HAWAII WRESTLING WEIGHT MONITORING PROGRAM RULES AND REFERENCE GUIDE

Hawaii Interscholastic Athletic Directors Association

and

Hawaii High School Athletic Association

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Prepared by

Hawaii Athletic Trainers' Association and HHSAA Wrestling Committee

HAWAII WRESTLING WEIGHT MONITORING RULES

I. PROGRAM FUNCTION: The program is designed to assist wrestlers in avoiding potentially harmful, rapid weight reduction practices utilized by wrestlers to achieve participation in a specific weight class. The rules are to comply with the NFHS Wrestling Rule 1 Competition, Section 3 Weight-Control Program.

II. WRESTLING WEIGHT CONTROL PROGRAM

- A. Once the testing cycle has begun, no changes in the Weight Monitoring Program rules or procedures will be permitted until the state championships are completed.
- B. No wrestler may compete, pre-season or in-season, until he/she has successfully completed the required hydration test and body fat assessment.
- C. Wrestling weight monitoring program definitions
 - a. Base Weight The actual body weight of a wrestler at his/her first successful weight monitoring session.
 - b. Lowest Allowable Weight The lowest weight a wrestler is eligible to reach during the season based on the body fat test.
 - c. Low Weight Class The lowest weight class a wrestler is eligible for based on the body fat test and the wrestler's individual Weight Descent Plan.
 - d. Eligible Low-Weight Class The weight class, and the next higher weight class, for which a wrestler is eligible to wrestle that week based on the wrestler's individual weight descent plan that week.
 - e. Certified Low-Weight Class The low weight class for which a wrestler has weighed in at the scratch weight or below scratch weight, and is eligible based on his/her body fat test and his/her individual weight descent plan.
 - f. Body Fat Test The measurement of the body fat percentage of the overall body mass. Each wrestler will be measured for his/her body fat percentage according to established protocols utilizing skin-fold calipers.
 - g. Weight Descent Plan An individual wrestler's season long plan for weight loss. The amount of weight loss per week is an average of 1.5% of wrestler's base weight. The weight descent plan only establishes two weight classes for which the wrestler may compete in during any particular week.
 - h. Weigh In Report Form The form downloaded from the National Wrestling Coaches Association Optimal Performance Calculator that must be brought to each weigh-in.
 - i. Team Form The form downloaded from the National Wrestling Coaches Association Optimal Performance Calculator that depicts the weigh-in history and weigh-in projections of each wrestler on a given team.
 - j. Hydration Test The measurement of a wrestler's hydration level by testing the specific gravity of the wrestler's urine.

- D. Establishing Lowest Allowable Weight
 - a. Body Fat Testing: Each league will provide a minimum of two opportunities for hydration and body fat testing. Individual leagues shall determine their test dates due to the peculiarities of each league. However, the initial test for all leagues may not be provided prior to September 1st. Each wrestler will have a maximum of three testing opportunities. All tests must be completed prior to the fifth Saturday prior to the State Tournament, unless a wrestler falls into one of the exemptions listed below. Coaches, or chaperones that have been designated in writing by the school's athletic director at least 24 hours prior to any hydration and body fat testing, shall escort all wrestlers to the testing site and check in with the appropriate league-designated testing site administrator. The designation of a chaperone shall be sent to the league and league-designated site coordinator at least 24 hours prior to the testing.
 - b. Results of measurements should be distributed to the coaches by the day after the test and sent to the HHSAA Office, or designee, within seven (7) days of the test date.
 - c. Results of the measurement should be available on the Trackwrestling website within 72 hours of the completion, submission, and validation by HHSAA of the body fat testing results.
 - d. Unusual situations must be arranged with the HHSAA in writing before deadline or due dates.
 - e. No wrestler may compete until the wrestler's lowest allowable weight is determined.
 - f. The lowest allowable weight for a male wrestler can not be a weight in which his body fat is less than 7%, unless a wrestler falls into one of the exemptions listed below. The lowest allowable weight for a female wrestler can not be a weight in which her body fat is less than 12%, unless a wrestler falls into one of the exemptions listed below.
 - g. During the body-fat testing, wrestlers will be allowed a 1 pound error variance when determining the low-weight class (e.g. if a male wrestler's body-fat test indicates a low-weight of 115.0 pounds, he will be able to meet the low-weight class of 114 pounds).
 - h. Wrestlers below Minimum Body Fat Percentage
 - 1. Any male wrestler whose body fat percentage at the time of measurement is below 7% must obtain before competing, in writing, a licensed physician's (MD or DO) clearance (Appendix J) stating that the athlete is naturally at this sub-7% body fat level.
 - 2. Any female wrestler whose body fat percentage at the time of measurement is below 12% must obtain before competing, in writing, a licensed physician's (MD or DO) clearance (Appendix J) stating that the athlete is naturally at this sub-12% body fat level.
 - 3. A physician's clearance is for one season and expires April 1 of each year. The wrestler must use the HHSAA physician clearance form (Appendix J) when submitting this information.

4. A Parental permission form may not be used to affect the determination of lowest allowable weight.

E. Testing Protocols

- a. All wrestlers must pass the Hydration Test prior to being allowed to proceed to the Body Fat test. In order to pass the hydration test a wrestler specific gravity assessment of his or her urine must be greater than 1.000 and equal to or lower than 1.025 grams per milliliter. An over-hydration failure (equal to or lower than 1.000 grams per milliliter) shall not count against the individual. Any individual(s) identified as attempting to cheat and/or manipulate the results of the hydration test will be immediately disqualified from that test. The incident will be documented on the back of the result card and reported to the league-designated testing site administrator, coach(s) of the individual(s), respective school athletic director, respective league coordinator, respective league executive secretary, and HHSAA office. Individual(s) shall be suspended for the duration of the season.
- b. Upon passing the hydration test the wrestlers will be weighed to the nearest tenth of a pound.
- c. After weighing-in wrestlers will be proceed to the body fat test. The body fat test will be conducted by certified athletic trainers educated in the use of skin fold calipers. Each wrestler will be analyzed three times by three different assessors. Males will be analyzed at the triceps, the subscapula and the abdominals. Females will be analyzed at the triceps, the abdominals, the suprailiac, and the thigh. Any individual who does not complete the skin fold caliper measurement will have his/her results recorded as 0 for each measurement. However, the individual being disqualified will have an opportunity to re-test so long as the disqualification did not take place during the last scheduled session for the duration of the season.
- d. The Bod Pod shall not be used as a measurement tool for determining percent body fat for HHSAA wrestling (June, 2005).

