rules on start time, flights, finals, minimum distance, where flight sheets are and where finished flight sheets go.
2. Determine where medical personnel will be during the meet and how to contact.
3. Pick-up flight sheets.
4. Meet with officials. Discuss safety in the field and around the ring/runway. Assign tasks. Review rules and measurement methods.
5. Inspect equipment including tape and attachment to measuring rod. Confirm location of zero and that desired measurement unit is up at the connection.
6. Notify field officials of the likely distances for the throws given past throws.
7. Check venue, ring, cage, spectator control flags, distance arcs and signs. Check that hammer insert is in place if hammer is done from discus ring.
8. Measure sector. Re-mark if necessary and time is available. Lay out string for sector lines if time is short.
9. If necessary, place athletic tape at edge of ring to designate back half.
10. Instruct non-officials on their duties, emphasizing safety and methods.
11. Contact weights and measures for mark and how implements will be moved.
12. Review throwing distances. If a National record is possible, make sure steel tape is available and weights and measures will be ready to recheck the implement.
13. Check in athletes including a reminder to remove jewelry for HS. All NCAA and HS athletes need to check in before the start of the event. Athletes can check in up to scheduled start time. If possible have an official available to check in athletes during first warm up period. Entered USATF athletes can check in late.
14. Ask athletes for conflicting events and note or adjust flights.
15. Determine flights if necessary. If flights have been determined by meet management, it is better to follow them even though some flights might have fewer competitors because of scratches.
16. Twenty minutes before scheduled start time, call 1st flight into competition area.
17. Confirm competitors are present. Don't wait if someone is not there.
18. Check for jewelry and proper uniforms for high school and numbers for others.
19. Give instructions to athletes covering safety, flights (preliminaries and finals), number of throws or time for warm up, number of throws in preliminaries, number of competitors to finals, rules for event, work out sharing of implements during warm up and competition.

Throwing Officials' Tasks (Continued)

Warm ups:

1. After instructions note time and start warm ups.
2. Warm up by time or number of throws.
3. Time is approximately 10-15 minutes depending on number of throwers and rules.
Note start time for flight warm up
4. Number – 3 or 4 warm up throws for large flights or meets, 5 for meets with a small number of throwers
5. Shot put – one warm up throw at a time. 3 to 5 throwers per minute.
6. Hammer – one warm up throw at a time. 2 to 3 throwers per minute.
7. Discus – 2 times in with 2 discuses for a total of 4 warm ups with possibly one additional throw with a single discus. Move those with only one discus around in each warm up round so everyone has the same number of throws. Two athletes in with 2 discuses in 1 minute.
8. Javelin - Get steps on runway, pick all together (short throws in line across sector, out and back one time). Throw from runway 3 to 4 times. Some may have to do steps between picks and runway. Throw 4 or 5 with officials outside sector then halt warm-ups and have field pick up. Continue when all removed to side.
9. End warm ups a few minutes before the start time. Field personnel should prepare the field (smooth holes for Shot Put and Hammer Throw) and get into position for the event.
10. Give any final instructions to the competitors including the throwing order and the method to call them up

Competition

Approximate time to complete throw during competition: Shot put - 0.75 min/throw,
Discus/Hammer/Javelin - 1 min/throw

Call up procedure after first competitor in flight:

1. After A throws and while officials move to measure with tape or while waiting for Laser measurement, announce “B WILL BE UP, C IS ON DECK, and D IS ON HOLD”. Alternate call up: “B WILL BE UP, FOLLOWED BY C AND THEN D.”
2. After A’s measurement is done and announced, check that field officials are ready and announce “B IS UP”. Official should stand in front of ring until field is ready. Time (1 minute) for trial starts at that point.
3. B can move to ring when first announced but should not enter ring until second announcement.
4. For Javelin, stand in middle of runway after A’s throw, announce “B WILL BE ON RUNWAY, C IS ON DECK, D IS ON HOLD”. Alternate call up: “B WILL BE ON THE RUNWAY, FOLLOWED BY C, AND THEN D.” After A’s measurement, check field, then look at B and announce “B IS UP” while moving off runway. Time (1 minute) for trial starts at that point.

Throwing Officials' Tasks (Continued)

Ring procedure:

1. At start of flight, sweep the ring to remove dirt and grass. Do again as necessary or if asked by competitor. Note start time on top of flight sheet.
2. Make sure all officials and helpers are ready.
3. Call first competitor into ring using "A WILL BE UP, B ON DECK, C ON HOLD, A YOU ARE UP". Alternate call up: "A WILL BE UP, FOLLOWED BY B, AND THEN C. A YOU ARE UP". Start time for A.
4. Start watching for fouls after competitor is stationary in ring and starting to throw.
5. A foul should be called if it is actually seen. If it is questionable or not seen distinctly, a foul should not be called. Give the athlete the benefit of the doubt.
6. If a foul does occur, the red flag can be raised as it happens. It is better not to call "FOUL" if you can. Inexperienced field officials often do not see the red flag at the ring and may need to be notified of the foul verbally after reaching the mark.
7. If using the white flag and there are no fouls, raise it after the competitor correctly leaves the ring.
8. For a fair throw, announce the next three throwers as the tape puller and field marker move to position.
9. The tape puller should not step into the ring during the measurement but can go to 8 m mark for javelin. Make sure that tape passes through center of ring or the 8 meter point for the javelin. The tape should be straight and initially pulled tight but then backed off slightly to reduce the stretch. The tape for the shot put is pulled slightly harder to keep it above the ground. The tape may have to be pulled harder during windy conditions to keep it straight. The tape puller should hold the proper units up and with experience can learn to flip the tape over.
10. The reader should stand outside the ring and read the tape at the inside of the shot put stop board, discus, or hammer iron band. The numbers will be right-side up if read from the left-hand side of the ring or runway.
11. The reader should make sure the tape is pulled with the proper stretch and through the center of the ring or 8 m point.
12. Measure in metric (USATF and NCAA) or in feet and inches (high school).
13. Measurement is read to the next lesser increment on the tape.
14. Read measurement saying aloud. Enter mark on flight sheet while saying again for the athletes and spectators.
15. For high school, measurement for shot put is FF-II.ii where FF is feet; II is 0 through 11 inches and .ii is .0, .25, .5, or .75 inches. Measurement for discus/hammer/javelin is FFF-II where FFF is feet, II is 0 through 11 inches
16. For USATF/NCAA, measurement for all throws is MM.CC where MM is meters and CC is centimeters.
17. Additional notations on flight sheet for trial are F for foul, P for pass, ND for no measured distance (less than minimum), and DNS for an athlete that did not start. Do not enter DNS for USATF until preliminary flight is done.
18. At the end of a flight, record time on the flight sheet. Sign sheet including USATF certified official number.
19. Call up next flight. Give instructions. Start warm ups.

Throwing Officials' Tasks (Continued)

Field procedure:

1. Field markers should stand to one side of the sector or the other at the expected distance for the throw. The landing of the discus and javelin (if skips) can be seen better if to the side and is safer. The shot and hammer leave a more easily seen mark.
2. The zero end of tape is held at the mark in field.
3. The spotter and marker should move to the mark as fast as possible for all throws and mark the first point of impact nearest to ring or runway including apparent fouls.
4. Spotter should insert screwdriver or other indicator at mark.
5. Marker should hold tape and rod with both hands when moved to mark. At the mark, after the rod is inserted, the tape puller and marker should move the tape together so that the tape is straight. The marker then drops the tape to the ground and signals to puller to take up the slack. Zero is held at screwdriver.
6. For Laser measurements, the retro-reflector rod is moved to landing spot as fast as possible. Rod is held still with bubble inside indicator circle. Mark is held until measurement is announced and next competitor is called up. One of other field judges should notify rod holder that measurement is done.
7. The mark should be held even if a foul is called in case a protest is made. The ring judge should notify the field that the next thrower will be up. For a fair throw, the mark should be held until the measurement is made.

Implement marks:

Shot

Landing can leave 2 rings (inner mark and outer splash mark). Measure at inner mark nearest to ring. Depends on ground surface, mark consistently. Smooth mark after measurement

Discus

View flight from side. May or may not leave visible mark on ground. Follow discus to ground and go to expected mark. For distinct mark, measure at nearest point to ring. For indistinct mark, measure at visually determined landing point.

Hammer/Weight

On dirt field, landing can leave 2 rings (inner mark and outer splash mark).

Measure at inner mark nearest to ring. Smooth mark after measurement.

On grass field, head can bury. Mark at disturbed ground nearest to ring. Replace as much of divot as possible after measurement.

Javelin

View flight from side,

For sticking javelin, leave in ground until marker arrives. Mark at part of hole nearest to runway.

For skipping javelin, follow head (USATF/NCAA) or follow 1st point of contact (High School/USATF Junior) to ground and go to expected mark. May or may not leave visible mark on ground. For distinct mark, measure at nearest point to runway. For indistinct mark, measure at visually determined landing point.

Throwing Officials' Tasks (Continued)

End of Preliminaries-Flights:

1. After each competitor completes the preliminary throws, circle the longest throw on the flight sheet.
2. After each flight, write several of the longest throws for that flight on the last flight sheet to be referred to while determining the qualifiers for the finals.
3. The competitors with the longest throws in the early flights should be notified that they might qualify for the finals and should keep track of the results of the later flights. Their implements should be kept in the competition area. Those who do not qualify for the finals should pick up their implements before the finals start and may need to sign for them.
4. Implements that will be used by a teammate in a later flight should be left in the competition area.
5. At the end of all preliminary flights, determine the longest 8 or 9 (depending on rules and meet management) for the final 3 rounds. For NCAA and high school, ties for the last place qualify for the finals. For USATF, ties for the last place are broken by next longest throws unless there is an exact tie.
6. For Qualifying rounds with Finals not on the same day, implements of qualifying athletes will generally be impounded by Weights and Measures.

Finals:

1. To speed up the finals process, determine the qualifiers for the finals and if anyone from the earlier qualified for the finals but not necessarily the final order. Generally if all competitors are from last flight no additional warm up should be allowed. NCAA rules do call for the same warm up period before the finals as given before the preliminaries. Time should be allowed if the competitors request it.
2. Qualifiers from earlier flights should be called in to the competition area and organized to do up to 2 warm up throws which should be started.
3. Allow qualifiers from the last flight to throw one warm up after qualifiers from earlier flights have thrown one. Exception - NCAA.
4. During warm up for finals, reorder throwers from shortest to longest for finals.
5. Have another official confirm the final throwing order.
6. Announce the new throwing order to the competitors and spectators.
7. At start of finals, note start time on last flight sheet.
8. Conduct final three rounds using new throwing order. For the open USATF championships, the final round is also reordered as indicated on most flight sheets.
9. At end of finals, note end time on last flight sheet.
10. At end of finals, circle longest throw in final rounds for each competitor if longer than in preliminary rounds.
11. Enter longest throw for each competitor, including non-finalists in designated column on flight sheets, using ND for No Distance and DNS for Did Not Start. Rank competitors for finalists.

Throwing Officials' Tasks (Continued)

12. Compare final flight sheets of all recorders or have another official review the single flight sheet.
13. Sign flight sheets including USATF certification number.
14. Announce to athletes and spectators the longest throw of each finalist. In some cases, awards will be made at the venue.
15. Turn flight sheets in to designated meet personnel.
16. If meet management indicates, escort athletes to awards area or from the competition area.
17. The competitors should remove their implements at the end of the Finals competition. Weights and measures sometimes requires the athletes to sign for their implements when they remove them from the competition area.

Instructions to Competitors

The following instructions can be tailored to the event and the level of the athletes. I would give more instructions regarding the event rules at a high school meet, particularly early in the season. I want the athletes to be aware of the rules and I want them to know that I know the rules. Certain points of emphasis can also be given. The following are how I would announce the instructions:

This is Flight __ of __ Flights. Everyone in this flight will have three competition throws. The top 8/9 competitors (plus ties for the last place for NCAA and high school) will qualify for the Finals in which they will have another set of 3 throws.

(For high school) You must remove all visible jewelry except for Medic Alert bracelets and religious metals which must be taped to your body. This includes plastic or string bracelets.

(For high school) You must have a school issued uniform that is for track and field. Shorts or shirts labeled with other sports are not track uniforms.

(For NCAA) You must wear the school issued uniform at all times and a competition number if issued. Your uniform must not show a bare midriff when you are standing still.

(For USATF) You must have number attached to the front of the uniform.

There will be no electronic devices used in the competition area. You may not view video that is taken by your coach or others during the competition.

(NCAA/high school) Tape may be only be used on the hands to cover an open wound. You may use tape during warm up but must remove it for the competition.

(USATF) Tape may be used on the hands but fingers may not be taped together.

(Hammer Throw) Individual fingers may be taped but not together. Hammer gloves must have open fingers. Are there any left hand throwers? During warm ups, I would like the left handers to throw one after the other.

(For high school) Is any one doing another event that may interfere with your preliminary or final flight? I can have you throw out of order in the flight. If you leave before you have done all your throws in the flight, you will have to return before your flight ends to have your other throws. You will be excused for ___ minutes.

(For NCAA) Is any one doing another event that may interfere with your preliminary flight? I can have you throw out of order in the flight. If you leave before you have done all your throws in the flight, you will have to return before your flight ends to have your other throws.

Instructions to Competitors (continued)

(For USATF Open/Masters) Is any one doing another event that may interfere with your preliminary flight? I can have you throw out of order in a round of your flight. You need to return before the end of the next round to have your next throw. It will be a pass if you have not returned in time.

(For USATF Youth) Is any one doing another event that may interfere with your preliminary or final flight? I can have you throw out of order in the flight. If you leave before you have done all your throws in the flight, you will have to return before your flight ends to have your other throws.

For events inside track:

(NCAA) You may cross the track to talk to your coach until the running events start. Be careful at all times when crossing track. After running events start, you may talk to your coach across the track. Be aware of the person in the ring and don't walk behind the ring until the throw is completed.

(High school - Meet management may allow the athletes to cross the track to talk to their coaches.) You may cross the track to talk to your coach. Make your time across the track short and come back directly to the competition area. Be careful crossing the track. Be aware of the person in the ring and don't walk behind the ring until the throw is completed.

For events away from the track:

You may talk to you coach between throws. You should meet with your coach at the coaching box (if provided). Be aware of the person in the ring and don't walk behind the ring until the throw is completed.

Warm up instructions:

We will have __ minutes for warm up and will start the flight at _____. Don't over throw in warm up.

Everyone will get ___ throws. If you don't need that many, do only as many as you need.

Does everyone have an implement or are sharing with a team mate? (NCAA) Is there anyone willing to share an implement with ____? (I would also ask the same for high school.)