F. Establishing Certified Low-Weight Class

- a. Certified low-weight classes are determined by:
 - 1. The league weight monitoring sessions (hydration and body fat testing sessions) to establish the lowest allowable weight;
 - 2. The weight descent plan; and
 - 3. The wrestler weighing in at scratch weight on or below a given weight class at an official scheduled league competition or weight monitoring session, or HHSAA sanctioned pre-season competition at which the individual's weight descent plan allows him/her to weigh-in. The certified low-weight class must be equal to or above the lowest allowable weight as established by body fat testing and the individual's weight descent plan.
- b. No wrestler may compete below his or her certified low-weight class.

- c. All wrestlers must establish his/her certified low-weight class by the third Saturday before the State Tournament.
- d. There shall be two-pound growth allowance after the third Saturday prior to the State Tournament. No wrestler may certify using the two-pound growth allowance. The wrestler's weight descent plans on the third Sunday prior to the State Tournament (downloaded from the OPC after all weigh-in data has been input into the system) will, along with the certified low-weight class, establish his/her eligible weight class from that date forward to the State Tournament, and the wrestler's weight descent plan, from that date forward, will no longer be utilized.
- e. Once the certified low-weight class has been established, the two eligible weight classes will be the certified low-weight class and the next highest weight class. However, if an individual weigh-ins over the higher of the two eligible weight classes, the recertified weight class of that individual will be the weight class for which he/she qualified by that weigh-in. The recertified low-weight class will establish his/her eligible weight class from that date forward to the State Tournament.

G. Functions of the Weight Descent Plan

- a. The weight descent plan only establishes the two weight classes for which the wrestler may compete in during any particular week.
- b. The weight descent plan does not preclude a wrestler from competing if he/she loses more than 1.5% of the wrestler's body weight in a given week, providing, the wrestler does not lose weight beyond that of the eligible low-weight class. He/she can compete at that eligible low-weight class and the next higher weight class.
- c. If a wrestler loses weight beyond the eligible low-weight classes, he/she can only wrestle at the next highest weight class (e.g. according to a wrestler's weight descent plan, the two eligible weight classes are 125 and 130 pounds. The wrestler weighs in at or below 120.0 pounds, and higher than 114.0, he would be eligible for only the 125 pound weight class).
- d. If a wrestler weighs in above the top of the higher of the two eligible weight classes according to his/her descent plan, that wrestler's weight descent plan will be recalculated by the OPC.
- e. No wrestler may compete below his or her eligible low-weight class, which may change from week to week based on the weight descent plan. If a wrestler weighs in more than one weight class below his or her lowest eligible weight class, that weigh-in would be voided and the wrestler ineligible to compete for that competition date.

H. Weigh-In Report Form Rules

a. Each coach is required to have his/her team's Weigh-In Report Form (Appendix N) and the Hawaii Team Weight Loss Report (Appendix M) at each match for the opponent's coach to inspect. Coaches shall be held responsible to ensure the proper participation of team individuals in eligible weight classes, and violations shall result in suspension as

- outlined in Section M. Disciplinary Actions. Incidents shall be reported to the respective school athletic director, league coordinator, executive secretary, and HHSAA office.
- b. Input to the Trackwrestling web site for all weigh-in data shall be managed by the league coordinators for their respective leagues. Input of actual weigh-in data for all league and pre-season events shall be completed no later than the Tuesday following each competition. No Weigh-In Report Forms shall be created prior to noon Wednesday for any events that following Thursday, Friday and/or Saturday. Special circumstances for mid-week competition shall be coordinated between the respective league coordinator and the state coordinator. However, all prior weekend competition shall be input to the Trackwrestling web site prior to the creation of Weigh-In Report Forms.
- c. Untimely input to the Trackwrestling web site may result in ineligible participation. In the event of ineligible participation, the wrestler shall forfeit all matches competed while ineligible. Furthermore, any team scoring impacted by such forfeits shall be adjusted accordingly. The Head Coach of the ineligible wrestler shall be suspended as outlined in Section M. Disciplinary Actions.

I. Out of State Transfers

- a. Wrestlers who transfer to Hawaii from out of state during the season and have certified at their previous state will use the previous state's certification.
- b. Wrestlers who transfer to Hawaii from out of state during the season without a low-weight class certification and arrive prior to January 1 must certify by the fifth Saturday prior to the State Tournament. (Reminder, no wrestler may compete, pre-season or in-season, until he/she has completed the required hydration and body fat assessment).
- c. Wrestlers who transfer to Hawaii from out of state during the season without a low-weight class certification after January 1 must certify at least one week prior to the league championship tournament (Reminder, no wrestler may compete, pre-season or in-season, until he/she has completed the required hydration and body fat assessment). Leagues may set up special weight monitoring sessions for late transfer students. Late transfer students shall have only one opportunity to establish their certified low-weight class after January 1st.

J. Retesting Procedures

a. One retest will be allowed for wrestlers who establish a minimum weight that is within 1 pound over their minimum weight class. Testing will occur with each league's hydration testing period. Example: A wrestler passes hydration and establishes a minimum weight of 108.4. They will be allowed to retest 1 more time because they are within the 1 lb. of the 108 weight class as opposed to being forced to wrestle up at the 114 lb. weight

- class. Other than the foregoing, no wrestler may retest his/her initial successful body fat testing results.
- b. If a wrestler fails his/her hydration test, he/she will be allowed to retest on another date. However, a wrestler failing his/her third attempt based on under-hydration (greater than 1.025 grams per milliliter) will not be allowed any additional retests.

K. Weight Monitoring Data Plan

- a. The HHSAA will utilize Trackwrestling web site as the mechanism to calculate the weight descent plan for each wrestler and as the data reporting and retrieval tool for all member schools.
- b. The OPC can be assessed from www.trackwrestling.com Select OPC in the upper right hand corner. Click "Login". Enter Login ID and password for coach, or student-athlete.
- c. Coaches will be able to print both their Team Form and Weigh-in Report Form from the OPC website.

L. Nutrition Education Program

- a. Training the coach
 - 1. A Coach's Education video and fact sheet is available at the NWCA OPC website.
- b. Educating the athletes and parents
 - 1. Annually, wrestlers and parents will be provided nutrition education.
 - 2. The importance of maintaining a weight control program will be a major component of the education program.

M. Disciplinary Actions

- a. Any individual(s) identified as attempting to cheat and/or manipulate the results of the hydration test will be immediately disqualified from that test. The incident will be documented by the athletic trainer(s) that witnessed the activity on the back of the result card and reported to the league-designated testing site administrator, coach(s) of the individual(s), respective athletic director, respective league coordinator, respective league executive secretary, and HHSAA office.
- b. Coaches shall be held responsible to ensure the proper participation of team individuals in eligible weight classes. Incidents shall be reported to the respective school athletic director, league coordinator, executive secretary, and HHSAA office.
- c. Individual(s) and coach(s) shall be suspended for the duration of the season for incidents of cheating and/or manipulation of hydration test results. Coach(s) shall be suspended as determined by the respective league, for the participation of ineligible individual(s) in any competition. Each league, through its own internal processes, will review and, as appropriate, affirm the

suspension. Individual(s) or coach(s) may appeal the decision of the league to the HHSAA Executive Board through appropriate processes defined by HHSAA. Individual(s) or coach(s) shall not participate while the appeal process in ongoing.