If more than one athlete is using the same implement, split up in the warm up line and stay in your relative position. After throwing, the first thrower will bring the implement back to the second thrower and move to the end of the line.

(For discus warm up) There will be 2 times into the ring with 2 discuses. If you have only one discus, I will move you around in the line so that you get the same number of warm-ups as the others.

Instructions to Competitors (continued)

Competition Instructions:

You may enter the ring from any side.

You need to be stationary in the ring before you begin your throw.

I will start looking for fouls after you are stationary and at the point you start your throw.

As you throw, you may not touch the top of iron ring, stop board, or any place outside the ring or runway with any part of the body.

(Shot put) You need to have the shot put at or near your neck as you start your throw and may not let it drop behind the line of your shoulders as you throw.

(Hammer) You may lay the hammer head on the ground inside or outside the ring before you begin your throw. You need to hold the handle with both hands. A throw may be interrupted and restarted if no foul has been committed if started within the time limit. A throw may be interrupted if the head hits the ground and restarted if no foul has been committed.

(Javelin) The javelin must be held by the grip with one hand only so that the little finger is toward the front and your last contact is with the grip. At no time until the Javelin is in the air may you turn completely around so your back is toward the throwing area unless you are returning to your starting point for a restart. The javelin shall be thrown over the shoulder or upper part of the throwing arm. It shall not be slung or hurled.

A fair throw must land within the sector. On the sector line or outside the sector is a foul.

(NCAA, USATF) After the implement lands, leave from the back half of the ring or behind the extended javelin foul lines. The first step should be distinctly behind the line.

(High school) After the implement lands, get under control and I will say "Mark". Then leave from the back half of the ring. The first step should be distinctly behind the line.

You have one minute from when I call you up to when you start your throw that you complete. At 15 seconds to go, I will raise the yellow flag and tell you that you have 15 seconds left if you are not in the process of throwing. You may interrupt your throw and restart but you have restart within the 1 minute time limit.

We will measure in meters and centimeters (NCAA, USATF) or in feet and inches (high school).

Instructions to Competitors (continued)

Minimum distance for measurement:

Method 1 - one measurement of short throw:

We will have a minimum measurement distance. We will measure all throws near or longer than ____, which is the nth sector arc in the field. We will measure your first fair throw that is less than the minimum but no other short throw. You may intentionally foul any short throw but you have to decide quickly if you want to keep it fair.

Method 2 – no measurement of short throw:

We will have a minimum measurement distance. We will measure all throws near or longer than ____, which is the nth sector arc in the field. We will not measure any throw that is less than the minimum but will verbally estimate the distance.

Call up instructions:

I will call you up in the following manner:

After A throws and while we move to measure with tape (or while waiting for the Laser,) I will announce “B WILL BE UP, C IS ON DECK, and D IS ON HOLD” or “B WILL BE UP, FOLLOWED BY C AND THEN D.”

After A’s measurement is done and announced, I will check that field officials are ready and then announce “B IS UP”. At that point, you may enter the ring. Your one minute time starts then.

B can move to ring when first announced but should not enter ring until second announcement.

For Javelin, I will announce “B WILL BE ON RUNWAY, C IS ON DECK, D IS ON HOLD” or “B WILL BE ON THE RUNWAY, FOLLOWED BY C AND THEN D.”

After A’s measurement is made and announced, I will check the field, then look at B and say “B IS UP” while moving off runway. Your one minute time starts then.

The throwing order for this flight will be _____.

Any questions? Good luck and have a good competition.

Suggested Personal and Supplied Equipment for Throws

Band Aids
Baggies (2 gallon to fit over clipboard in case of rain)
Benches for Athletes +
Big Clips for clipboard paper sides
Blank Numbers (for lost numbers)
Brooms: Small Broom for Ring +
Push Broom to smooth field +
Bug Repellant
Cell Phone (for emergency call-off or on vibrate during competition)
Chairs for officials +
Chalk or Paint Dispenser for Sectors +
Chalk, small and large
Clip Boards*
Cone, small 4'' (circle or runway closure)
Conversion Book, Metric to feet/inches
Disinfectant
Distance Markers (Laminated)
Eraser
Event Clock (battery operated time clock) +
Extra Key Rings to fix tape ends
Field Event Forms +
Field Measuring Rod
Flags (white, red, yellow)*
Foot Mat to clean shoes
Garbage Bags (for equipment bag or poncho if rain)
Gloves for handling hammers
Highlighter, several colors
Instruction to Athlete Cards (List of rules for each event)
Labels (Address for implements)
Ladder, 12' to reach hammer stuck on cage +
Markers (screwdrivers, skewers)*
Megaphone, battery operated
Membership Forms (USATF)
Note Pad
Officials Address List (local)
Officials Application Forms
Paper Towel to put between baggie and sheets if raining)
Permanent Markers (particularly black) and/or paint stick
Pens or Pencils (particularly if raining)*
Pencil Sharpener
Plastic Ties (various sizes for netting)
Plastic Sheet Protectors (8 ½ by 11), Heavyweight
Post It™ notes
Push pins and tags for Javelin runway
Rake to smooth field holes
Record Forms
Record List for Competition (National and World Records)
Rubber Bands (for clip board)
Rulebooks (USATF, NCAA, High School)*

Suggested Personal and Supplied Equipment for Throws (continued)

Safety Pins
Scissors
Sector Tape +
Spike Wrench
Stapler and Staples
Stop Watch (Yellow Flag)
String for laying out sector
Sun Screen (Rating higher the better)*
Tapes, Measuring: Long Throws: 330'/100 m Fiberglass*+
 Long Throws: 100 m for records+
 Short Throws: 100'/30 m Fiberglass*+
 Short Throws: 30 m steel tape for records+
Tape: Adhesive/Athletic Tape*
 Duct (Silver, White, Yellow, Red)
 Electrical (several colors)
 Masking
 Scotch
Tape Holder/Marking Rod
Tarp to cover ring or equipment if raining
Time of Day Clock (hung near event)
Tools: Allen Wrenches
 Adjustable Wrench (6")
 Hammer
 Knife
 Pliers: Needle Nose, Regular
 Screwdrivers (as markers and tools): Phillips, Regular (Long thin and Large)
 Vise Grips
Towels, Cloth
Umbrella for Athletes +
USATF Directory
Water Bottle*
Wind Sock (Javelin)
Weatherwriter Clip Board for use during rain

Clothes

Extra Pair of Socks (particularly if wet in morning)
Extra Pair of Shoes if inclement weather or wet field
Hat, preferably with wide brim for sun protection*
Hat with chin strap for windy conditions
Sweater, Jacket or Wind Breaker (depending on time of year)
Pull Over Rubbers or Rubber Shoes
Gloves for cold weather
Sunglasses*
Hand Warmer
Umbrella, personal

* Should have as a minimum + Supplied by meet management
From Kleeman, George (2007). **The Throwing Officials' Manual.**

**Meet
Location
Field Score Sheet**

Event # _____ Event name Flight 1 of _____ Start Time: _____
 Records _____ End Time: _____

	Attempt 1	Attempt 2	Attempt 3		Attempt 4	Attempt 5		Attempt 6	Best	Place
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

NCAA Division I National Championship

De Moines, Iowa 6/11 - 14/2008

Field Score Sheet

Event 17 Men Shot Put Finals 6/14/2008 Flight 1 of 1

Records:

American: 23.12m 5/20/1990 Randy Barnes, Mazda
 College Best: 22.00m 6/3/1995 John Godina, UCLA
 NCAA Meet: 22.00m 6/3/1995 John Godina, UCLA
 Drake Stad.: 22.10m 2006 Christian Cantwell, Nike

Start Time: 3:00 PM
 End Time: 4:00 PM

	Attempt 1	Attempt 2	Attempt 3	Attempt 4	Attempt 5	Attempt 6	Best	Place
1 Harrison Benjamin JR Texas Tech 17.97 m	17.00	17.80	17.22	17.92	17.34	F	17.92	9
2 Rashaud Scott JR Kentucky 18.44 m	17.87	17.53	18.29	F	17.99	F	18.29	8
3 Nate Englin SR Missouri 18.39 m	17.27	16.99	17.60	-	-	-	17.60	10
4 John Caulfield SR UCLA 18.42 m	F	17.27	17.56	-	-	-	17.56	11
5 Zack Lloyd JR Arizona 18.55 m	18.35	19.19	19.35	19.40	F	F	19.40	4
6 Wes Stockbarger SR Florida 18.28 m	F	F	17.11	-	-	-	17.11	12
7 Russ Winger SR Idaho 19.32 m	F	18.84	18.79	19.63	19.13	19.73	19.73	3
8 Jarred Sola JR Arizona 18.06 m	17.74	18.00	F	F	17.92	18.47	18.47	7
9 Cory Martin SR Auburn 19.48 m	18.33	19.32	19.31	19.89	20.16	20.35	20.35	1
10 Shawn Best SR Arizona 18.30 m	18.52	F	F	18.10	18.44	F	18.52	5
11 Ryan Whiting SO Arizona State 19.34 m	19.83	F	20.24	19.78	F	19.98	20.24	2
12 Justin Clickett SR Virginia Tech 18.50 m	18.05	18.00	18.27	18.52	18.34	F	18.52	6
13								
14								
15								
16								
17								
18								

John L. Baven
 # 016042

adidas Golden West Invitational
Folsom High School, Folsom, CA 6/12/2010
Field Score Sheet

Event # 47 Boys Discus A Flight 1 of 1

Start Time: 5:00 PM

Records

End Time: 6:00 PM

GWI: M 225-02 1987 Kamy Keshmiri (Reno, NV)

National: N 236-06 4/26/2009 Mason Finley (Buena Vista, CO)

		Attempt 1	Attempt 2	Attempt 3		Attempt 4	Attempt 5		Attempt 6	Best	Place
1	Matthew Bender 10 Shafter High 147-04	123-05	142-07	126-10	-	-	-		-	142-07	11
2	Jacob Eckel 12 Castro Valley 151-04	148-01	138-11	138-00	1	143-08	140-08		F	148-01	9
3	Richie Casas 11 N Monterey Co 153-10	F	154-03	146-08	3	146-08	F		149-06	154-03	7
4	Nelson Quinley 11 Oakmont 159-00	-	-	-	-	-	-		-	-	DNS
5	Carson Frost 11 Sonora HS 160-09	F	138-08	134-06	-	-	-		-	138-08	12
6	Zach Sharp 11 Billings West 166-07	F	142-07	150-09	2	137-01	150-06		139-11	150-09	8
7	Frankie Martinez 12 San Benito HS 168-00	F	125-00	143-02	-	-	-		-	143-02	10
8	Jefferson Jarvis 10 Hidden Valley 168-11	159-08	162-11	F	5	148-07	167-05		161-11	167-05	5
9	Europa Mataia 12 Anderson HS 170-11	135-11	160-08	F	4	166-02	F		144-00	166-02	6
10	Mauricio Cornejo 11 Terra Linda 170-03	147-11	166-01	F	7	168-10	167-00		165-08	168-10	4
11	Eric Mason 12 Castro Valley 176-06	F	F	121-11	-	-	-		-	121-11	13
12	Will Lohman 12 Jenkins HS 176-06	174-08	174-05	F	8	169-09	F		161-02 181-02	174-08	2
13	Zach Coniglio 12 Alhambra HS 186-00	F	165-08	F	6	167-04	169-04		F	169-04	3
14	Zachary Stetler 12 Elko HS 186-10	186-10	F	F	9	F	175-11		186-10	186-10	1
15											
16											
17											
18											

John L. Raven
#016042

Example of Filling out Field Sheet

Short example

8 competitors get 2 throws in the Preliminaries

4 longest qualify for 2 throws in the Finals

Start 5:00 PM, End 5:45 PM

Hy-Tek's MEET MANAGER

adidas Golden West Invitational
Folsom High School, Folsom, CA 6/12/2010
Field Score Sheet

Event # 44 Boys Shot Put A Flight 1 of 1

Records

GWI: M 81-03.50 1979 Michael Carter (Dallas, TX)

National: N 77-00 5/5/1979 Michael Carter (Jefferson, Dallas. TX)

Start Time: _____

End Time: _____

	Attempt 1	Attempt 2	Attempt 3		Attempt 4	Attempt 5		Attempt 6	Best	Place
1 Jarvis, Jefferson 10 Hidden Valley										
2 Lohman, Will 12 Jenkins HS										
3 Coniglio, Zach 12 Alhambra HS										
4 Cullors, Dimitri 11 Atascadero HS										
5 Stetler, Zachary 12 Elko HS										
6 Eckel, Jacob 12 Castro Valley										
7 Mason, Eric 12 Castro Valley										
8 Casas, Richie 11 N Monterey Co										
9										
10										

	1	2	3	4	5	6
Jarvis, Jefferson 10 Hidden Valley	50-11.5	51-3.75	-	51-10.5	52-10.25	-
Lohman, Will 12 Jenkins HS	53-7.25	Foul	-	56-9.5	57-3.5	-
Coniglio, Zach 12 Alhambra HS	Foul	56-10.75	-	Foul	56-4.5	-
Cullors, Dimitri 11 Atascadero HS	Foul	Pass	-	-	-	-
Stetler, Zachary 12 Elko HS	55-6.75	61-4.25	-	60-2.5	61-1.5	-
Eckel, Jacob 12 Castro Valley	Did not start	-	-	-	-	-
Mason, Eric 12 Castro Valley	49-4	51-3.75	-	51-10	52-9.5	-
Casas, Richie 11 N Monterey Co	47-11.5	50-5.25	-	-	-	-

Example of Filling out Field Sheet

Short example

8 competitors get 2 throws in the Preliminaries

4 longest qualify for 2 throws in the Finals

Start 5:00 PM, End 5:45 PM

Hy-Tek's MEET MANAGER

adidas Golden West Invitational
Folsom High School, Folsom, CA 6/12/2010
Field Score Sheet

Event # 44 Boys Shot Put A Flight 1 of 1

Records

GWI: M 81-03.50 1979 Michael Carter (Dallas, TX)

National: N 77-00 5/5/1979 Michael Carter (Jefferson, Dallas. TX)

Start Time: _____

End Time: _____

	Attempt 1	Attempt 2	Attempt 3		Attempt 4	Attempt 5		Attempt 6	Best	Place
1 Jarvis, Jefferson 10 Hidden Valley										
2 Lohman, Will 12 Jenkins HS										
3 Coniglio, Zach 12 Alhambra HS										
4 Cullors, Dimitri 11 Atascadero HS										
5 Stetler, Zachary 12 Elko HS										
6 Eckel, Jacob 12 Castro Valley										
7 Mason, Eric 12 Castro Valley										
8 Casas, Richie 11 N Monterey Co										
9										
10										