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I. LEAGUE RESPONSIBILITIES FOR THE MEASUREMENT PROCESS

- A. It is the leagues responsibility to coordinate dates and personnel for skin-fold assessment.
- B. The league executive director or appointee will designate the site director.
- C. The league will provide the materials to conduct the urine specific gravity test.
 - (1) Refractometer
 - (2) Collection cups
 - (3) Plastic stir straws
 - (4) Distilled water
 - (5) Latex gloves
 - (6) Gauze
- D. The league will provide the materials to conduct the skin-fold assessment.
 - (1) Lange or Harpenden Skin-fold Calipers
- E. The league must have available at the time of the measurement:
 - (1) A certified scale (certified after the start of school in the fall and before October 31)
 - (2) Skin-fold data forms
 - (3) Two league referees or designated personnel (coach, teacher, etc.) who will:
 - (a) Assist with obtaining the weight of each wrestler.
 - (b) Assist with the recording of data.

II. MATERIAL COSTS (Approximate Cost)

A.	Refractome	eter	\$350
B.	Skin-fold (Calipers	
	(1) Lar	nge Skin-fold Calipers	\$217.95
	(2) Hai	penden Skin-fold Calipers	\$220.00

III. PROGRAM IMPLEMENTATION PROCEDURES

- A. Body Composition Testing Goals and Procedures:
 - (1) Site Director (Unbiased party)
 - (a) Responsible for obtaining and organizing all materials needed for testing.
 - (b) Obtaining, organizing and assigning all testers for the testing.
 - (c) Resolve any problems which arise during the test.
 - (2) Materials required for testing protocols (Quantity may vary depending on site requirements)
 - (a) Registration forms (HHSAA Data form)
 - (b) Refractometer
 - (c) Plastic stir straws
 - (d) Latex gloves
 - (e) Distilled water

- (f) Cups plastic 3 oz
- (g) Colored dye toilet cleaner
- (h) Skin-fold Calipers
- (i) Clipboards
- (j) Pens
- (k) Scales Digital
- B. Testing Protocols No coaches, parents, or other unauthorized personnel shall be allowed in any of the testing areas from the commencement of the session until completion.
 - (1) Registration Station
 - (a) List of all athletes to be tested is requested two weeks in advance.
 - (b) Registration forms should be prepared prior to test date.
 - (c) Athletes will be allowed to register on the day of the test.
 - (d) Computer data should be prepared prior to the test date.
 - (2) Station #1 Specific Gravity Estimated time to complete test 5 Minutes (There is no time limit to complete the test if athlete is having difficulty producing specimen) Bath Room or Locker Room

Limit the amount of athletes in the specific gravity area to the amount of assessors in the room.

The toilets should have a colored dye placed in each toilet before testing is started.

- (a) One to two ATCs
- (b) Follow OSHA Standards
- (c) All student-athletes must be wearing an undergarment (i.e. shorts and t-shirt) before proceeding to the toilet. Wrestlers will be asked to remove anything in their pockets if shorts have pockets.
- (d) Student-athlete gives data form to ATC and identifies themselves to the ATC.
- (e) ATC gives the athlete a cup.
- (f) Student collects urine sample and empties bladder. The studentathlete should be instructed NOT to flush the toilet. Note that the doors to stalls shall be left open and/or male students shall use available urinals.
- (g) Sample is placed on the refractometer using the plastic stir straw.
- (h) ATC reads refractometer. Specific gravity must be equal to or greater than 1.002 g/ml and equal to or below 1.025 g/ml.
- (i) Student must empty and discard plastic cup.
- (j) If a pass is recorded, the data form is given to student-athlete and proceeds to Station #2.
- (k) All data must be entered in black or blue ink. All mistakes must be double initialed.
- (l) If a fail is recorded, the data form is retained by the ATC and the student-athlete is sent to Station #4

- (2) Station #2 Weight Station Estimated time to complete test 3 minutes
 - (a) Two league officials, coaches, ATC A male and female required as determined by league.
 - (b) Student-athlete gives data form to ATC or coach
 - (c) Undergarment weight is taken and recorded on individual's data form.
 - (d) All data must be entered in black or blue ink. All mistakes must be double initialed.
 - (e) Student-athlete goes to Station #3.
- (3) Station #3 Skin-fold measurements -Estimated time to complete test 10 minutes See Appendix D for exact protocol
 - (a) A minimum of 3 ATCs Optimal is 12 trained ATCs.
 - (b) One recorder for each ATC- may be students or coaches.
 - (c) One ATC to mark skin-fold sites on each wrestler.
 - (d) ATC (A) will take 3 rotating skin-fold readings at 3 sites. Recorder enters data on form.
 - (e) ATC (B) will take 3 rotating skin-fold readings at 3 sites. Recorder enters data on form.
 - (f) ATC (C) will take 3 rotating skin-fold readings at 3 sites. Recorder enters data on form.
 - (g) All data must be entered in black or blue ink. All mistakes must be double initialed.
 - (h) Data form collected at this station and sent to Data Analysis
 - (i) Student-athlete moves to Station #4.
- (4) Station #4 -Holding Area Student-athlete reports to the holding area when testing is completed to await departure.
- (5) Data Analysis Computer Room
 - (a) Minimum of One computer and printer 1 computer literate person in charge.
 - (b) Data forms collected from Station #3.
 - (c) Preliminary information is prerecorded in the computer.
 - (d) Data input into computer.
 - (e) Results saved and reports (team and individual) printed out the same day if possible.
 - (f) Data will be uploaded to Trackwrestling website.
 - (g) Hardcopies given to HHSAA, League, Coach and School's ATC.
 - (h) Printout of results for entire team is given to HHSAA, League, Coach and School's ATC, including failed results.
 - (i) Print outs of all results will be distributed to all schools.
- (6) If the student-athlete fails the specific gravity test, instructions for retest will be included with report and the student-athlete will be instructed to review the handbook. Specific date for retest must be established by each league.
- (7) If the student-athlete or coach wishes to appeal the results, they must follow the procedures as noted in the handbook.

IV. TRAINING THE SKINFOLD ASSESSOR

A. Training the Assessor

- (1) Persons eligible to be trained as HHSAA approved assessors include Physicians (MD or DO), certified athletic trainer, registered nurses, licensed practical nurses, physical therapist, physician's assistant, nutritionist, health educator or an exercise physiologist.
- (2) To be eligible to become an HHSAA approved skin-fold assessor, an individual must have demonstrated training and experience in skin-fold measurement.
- (3) The assessor will participate in an initial training session and annual update education. The assessor will provide his/her own measuring device which meets the standard required by the HHSAA wrestling minimum weight program.
- (4) The assessor training will consist of both classroom education and practical training.
- (5) Training sessions will be conducted in conjunction with the Hawaii Athletic Trainer's Association and the University of Hawaii Department of Kinesiology under guidelines provided by HHSAA.