	1	2	3	4	5	6
Jarvis, Jefferson 10 Hidden Valley	50-11.5	51-3.75	-	51-10.5	52-10.25	-
Lohman, Will 12 Jenkins HS	53-7.25	Foul	-	56-9.5	57-3.5	-
Coniglio, Zach 12 Alhambra HS	Foul	56-10.75	-	Foul	56-4.5	-
Cullors, Dimitri 11 Atascadero HS	Foul	Pass	-	-	-	-
Stetler, Zachary 12 Elko HS	55-6.75	61-4.25	-	60-2.5	61-1.5	-
Eckel, Jacob 12 Castro Valley	Did not start	-	-	-	-	-
Mason, Eric 12 Castro Valley	49-4	51-3.75	-	51-10	52-9.5	-
Casas, Richie 11 N Monterey Co	47-11.5	50-5.25	-	-	-	-

Example of Filling out Field Sheet

Short example

8 competitors get 2 throws in the Preliminaries

4 longest qualify for 2 throws in the Finals

Start 5:00 PM, End 5:45 PM

Hy-Tek's MEET MANAGER

adidas Golden West Invitational
Folsom High School, Folsom, CA 6/12/2010
Field Score Sheet

Event # 44 Boys Shot Put A Flight 1 of 1

Records

GWI: M 81-03.50 1979 Michael Carter (Dallas, TX)

National: N 77-00 5/5/1979 Michael Carter (Jefferson, Dallas. TX)

Start Time: 5:00 PM

End Time: 5:45 PM

	Attempt 1	Attempt 2	Attempt 3		Attempt 4	Attempt 5		Attempt 6	Best	Place
1 Jarvis, Jefferson 10 Hidden Valley	50-11.5 15.53	51-3.75 15.64	-	2	51-10.5 15.81	52-10.25 16.11		-	52-10.25 16.11	4
2 Lohman, Will 12 Jenkins HS	53-7.25 16.34	F	-	3	56-9.5 17.31	57-3.5 17.46		-	57-3.5 17.46	2
3 Coniglio, Zach 12 Alhambra HS	F	56-10.75 17.34	-	4	F	56-4.5 17.18		-	56-10.75 17.34	3
4 Cullors, Dimitri 11 Atascadero HS	F	P	-		-	-		-	ND	ND
5 Stetler, Zachary 12 Elko HS	55-6.75 16.94	61-4.25 18.70	-	5	60-2.5 18.35	61-1.5 18.63		-	61-4.25 18.70	1
6 Eckel, Jacob 12 Castro Valley	-	-	-		-	-		-	DNS	DNS
7 Mason, Eric 12 Castro Valley	49-4 15.04	51-3.75 15.64	-	1	51-10 15.80	52-9.5 16.09		-	52-9.5 16.09	5
8 Casas, Richie 11 N Monterey Co	47-11.5 14.62	50-5.25 15.37	-		-	-		-	50-5.25 15.37	6
9										
10										

Dimensions for Sectors USATF/NCAA/HIGH SCHOOL

A is length on sector side

B is distance across sector at points A on sides - Acceptable error in B is $\pm 0.1\%B$ ($\pm 0.001B$).

C is distance along centerline of sector to midpoint of B

Measurements made from center of ring (Shot, Discus, Hammer) or center of arc (Javelin)

Sector angle is inside angle

Measurements for sector layout are made from center of ring (SP,DT,HT,WT) or center of arc (JT)

Measurements for sector layout are in meters.

Sector side lines are to outside of sector angle. The sector angle is the inside angle.

Distances for sector arcs are measured from inside edge of circle, toe board, or inside javelin foul arc along radius through center of circle or arc.

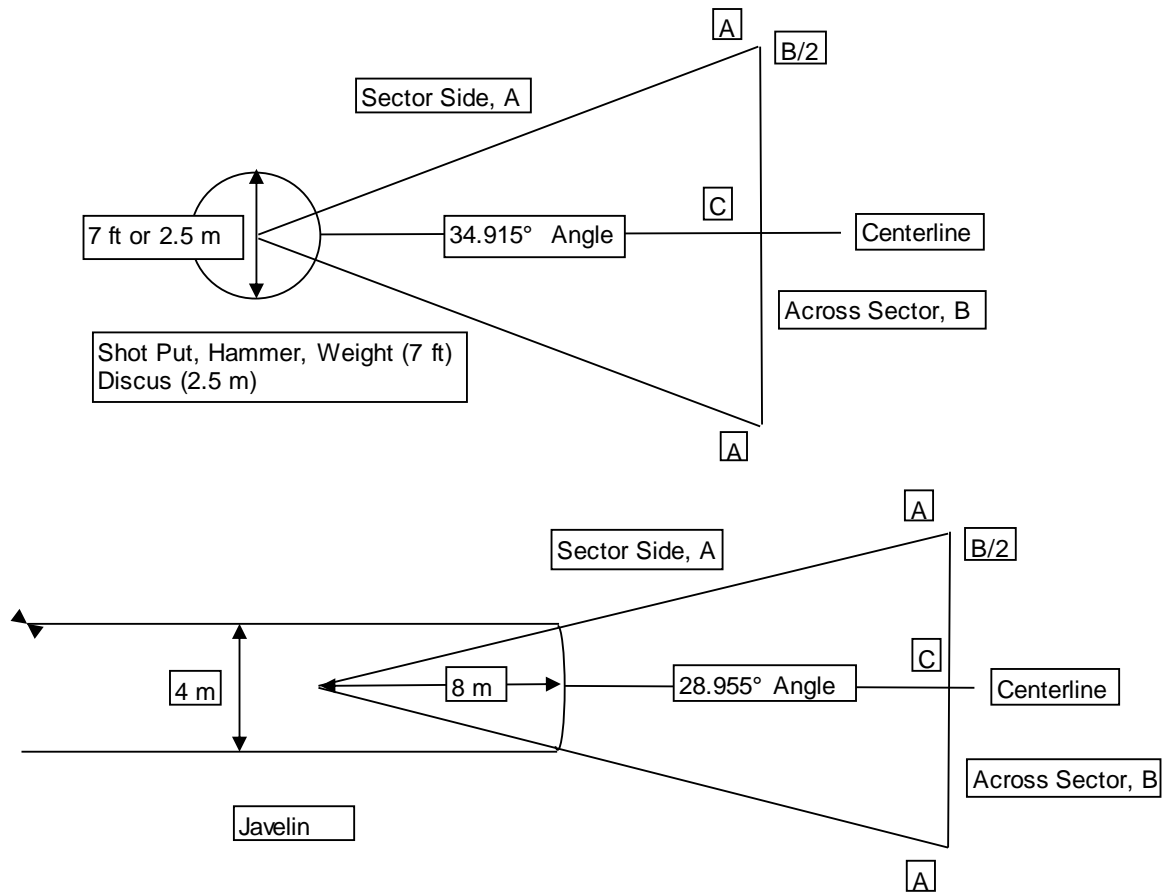
Throw	Ring Diameter	Sector Angle	Sector Side A	Across Sector B	Center line C	B/2	
		Degrees	m	m	m	m	
Shot Put Weight Throw	2.134 m 7 ft	34.915	1.0668	0.64	1.02	0.32	At stop board
			5	3.00	4.77	1.50	
			10	6.00	9.54	3.00	
			15	9.00	14.31	4.50	
			20	12.00	19.08	6.00	
			25	15.00	23.85	7.50	
Discus, ring	2.5 m 8.2021 ft	34.915	1.25	0.75	1.19	0.375	At ring
Hammer, ring	2.134 m 7 ft	34.915	1.0668	0.64	1.02	0.32	At ring
Discus/Hammer Sector		34.915	30	18.00	28.62	9.00	
			40	24.00	38.16	12.00	
			50	30.00	47.70	15.00	
			60	36.00	57.24	18.00	
			70	42.00	66.78	21.00	
			80	48.00	76.32	24.00	
			90	54.00	85.85	27.00	
Javelin 4 meter wide runway		28.955	8	4.00	7.75	2.00	At foul line
			40	20.00	38.73	10.00	
			60	30.00	58.09	15.00	
			80	40.00	77.46	20.00	
			100	50.00	96.82	25.00	

For SP,DT,HT,WT: $B = 0.6 \cdot A$ $B/2 = 0.3 \cdot A$

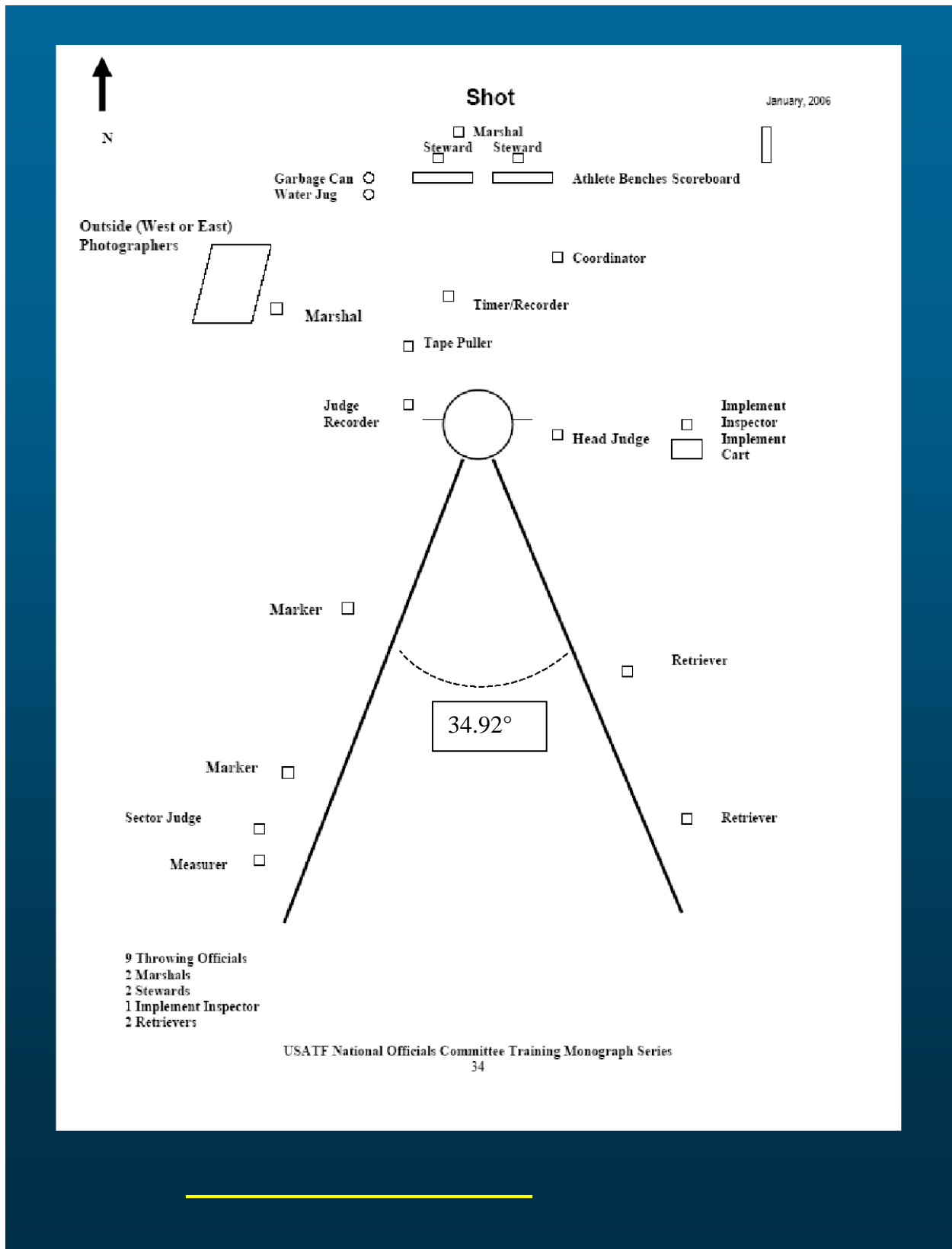
For JT: $B = 0.5 \cdot A$ $B/2 = 0.25 \cdot A$

For all:
 $C = \text{Sqrt}[A^2 + (B/2)^2]$
Sector angle = $\arcsin[(B/2)/A]$

Procedure for Layout of Sectors



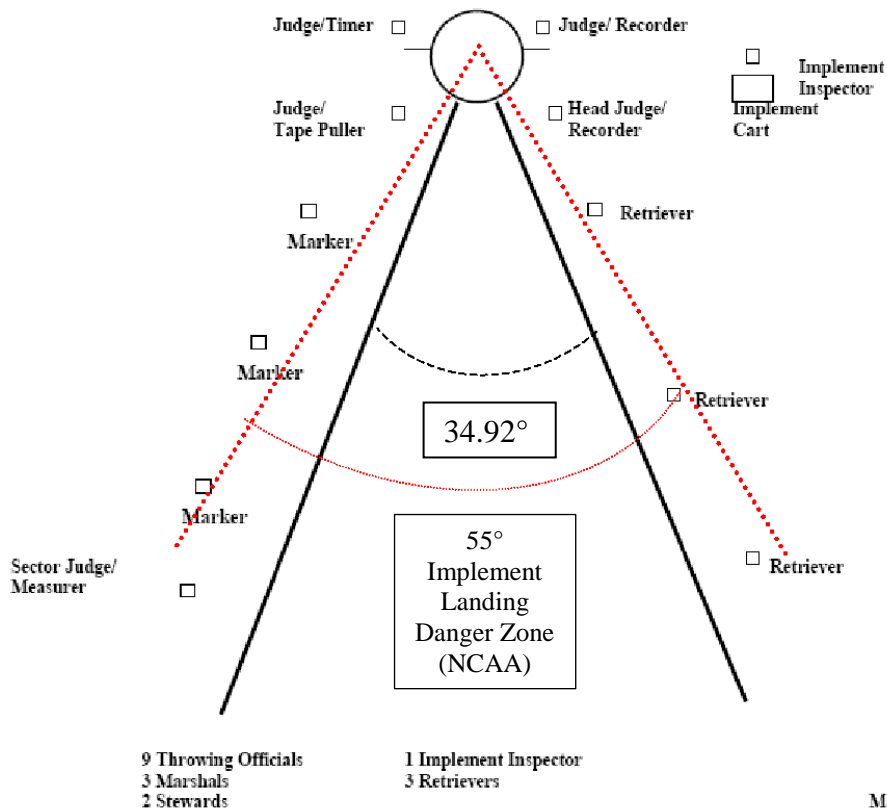
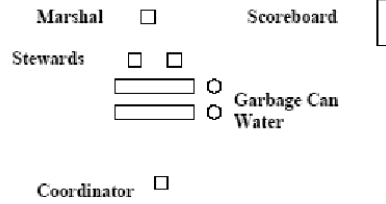
1. Determine direction of centerline.
2. Measure distance C along centerline and mark.
3. Measure distance B/2 approximately perpendicular to centerline and make a provisional mark.
4. Measure distance A from center of circle or arc to location near provisional mark of step 4.
5. Place permanent mark at distance A that is near previous provisional mark.
6. Measure distance B from mark in step 5 and distance A from center of circle or arc to a point along other sector line.
7. Place permanent mark where two distances of step 6 intersect.
8. Recheck distances of sector sides, A, and across sector distance, B.
9. Confirm that centerline of sector is at desired orientation.
10. Lay out marking string from center of circle or arc to points A along sector sides.
11. Check across sector distance, B at one or more sector distances A.
12. Place sector tape or chalk along marking string to the outside of the sector line.
13. Measure distances for sector arcs within sector from inside edge of circle, toe board, or arc across sector.
 - 13a. With two people:
 - One person holds the zero of the tape at the inside edge.
 - The other scribes an arc from one sector side to the other at the desired distance from the inside edge.
 - 13b. With one person and hole at center of circle or arc:
 - Secure the tape to nail at the center of the circle or arc.
 - Add the radial distance to the inside edge of the circle or arc to the desired sector line distances.
 - Scribe arc between sector lines at those distances.
14. Place tape or chalk along scribed arcs from one sector side to the other.