B. Recertification

- (1) Recertification will require a minimum of one hour training.
- (2) Recertification training will be conducted in several locations throughout the state annually.
- (3) Trainers and assessor trainers will conduct all recertification training programs.

C. Data Collection

- (1) The HHSAA will provide the forms for each school.
- (2) The assessor will conduct all body fat measurements.
- (3) The league will provide the supplies to conduct the specific gravity test.
- (4) The site director will be responsible for submitting the measurement results to the HHSAA within one working day after the testing date.

APPENDIX A

A. HYDRATION REQUIREMENT

Specific gravity assessment of the urine will determine whether a candidate may participate in the skin-fold measurement process on any date. If the wrestler has a specific gravity above the predetermined level, they may NOT be assessed for body composition. A specific gravity level of 1.000 g/ml or less, and/or greater than 1.025 g/ml will result in failure.

Monitoring this process is a part of the Assessor's responsibility. Make certain that each wrestler is tested individually to prevent urine exchange (this is an area where the right to privacy must be respected). The wrestler must fill the cup with urine. A drop of urine will be placed on the refractometer to determine the specific gravity for the specimen. If the wrestler passes the specific gravity test he may continue for the body composition assessment. If the wrestler fails the specific gravity test he/she must wait for the next scheduled testing date.

B. BODY COMPOSITION

The human body can be represented as composed of at least two components.

- 1. Lean Body Mass (LBM) = the muscle and bone mass predicted to be in the body.
- 2. Body Fat (BF) = essential and non-essential fat storage that is predicted to be in the body. To some, this is an over simplification. The actual composition of an individual's body is probably not truly known, nor can it actually be determined. All current methods of assessing body composition are indirect methods or predictions of the actual values. While underwater (hydrostatic) weighing has long been considered the "GOLD STANDARD" (the method to which all other methods of body composition determination have been related) it too has been critically reviewed as having the possibility for error. Population specificity, maturation, and sub-component validity have all been cited as having potential negative impact on hydrostatic body composition assessment. Current technology and its improvement will continue to lead researchers to develop new methods and refine those which currently exist. This will require that those of us assessing body composition through various field techniques must continue to update our knowledge and remain current relative to adjustments in assessment procedures.

C. PREDICTION OF BODY COMPOSITION

There are a number of field techniques available to attempt to assess body composition. Following is a brief description of some common techniques.

1. Bioelectric Impedance analysis (BIA). A fairly modern technique, still in the developmental stage. It utilizes electrode attachment to the extremities and a small (safe) electrical current to determine the conductivity of lean tissue verses fat tissue. It is programmed to calculate lean body mass and percent body fat. The instrument costs about \$3000 to \$6000, is subject to hydration level of each subject.

- 2. Skeletal Anthropometic Widths (SAW). This method was developed by Tipton et al. specifically for the wrestling population in Iowa. It utilizes diameter assessment with two types of anthropometric calipers on the chest, hip, and ankle joint areas along with height and weight. A prediction equation includes these various measurements to calculate minimal wrestling weight.
- 3. Near Infra-Red technology (NIR): This is a method that was developed to determine the legal fat content of packaged meats for human consumption. It utilizes the theory of the passage of light waves through lean muscle tissue verses fat tissue. The cost of the units ranges from \$1000 to \$2000 and purport rapid and non-invasive assessment. Ultrasound technology has also been used in a similar manner to determine fat deposition.
- 4. Computed Tomography (CT): This is an example of new technology being adapted to the study of body composition. It was developed for the detection of normal verses pathological internal body components. Although few CT scan units are used strictly for determination of body composition, it may be the most valid potential assessment device currently available. As such it may define a new "GOLD STANDARD" for body composition assessment.
- 5. Hydrostatic Weighing (HSW). This is an ancient method (Archimedes' principle) adapted to the body composition assessment problem in recent times. It involves the submersion of an individual to determine the subject's under water weight which is used along with the weight on land to calculate the body density. It utilizes the concept that muscle mass and fat mass have specific know densities relative to water. The assessment of residual volume of the lungs is an important feature of this assessment. The availability of a proper space and equipment is a problem with this method, but it can be very accurate if all the conditions of assessment are met. Currently this method is not available in Hawaii at this time.
- 6. Skin-fold Assessment (SFA): This is a current method which has gained popularity with the exercise and fitness community. It is based on the relationship between subcutaneous fat and total body fat and its inverse relationship to body density number of sites to determine the thickness of the skin. Skin-fold thicknesses are used in a regression equation equations have been derived for specific populations. The cost of accurate calipers range from \$175 to \$250.
- 7. BOD POD: an air-displacement plethysmograph for measuring human body composition, utilizes the inverse relationship between pressure and volume (Boyle's law) to measure body volume directly. The BOD POD utilizes computerized sensors to determine the amount of air displaced by the person's body within a confined area (the BOD POD). The whole-body measurement principle is the same as underwater weighing and the overall body density can be used to determine the percentage of fat and lean tissue. Developed in conjunction with the US National Institutes of Health, the test can be completed in less than 5 minutes.

D. METHOD COMPARISON

The Program calls for the assessment of all the wrestlers in the State of Hawaii within a two week period prior to the beginning of the season. Given the methods reviewed above to accomplish this task the appropriate choice is skin-fold assessment. There has been more work done to establish population specific methods, procedures, and calculations with the skin-fold method than with any other method. The cost of the methods is a factor to consider in the selection of a program. Standardization of procedures is a major factor in the control of validity and reliability. This can be best accomplished to insure accurate reproducible and fair results in an economically controlled environment through the skin-fold assessment procedures.

As hydrostatic weighing is currently unavailable in Hawaii, the BOD POD is a reliable and valid alternative to hydrostatic weighing which is recommended to be used for the appeal process. (The BOD POD is no longer an accepted measurement device as there is limited access. June, 2005)

APPENDIX B

SKINFOLD ASSESSMENT TERMINOLOGY

The use of skin-fold assessment in the process of determination of body composition requires some standardization of terminology used in this field. The following is an attempt to accomplish this standardization:

- 1. Total Body Weight (TBW)=weight of the body on a certified, calibrated scale.
- 2. Body Density(BD)=the mass of the body per unit of volume. (The fat free component is assumed to have a density of 1.100 gm/cm3. The mass of fat is considered to be about .90 gm/cm3.)
- 3. Percent Body Fat(%BF)=the proportion of total body weight that is fat weight and expressed as a percentage. %BF = (TBW-LBM) / (TBW) x 100
- 4. Lean Body Mass(LBM)=the weight of the lean tissue of the body such as muscle, bone, and blood. The weight of the body without the fat weight. LBM = TBW-FW
- 5. Fat Weigh(FW)=the weight of the fat tissue of the body. Includes both essential and stored fat tissue. FW = TBW x %BF
- 6. Lowest Allowable Weight (LAW)=the lowest weight at which a wrestler may compete, determined to be 7 % body fat for males and 12% (12% 2005) for females in the Hawaii Wrestling Monitoring Program
- 7. Ideal Body Weight=a body weight selected for a specific individual or group based on both empirical and scientific evidence that provides an optimum level of performance.

- 8. Minimum Weight = a body weight selected for a specific individual or group based on a specific percent body fat. A minimal, but not necessarily ideal or optimum, body weight.
- 9. Regression equations=equations which express the relationship (based on correlation) between the criterion measure (GOLD STANDARD) and the prediction measure. In skin-fold assessment these are determined for specific combinations of sites, and specific populations.
- 10. Population Specificity=the attempt to make prediction calculation (equations) on representative subjects from specific groups of individuals, the results of which are intended to be applied to a similar, larger population. In skin-fold assessment for body composition the important specific factors are sex, age, national origin, maturation and hydration.
- 11. Biological Variability =variation which will contribute to error due to such factors as hydration and deposition sites.
- 12. Technical Variability =variability which will contribute to error due to such factors as lack of standardization of procedures among assessors.
- 13. Reliability = reproducibility, the consistency and dependability of a measure, >.9 with experienced assessors. Increases with fewer sites and monitored practice.
- 14. Validity = degree to which an assessor obtains an accurate measure. How well the group being assessed matches the group from which the regression equation was obtained. Dependent upon: age, activity level, population specific, body composition status.

APPENDIX C

SKIN FOLD SITE SELECTION AND IDENTIFICATION

The sites and regression equation selected for the Program are those described by Lohman specifically for use with young wrestlers. The techniques for site identification are adopted from "Anthropometric Standardization Reference Manual", Lohman, Roche, and Martorell, Human Kinetics Books, Box 5076, Champaign, IL 61820, (800-DIAL-HKP).

- 1. subject should be in standing anatomical position with the skin for potential skin-fold sites exposed.
- 2. all measurements are taken on the dominant side of the body
- 3. identify the sites for Males = TRICEPS, SUB SCAPULAR, ABDOMEN
- 4. identify the sites for Females = TRICEPS, ABDOMEN, SUPRAILIAC, THIGH

ABDOMINAL=measured vertically, the site is located 3 centimeters lateral to the midpoint of the umbilicus and 1 cm inferior to the umbilicus. The subject must stand erect with weight on both feet, relax the abdominal wall musculature and breathe normally during the assessment procedure.

SUBSCAPULAR=measured on a diagonal axis, (left shoulder to right hip) one centimeter below the inferior angle of the scapula. The site is angled infero-laterally about 45 degrees in the natural cleavage line of the skin. It may be necessary to have the subject place their arm behind the back to make the anatomical features more prominent. The arm is returned to the relaxed anatomical position for the measurement procedure.

SUPRAILIAC=a diagonal fold above the crest of the ilium at the spot where an imaginary line would come down from the mid-axillary line. The person being measured should stand erect with feet together. The arms should hang by the sides, but can be moved slightly to improve access to the site. A diagonal fold should be grasped just to the rear of the mid-axillary line, following the natural cleavage lines of the skin. The skin-fold caliper jaws should be applied about one-half inch from the fingers.

THIGH=a vertical fold on the front of the thigh, midway between the hip (inguinal crease) and the nearest border of the patella or knee cap. The person being tested should first flex his hip to make it easier to locate the inguinal crease. Be sure to pick a spot on the hip crease that is exactly above the midpoint of the front of the thigh. The closest border of the knee cap should be located while the knee is extended. When measuring the thigh skin-fold, the body weight should be shifted to the other foot, while the leg on the side of the measurement is relaxed with the knee slightly flexed and the foot flat on the floor.

TRICEPS=measured vertically in the midline of the posterior aspect of the upper arm, over the triceps muscle, midway between the lateral acromion process of the scapula and the inferior margin of the olecranon process of the ulna. Elbow is flexed to identify the landmarks but extended and relaxed to elevate the skin-fold.

STANDARDIZED ASSESSMENT PROCEDURE

In an attempt to insure valid and reliable assessment of skin-fold widths the following general measurement techniques should be employed. These techniques are general in that they are applied to all skin-fold site assessments. The subjects skin should be dry. Measurements should not be taken immediately after a workout or when the subject is overheated. This may be an ever present problem because some of the wrestlers may be attempting to take part in rapid weight reduction through exercise just prior to the assessment-this should not be allowed. In addition the process requires that each wrestler pass a urine specific gravity test to determine adequate hydration level for the skin-fold assessment procedure.

There is no substitute for practice and experience as an assessor. Quality in-service participation, in-depth knowledge about the all aspects of the body composition assessment, careful site identification, and practice will assist in the accuracy and value of this Program.

- 1. palpate the site to familiarize both you and the subject with the area to be measured
- 2. elevate the double fold of skin and the subcutaneous fat with the thumb and index finger of the left hand 1 cm above or adjacent to the measurement site
- 3. become familiar with the width of the thumb and index finger as well as the perpendicular approach to site assessment prior to the elevation of each specific skin-fold site.
- 4. the fold should be lifted in such a manner as to have two parallel sides.
- 5. the long axis should be parallel to the natural cleavage lines of the skin.
- 6. measure with caliper in right hand with scale in a position to avoid error due to parallax.
- 7. measure midway between the body surface and the bulbous crest of the skin-fold.
- 8. caliper jaws are placed to measure the thickness of the skin-fold perpendicular to its long axis.
- 9. caliper pad measurement surface should be in contact with the skin-fold for 2 to 4 seconds.
- 10. record to the nearest .5 mm and obtain (through rotation of sites) three measures with no more than a 2.0 mm difference from the smallest to the largest measurement.

APPENDIX D

BODY COMPOSITION FORMULAS

MALES

LOHMAN EQUATION-CALCULATION OF BODY DENSITY

BD= $[1.0973-(\sum SF \times .000815)]+[(\sum SF)2 \times .00000084]$

sum of SF = Triceps SF + Subscapular SF + Abdominal SF

BROZEK EQUATION-CALCULATION OF % BODY FAT FROM BODY DENSITY

% BF = (4.57/BD)-(4.142)

CALCULATION OF MINIMUM WEIGHT AT 7% BODY FAT

LAW= $([1-\% BF] \times TBW) / .93$

October 2016

FEMALES

JACKSON-POLLOCK EQUATION FOR CALCULATION OF BODY DENSITY

 $D = 1.0961 - 0.000695 (\sum 4 SF) + 0.0000011(\sum 4 SK)2 - 0.0000714 (age, years)$

sum of SF = Triceps, Abdomen, Suprailiac, Thigh

BROZEK EQUATION-CALCULATION OF % BODY FAT FROM BODY DENSITY

% BF = (4.57/BD)-(4.142)

CALCULATION OF MINIMUM WEIGHT AT 12% (12% 2005) BODY FAT

 $LAW = ([1-\% BF] \times TBW) / .86 (.88, 2005)$

APPENDIX E

TESTING GUIDELINES FOR WRESTLERS

It is important that wrestlers having their body composition tested follow the guidelines listed below. Certain factors can adversely affect the accuracy of body composition testing on any given day. In order to control as many of those factors as possible each wrestler to be tested should be provided with the following information.