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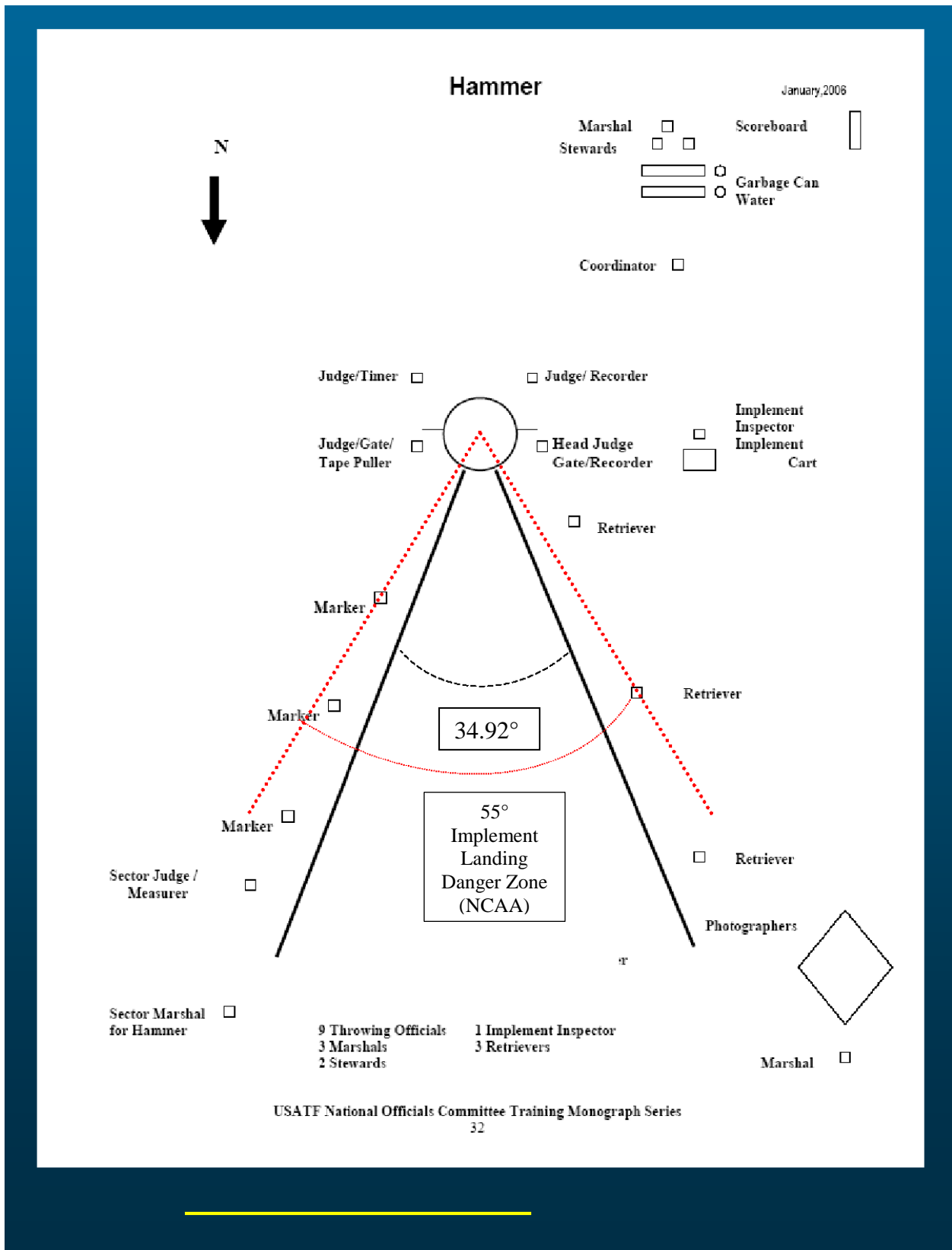
Discus

January, 2006

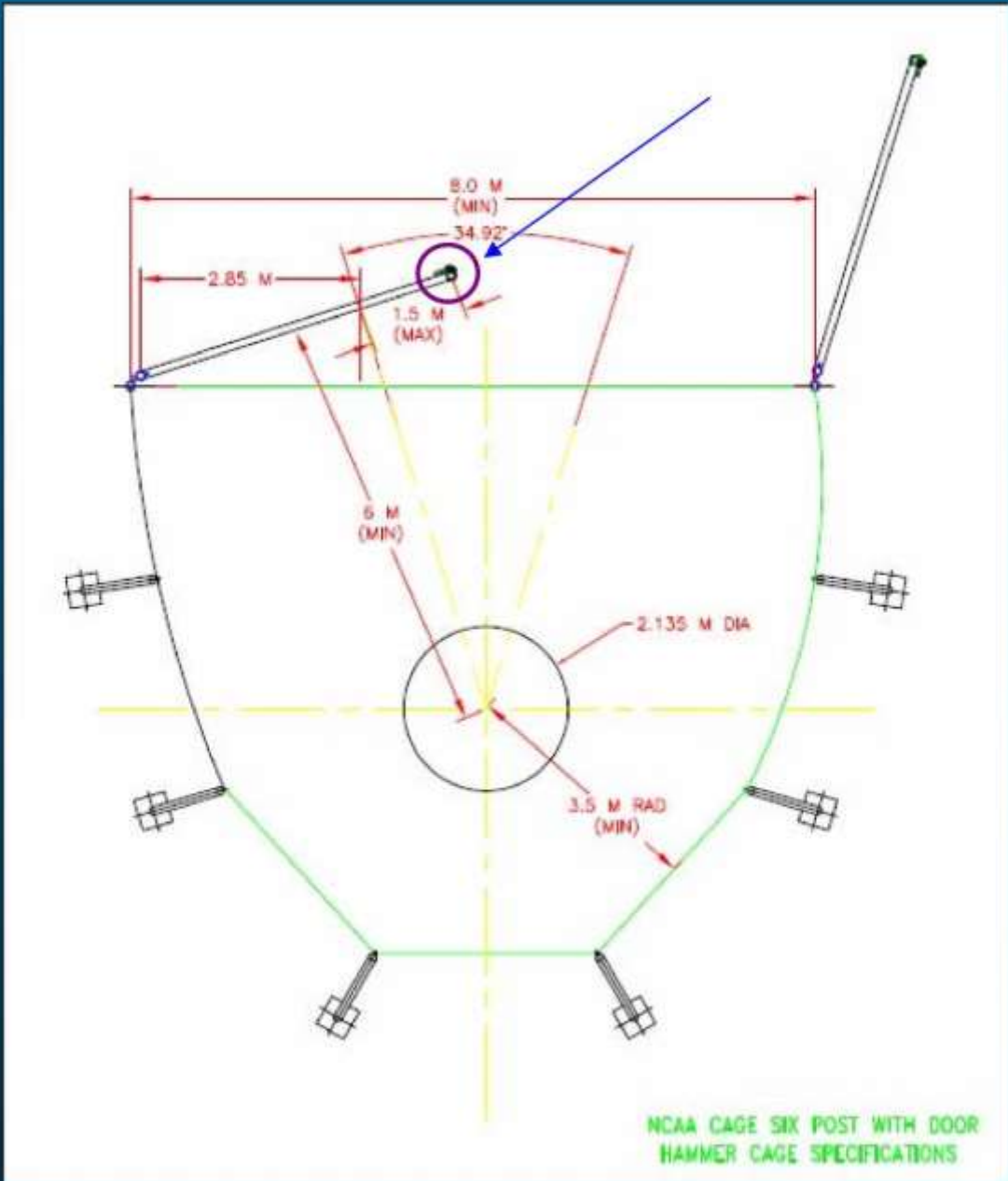


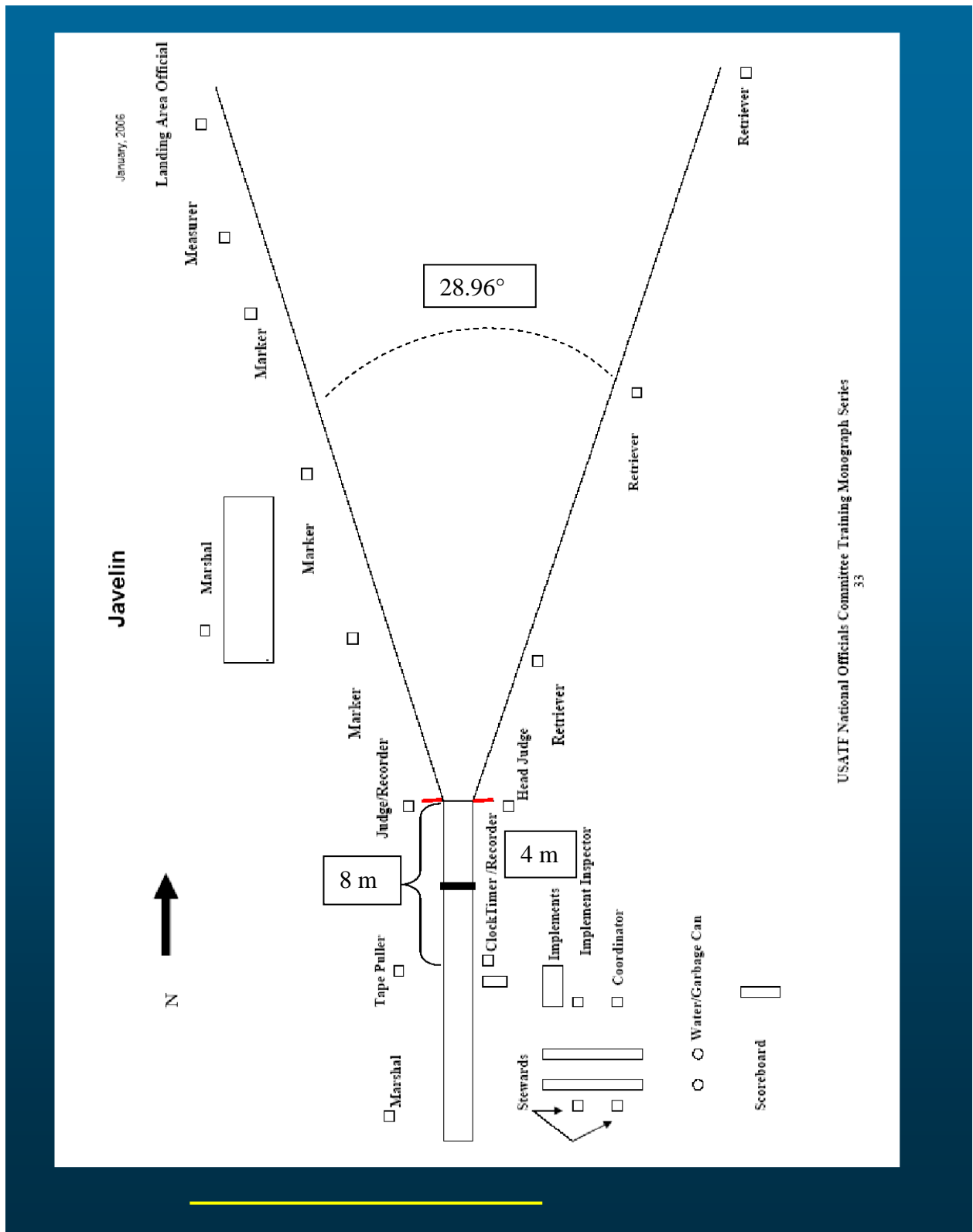
USATF National Officials Committee Training Monograph Series
31

Amended from The Throwing Officials' Manual 2007 Edition by George Kleeman



Amended from The Throwing Officials' Manual 2007 Edition by George Kleeman





Amended from The Throwing Officials' Manual 2007 Edition by George Kleeman

References

Adams, George (2008). **Officiating the Throws**. Presented at USATF Annual Meeting, Reno, NV, December 6, 2008.

Kleeman, George (2007). **The Throwing Officials' Manual**. USATF National Officials Training Monograph Series.

Officials' Resources from USATF: PDF and Word files

Accessed at <http://www.usatf.org/groups/officials/resources/field-events/>
<http://www.usatf.org/groups/officials/resources/best-practices/>

Best Practice Collection. **Event Time Limits** Updated: September, 2009

J. Showker. **Clinic Situations** Updated: January, 2010

Rich Schornstein. **Evaluation Form** Updated: October, 2009

B. Newland, Rich Schornstein, C. Van Holtz. **Event Preparations** Updated: September, 2009

Iowa Association Track Officials. **High School Rules** Updated: January, 2010

Rich Schornstein. **Instructions to Athletes and Rules – NCAA** Updated: September, 2010

Rich Schornstein. **Instructions to Athletes and Rules – USATF** Updated: January, 2010

None. **Links to Throws Materials** Updated: September, 2009

Len Krsak, Lane Dowell. **Officials Assignment Sheets** Updated: September, 2009

Lane Dowell. **Officials Duties** Updated: September, 2009

George Adams. **Officiating the Throws - 2008 Annual Meeting** Updated: December, 2008

Bill Buttermore. **Rules Comparison** Updated: January, 2010

NOC Training Committee, George Kleeman. **Throwing Officials' Manual - USATF Officials Monograph Series** Updated: January, 2007

Unknown. **Throws Officials Assignments and Positions** Updated: January, 2000

Mark Heckel. **Throws Safety Webinar** Updated: April, 2010

PDF files for IAAF, USATF, NCAA, and High School rule books can be accessed at

<http://www.usatf.org/groups/officials/resources/rules/>