- 1. Do not eat 4-5 hours before the test.
- 2. Avoid strenuous exercise for 10-12 hours before the test.
- 3. Avoid caffeinated beverages for 10-12 hours before the test.
- 4. Avoid any beverages or medications that may contain alcohol for 24 hours before the test.
- 5. Avoid the use of any diuretic drugs (fluid pills).
- 6. Consume water, juices, and non-caffeinated beverages as normal the 24 hours prior to the test.
- 7. DO NOT COME TO THE TEST DEHYDRATED.
- 8. Wear a t-shirt and shorts to the test.

ACCURATE RESULTS <u>CANNOT</u> BE OBTAINED IF THE TESTING IS PERFORMED IMMEDIATELY FOLLOWING A WORKOUT.

WEIGHTS MUST BE $\underline{ACCURATELY}$ OBTAINED IMMEDIATELY PRIOR TO THE TESTS BEING PERFORMED

APPENDIX F

Equipment requirements for Wrestling body fat testing (Estimated)

The equipment requirements for body fat testing must be determined on the estimated number of athletes participating in wrestling in each league. The following is an estimate only and is probably on the conservative side. Exact data from each league secretary will provide a more complete picture, but for preliminary planning purposes, we can use the following numbers

Estimated distribution of athletes

Big Island Interscholastic Federation (BIF)	375
Maui Interscholastic League (MIL)	275
Oahu Interscholastic Association (OIA)	900
Interscholastic League of Honolulu (ILH)	450

The HHSAA will need to provide the appropriate forms for collection of data. This will not only mean development of the forms, but printing and distribution to all sites.

A majority of the equipment required to conduct the testing can be provided by the league or schools at minimal or no cost. The Site Manager will be responsible for arranging with the host school for a majority of the equipment needed to conduct the test, but will need cooperation from other schools in order to have all of the required equipment. Quantity will depend on the number of athletes scheduled for the testing protocol.

Scales (Digital preferred)
Clip Boards
Pens
Paper Towels
Paper cups
Colored dye toilet cleaner
Tables
Chairs

Computers - Lap top preferred Printer Internet connection

Equipment to be Purchased for testing (Estimate)

	Cost @
Skin Fold Calipers	\$ 217.95
Refractometer	\$ 350.00
Production of Nutrition Video 5 copies	\$ 1000
Form Production & Duplication	\$ 400

APPENDIX G

Optimal Performance Calculator Instructions for Coaches in Hawaii

How to log into the program

- 1. Go to www.trackwrestling.com
- 2. Click on OPC in the upper right hand corner
- 3. Click "Login". Enter Login ID and password for coach, or student-athlete.
- 4. You will now be logged into the program.

For instructions on how to use the Trackwrestling web site, click on the ? in the top right on the home page once logged in, watch Demo or look at FAQ's

Please remember to log off once you are finished on the OPC.

Contact to us

For more information, on how to use the Trackwrestling web site, click on the ? in the top right on the home page once logged in, watch Demo or look at FAQ's

For problems or questions please contact the Trackwrestling office at 715-869-3444.

APPENDIX H

Instructions for OPC for High School Students

How the student-athlete accesses the Optimal Performance Calculator Program

- 1. Go to the NWCA home page at www.nwcaonline.com
- 2. On NWCA home page, go to top menu bar under <u>Weight Management</u> click on the <u>Optimal Performance</u> Calculator.
- 3. You will now be directed to the Optimal Performance Calculator Program (www.nwcaonline.com/nwcaonline/default.aspx).
- 4. Once at the OPC home page click on the *login* tab on the menu bar.
- 5. On the login page, the student will enter his/her NWCA user ID and password. (The student login information should be provided by the coach, assessor or teacher)
- 6. You will now be logged into the program at the Student homepage of the Optimal Performance Calculator Program

How the student-athlete views the nutrition program

- 1. Once the student is at the scholastic homepage of the OPC, the student will put his/her cursor over the <u>Student</u> tab. A drop down menu will appear and the student will select <u>Nutrition Program</u>
- 2. The "Nutrition Program" will appear and student will begin to enter a profile.
- 3. Student will be asked to select if they want a low fat or moderate fat diet plan. The student should click on the link titled "click for description" to under the difference between low fat and moderate fat.
- 4. The student will then be asked if they want a weight loss, weight gain or weight maintenance plan. The student should click on the link titled "click for description" to understand the difference between the three selections.
- 5. The student will enter his/her age
- 6. The student will enter his/her email
- 7. The student will then select their activity level. A description of each activity level is on the page.
- 8. After completing step 3, the student should click on the continue button at the bottom of the page
- 9. The student will then be taken to a page that will show the daily caloric diet and the food exchanges for the nutrition plan.
- 10. After viewing the information, the student should click on the continue button
- 11. In step 7, the student will enter the name of the meal plan they are creating in the form field. After naming their plan, the student will click on the button "click to add new meal plan"
- 12. The student will now to go to step 8, and click on the "select to edit" icon next to the name of the meal plan they would like to create
- 13. The student will now begin to enter food choices
- 14. Click on the category for each food exchange you plan to eat.
- 15. In the form boxes, enter the number of selections you would like for each food exchange. After making a selection, click on the save selections button for each exchange. You must save your selections before going to another category.
- 16. Continue this process in all food exchanges until all food exchanges are fulfilled
- 17. After all selections are completed, click on return to meal plan link at the top of the page.
- 18. Go to the meal plan you have just completed and click on the view/print icon next to the meal plan name

APPENDIX I



Hawaii High School Athletic Association

• P.O. BOX 62029 • HONOLULU, HAWAII • ₽ • PHONE: (808) 800-4092
• www.sportsHIgh.com •

HHSAA WRESTLING WEIGHT MONITORING PROGRAM Parent and Student-Athlete Consent Form to Allow Specific Gravity Testing

About the test:

In order to determine a safe/healthy weight at which a wrestler can wrestle, the wrestler's specific gravity (hydration level) must be tested. To determine a wrestler's specific gravity, a urine sample from the wrestler must be tested. Only the wrestler's specific gravity will be measured from the urine sample and, upon the test's completion, the wrestler's urine sample will be promptly disposed. A certified tester (usually the wrestler's high school athletic trainer) will perform this specific gravity test, which takes less than five minutes to complete.

PARENT/GUARDIAN CONSENT

I hereby give my consent for	t to measure his/her specific gravity. ermine his/her safe wrestling weight. r league, the HHSAA, and their and athletic trainers), volunteers, sing out of the HHSAA's Wrestling
Parent/Guardian Signature	Date
STUDENT-ATHLETE CON	SENT
I,	ure my specific gravity. I understand fe wrestling weight. I agree to hold HSAA, and their respective officers, s), volunteers, independent the HHSAA's Wrestling Weight
Student-Athlete Signature	Date

APPENDIX J



Physician's Name (please print)

Hawaii High School Athletic Association

• P.O. Box 62029 • Honolulu, Hawaii 96839 • PHONE: (808) 800-4092 • www.sportsHIgh.com •

HHSAA WRESTLING WEIGHT MONITORING PROGRAM PHYSICIAN'S STATEMENT

Name of Wrestler:	Gender:	Male	Female
High School:Measurement I)ate:		
Actual Weight:lbs. Body Fat Percentage	:		%
Dear Physician:			
In order to prevent high school wrestlers from being in a start starvation at the time they are officially weighed prior to the start of each wrestler is given a specific gravity test and a body fat assessment Athletic Association's Wrestling Weight Monitoring Program record fat percentage at 7% for a healthy high school male and 12% for a heatter of dehydration and/or starvation may occur when a wrestler's recommendations. The above-named high school wrestler was mean below the allowable 7% (males)/12% (females).	their compent. The Hammends the nealthy highweight dro	petitive awaii H e minin h schoo ps belo	e season, ligh School num body ol female. A w these
TO BE COMPLETED BY THE PHYSIC	CIAN		
In my judgment, the above named wrestler is neither dehydrestarvation at this time. Rather, his/her body fat is naturally at the above-named wrestler may collisted weight for the entire wrestling season.	ove-listed 1	percent	age.
Accordingly, I hereby accept full responsibility and assume injury sustained by the above-named wrestler as a result of my sign Statement, and agree to indemnify, release, discharge, and otherwisits member leagues, its member schools, and their respective officer (including coaches and athletic trainers), volunteers, independent coffrom any and all claims or actions arising from my signing this Phy	ing this Physe hold harres, directors, ontractors,	ysician nless th s, empl agents,	's ne HHSAA, oyees and assigns
Physician's Signature			Date

Phone Number

APPENDIX L

NOTE: ACTUAL FORM ON NWCA WERSITE MAY VARY FROM EXAMPLE

Hawaii Weight Management Program WEIGHT LOSS PLAN

This form designates the wrestler's eligible weight classes for each week and the first date for participation at the assigned minimum wrestling weight class. There is no evidence, scientific or otherwise, that the minimal wrestling weight is the optimal weight for wrestling performance.

Wrestler, School: DEmo-Two fifty-two - Hawaii Test School

Alpha Body Weight (initial assessment): BW= 15

Maximum Weight loss per week 2.307

Date		PROJECTED	Eligible Weight Class	Actual/Projected
1/26/2007	Initial Assessment	-		
11/26/2007	Week 1	153.80	160, 171	Date:
12/3/2007	Week 2	151.49	152, 160	Date:Weight: Date:Weight:
12/10/2007	Week 3	149.43	152, 160	Date:Weight: Date:Weight:
2/17/2007	Week 4	149.43	152, 160	Date:Weight: Date:Weight:
2/24/2007	Week 5	149.43	152, 160	Date:Weight: Date:Weight:
2/31/2007	Week 6	149.43	152, 160	Date:Weight: Date:Weight:
/7/2008	Week 7	149.43	152, 160	Date:Weight: Date:Weight:
/21/2008	Week 9	149.43	152, 160	Date:Weight:
/28/2008	Week 10	149.43	152, 160	Date:Weight:
2/4/2008	Week 11	149.43	152, 160	Date:Weight: Date:Weight:
2/11/2008	Week 12	149.43	152, 160	Date:Weight:
2/18/2008	Week 13	149.43	152, 160	Date:Weight:
2/25/2008	Week 14	149.43	152, 160	Date: Weight: Date: Weight:

APPENDIX M

NOTE: ACTUAL FORM ON NWCA WEBSITE MAY VARY FROM EXAMPLE

Hawaii State Interscholastic Athletic Association MINIMUM WEIGHT CERTIFICATION - team form

Hawaii Test School 2007/2008 Season

Please type and REVIEW - INCOMPLETE FORMS WILL BE RETURNED. THe following atheltes will compter on our wrestling team

Please type an	d REVIEV	V - INCOMP	LETE	FORMS W	ILL BE	RETURNED). THe f	ollowing at	heltes	will compte	r on ou	r wrestlir	ng team																
Team / Name	% Body Fat	Alpha Date	Min Wt Class	12/7/2007	Actual Wt.	12/14/2007	Actual Wt.	12/21/2007	Actual Wt.	12/28/2007	Actual Wt.	1/4/2008	Actual Wt.	1/11/2008	Actual Wt.	1/18/2008	Actual Wt.	1/26/2008	Actual Wt.	2/1/2008	Actual Wt.	2/8/2008	Actual Wt.	2/15/2008	Actual Wt.	2/22/2008	Actual Wt.	3/1/2008	Actual Wt.
Matt Oneothree (Hawaii Test School)	13.88581	11/1/2007	103	102.78	0	105.62		105.62		104.02	0	102.78	0	102.78	0	102.78		102.78		102.78		102.78		102.78		102.78		102.78	
Bob Onetwelve (Hawaii Test School)	12	11/1/2007	112	111.66	0	111.66		111.66		111.66	0	111.66	0	111.66	0	111.66		111.66		111.66		111.66		111.66		111.66		111.66	
Pat Onenineteen (Hawaii Test School)	18.07746	11/12/2007	119	126.75		124.72		122.69		120.66	0	118.63	0	118.04	0	118.04		118.04		118.04		118.04		118.04		118.04		118.04	
Jason Onetwentyfive (Hawaii Test School)	6	11/2/2007	125	124.80		124.80		124.80		124.80		124.80	0	124.80	0	124.80		124.00		124.80		124.80		124.80		124.80		124.80	
Nico Onethirty (Hawaii Test School)	12.98105	11/1/2007	130	129.12		129.12		129.12		129.12	0	129.12	0	129.12	0	129.12		129.12		129.12		129.12		129.12		129.12		129.12	
Jay Onethirtyfive (Hawaii Test School)	11.46826	11/1/2007	135	131.37		131.37		131.37		131.37	0	131.37	0	131.37	0	131.37		131.37		131.37		131.37		131.37		131.37		131.37	
Larry Oneforty (Hawaii Test School)	11.16499	11/1/2007	140	137.55		137.55		137.55		137.55	0	137.55	0	137.55	0	137.55		137.55		137.55		137.55		137.55		137.55		137.55	
Marco Onefortyfive (Hawaii Test School)	13.28288	11/1/2007	145	142.66		142:66		142.66		142.66	o	142.66	0	142.66	0	142.66		142.66		142.66		142.66		142.66		142.86		142.66	
Angelo Onelfitytwo (Hawaii Test School)	16.88516	11/1/2007	152	152.40		149.95		147.50		147.46	0	147.46	0	147.46	0	147.46		147.46		147.46		147.46		147.46		147.46		147.46	
Vincenzo Onesixty (Hawaii Test School)	14.48774	11/1/2007	160	157.68		157.23		157.23		157.23	0	157.23	0	157.23	0	157.23		157.23		157.23		157.23		157.23		157.23		157.23	
Stefano Oneseventyone (Hawaii Test School)	12.07409	11/1/2007	171	171.12		171.12		171.12		171.12	0	171.12	0	171.12	0	171.12		171.12		171.12		171.12		171.12		171.12		171.12	
Jay Oneeightynine (Hawaii Test School)	11.46826	11/1/2007	109	186.58		186.58		186.58		186.58	0	186.58	0	186.58	0	186.58		186.58		186.58		186.58		186.58		186.58		186.58	
Casey Twoffteen (Hawaii Test School)	18.67195	11/1/2007	215	212.36		208.93		205.50		202.07	0	201.13	0	201.13	0	201.13		201.13		201.13		201.13		201.13		201.13		201.13	
Jeff Twoeightyfive (Hawaii Test School)	20.44862	11/1/2007	285	239.84		235.92		232.00		228.08	0	224.16	0	222.40	0	222.40		222.40		222.40		222.40		222.40		222.40		222.40	
School)	20.79199	11/1/2007	103	104.36		102.68		101.71		101.71	102	101.71	0	101.71	0	101.71		101.71		101.71		101.71		101.71		101.71		101.71	
Temmy Subfemal (Hawaii Test School)	11.072	11/1/2007	112	111.00		111.00		111.00		111.00	0	111.00	0	111.00	0	111.00		111.00		111.00		111.00		111.00		111.00		111.00	
Michael Moyer (Hawaii Test Joe Hawaii	12 67697	11/1/2007	140	138.96		138.96		138.96		138.98	0	135.95	n	138.98	n	138.96		130.90		138.98		138.96		138.96		158.96		138.96	
(Hawaii Test School)	12.37665	8/31/2007	189	174.68		174.68		174.68		174.68	0	174.68	0	174.68	0	174.68		174.68		174.68		174.68		174.68		174.68		174.68	
Rocky Surfa (Hawaii Test School)	15.38873	11/26/2007	119	125.08		123.19		121.30		119.41		117.52	0	116.50		116.50		116.50		116.50		116.50		116.50		116.50		116.50	
Nathan Demo (Hawaii Test School)	9.34056	11/26/2007	135	134.90		134.72		134.72		134.72		134.72	0	134.72		134.72		134.72		134.72		134.72		134.72		134.72		134.72	
Roger rabbit (Hawaii Test School)	12.37665	12/3/2007	135	141.96		139.79		137.62		135.45		134.92	0	134.92		134.92		134.92		134.92		134.92		134.92		134.92		134.92	
Alika Sample (Hawaii Test School)	13.28288	11/26/2007	130	132.41		130.38		128.35		126.44		126.44	0	126.44		126.44		126.44		126.44		126.44		126.44		126.44		126.44	
Hawaii one- twenty-five (Hawaii Test School)	14.48774	11/26/2007	119	125.03	123	125.37		123.47		121.58	119.6	119.69	0	117.80		117.69		117.69		117.69		117.69		117.69		117.69		117.69	
Demo-one thirty-four (Hawaii Test School)	11.6198	11/26/2007	130	131.01	125	128.98		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53		127.53	
DEmo-Two fifty- two (Hawaii Test School)	9.6452	11/26/2007	152	150.17	146	149.43		149,43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43		149.43	
demo-three two-15 (Hawaii Test School)	30.5879	11/26/2007	215	248.95	205	245.10		241.25		237.40		233.55		229.70		225.85		222.00		218.15		214.30		210.45		206.60		202.75	
demo-4 forty (Hawaii Test School)	15.08866	11/26/2007	130	136.70	127	134.60		132.50		130.40		128.30		127.82		127.82		127.82		127.82		127.82		127.82		127.82		127.82	
Marco Tocci (Hawaii Test School)	14.5	11/1/2007	103	104.16		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70		103.70	
Female A (Hawaii Test School)	8	11/30/2007	98	95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00		95.00	

APPENDIX N

NOTE: ACTUAL FORM ON NWCA WEBSITE MAY VARY FROM EXAMPLE

2007-08 Weigh In Report

10/10/2007

ool: Hawaii 1	Test school	Opponent	t:		Weigh In	Date: 12/01/2	007
Weight Class	Wrestler	Eligible Wt. Class	Wt. Loss Plan	Actual Weight	Last Official WeighIn Date	Last Official Weighin	
112	Amy Female	112, 119	105.80			0.00	
112	Matt Oneothree	112, 119	103.80			0.00	
112	Bob Onetwelve	112, 119	111.66			0.00	
112	Tammy Subfemal	112, 119	111.00			0.00	
112	Marco Tocci	112, 119	105.60			0.00	
125	Jason Onetwentyfive	125, 130	124.80			0.00	
130	Pat Onenineteen	130, 135	128.49			0.00	
130	Nico Onethirty	130, 135	129.12			0.00	
130	Hawaii one-twenty-five	130, 135	126.65			0.00	
130	Rocky Surfa	130, 135	126.70			0.00	
135	Jay Onethirtyfive	135, 140	131.37			0.00	
135	Alika Sample	135, 140	134.15			0.00	
135	Demo-one thirty-four	135, 140	132.75			0.00	
140	Nathan Demo	140, 145	136.70			0.00	
140	demo-4 forty	140, 145	138.50			0.00	
140	Michael Moyer	140, 145	138.96			0.00	
140	Larry Oneforty	140, 145	137.55			0.00	
145	Marco Onefortyfive	145, 152	143.10			0.00	
145	Roger rabbit	145, 152	143.82			0.00	
160	DEmo-Two fifty-two	160, 171	152.15			0.00	
160	Angelo Onefiftytwo	160, 171	154.50			0.00	
160	Vincenzo Onesixty	160, 171	159.90			0.00	
189	Joe Hawaii	189, 215	174.68			0.00	
189	Jay Oneeightynine	189, 215	186.58			0.00	
189	Stefano Oneseventyone	189, 215	171.12			0.00	
285	demo-three two-15	HWT	252.25			0.00	
205	laff Turasialstafina		042.00				
Coach Name	(Printed):		g Coach or Tournam ctor Name (Printed):	ent			
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