# HARVEST MOON FALL FESTIVAL PUNKIN CHUNKIN OFFICIAL

# RULES & SAFETY

# **HANDBOOK**

Official June 29, 2013

ALL GENERAL AND SAFETY RULES IN THIS BOOK MUST BE OBSERVED AND SET FORTH BY ALL TEAM CAPTAINS.



DAN ANDERSON

SAFETY & RULES COMMITTEE

CHUNKIN WILL BE HELD ON THE WEST SIDE OF THE BOX BUTTE CO FAIR GROUNDS. ENTER THROUGH THE WEST GATE. IF MACHINE WILL NOT FIT UNDER SIGN USE GATE WEST OF MAIN GATE. FOLLOW SIGNS TO SIGN UP AND CHUNKIN AREA.

PIT # WILL BE ASSIGNED AT SING UP. SIGN UP FROM 6AM TO 10 AM. SETUP BEFORE 12 NOON. PIT MEETING AT 12 NOON. CHUNKIN STARTS AT 1 PM.

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#### General Rules

- 1. All pumpkins fired must remain intact until they impact the ground to obtain an official measurement.
- 2. No part of the machine shall cross the firing line.
- 3. No Wadding (including bean chaff, straw, foam, metal, or any other object.)
- 4. No explosives are allowed.
- 5. Pumpkins are not to be altered in any way, excluding marker paints. All pumpkins must be in their natural state. Pumpkins fired from machine during competition will be measured from the survey team designated point of

measurement. Your pit # may be written on your pumpkin to help in the identification in the landing zone. (Recommended) 6. HMFFPC accepted pumpkin types or species are as followed:

- Traditional orange, white, or ornamental pumpkins are allowed.
- If the HMFFPC determines a fruit does not qualify as a pumpkin, proof from the seed manufacturer or

(1)

commercial grower proving otherwise may be used to overturn this ruling.

- Any breed of pumpkin can be banned if deemed harmful to the owner's use of the field.
- Refer to list of pumpkin varieties at www.allaboutpumpkins.com for some accepted pumpkins.
- 7. The HMFFPC reserves the right to combine any classes if there is a lack of participation. Any class that is subject to cutting will be contacted to see where they want to be moved. This will mean they must meet the full qualifications of the class they move to. All classes must have three (3) entries in that class to open it to competition. Machines can only enter one (1) class per machine. Teams entering two machines on the same trailer in the same class may do so; provided they do not share components and they pay for both entries. 8. All Machines must be able to fire within five (5) minutes. Human power will get an additional three (3) minutes to cock the machine. (Keep in mind that every attempt is made to give you (20) minutes by informing you 4 machines or more down the firing line.) Any machine not able to fire when the pit boss decides your five (5) minutes are up, will forfeit that round. No exceptions! Team captains are responsible for making sure they get their pumpkin weighed well enough in advance to ensure they have time they need to set up. Team Captains are responsible for making sure you are ready when it's your turn to chunk.

Re-shoot Option:

Only (1) make up shot will be allowed per round of competition. The team captain may be asked to redirect their machine. If redirected, the machine will have to be re-inspected by the safety inspector. It is the team's responsibility to locate the Weigh Master and have another pumpkin weighed and documented. The team will be given as much time as available without interrupting the firing line.

9. If you are disqualified for any round in competition for breaking, Safety and General rules you will forfeit your longest distance not the distance of the shot you are being disqualified on.

(2)

- 10. When using an 8-10 lb. Punkin the longest distance of the event is the Harvest Moon Fall Festival Champion Punkin Chunker and wins the overall chunk regardless of class. All other first place winners are Champions of class entered.
- 11. It is the responsibility of the prior year champion to return the traveling trophy to the current year's Harvest Moon Fall Festival Champion Punkin Chunkin event in Hemingford, NE. The trophy must be kept in good condition.
- 12. The current Harvest Moon Fall Festival Champion Punkin Chunker has the right to elect to fire either first or last (of the day or division). This selection must be made and approved before the Captain's meeting. The selection must be approved by the Pit Boss.
- 13. The HMFFPC is not responsible for any equipment needs you may have once on the field. If you need equipment to set up or disassemble your machine, you must make those arrangements prior to the event.
- 14. All machines must be set up in the assigned areas. You will be given notice of this area well in advance. No excuses will be entertained for not being in your spot. You will be required to move.
- 15. All machines and equipment used by chunkers must be removed from the field by the evening of June 20<sup>th</sup>. Owner or team captain will pay towing and storage expenses for machine

And equipment left on field after deadline.

- 16. HMFFPC wrist bands should be worn at all times.
- 17. All youth in pits must be under adult supervision at all times. (Example: Youth could fire machine while unattended and be injured or injure someone else.)
- 18. No campers, tents or any overnight camping is allowed in pits. You must camp in the designated area.
- 19. No glass bottles will be permitted on the premises.
- 20. No pets are allowed in the pits.

# Safety Rules

1. All machine captains and teammates are to follow HMFF Punkin Chunkin Rules or you will be penalized or disqualified, depending on the nature of which rule is broken. If you are penalized, you will forfeit your chance to chunk in that round of competition if disqualified you will be referred to rule #10 of the General Rules. Major infractions that are deemed as challenging the (3)

safety of the chunk and/or others around your machine will be discussed during a quorum of The Safety and Rules Committee to decide on the actions to take. The results of the Quorum will be relayed to the team captain. There will be Zero Tolerance for those who break safety rules.

- 2. Machines may not chunk until the safety committee inspects and approves them to be safe by the HMFFP Punkin Chunkin Safety & Rules. Any alterations after being inspected will require another inspection to be able to fire. If your machine has been inspected you will need to be re-inspected by a safety inspector official in order to fire again. The safety Committee may require the team captain to fire their machine during the inspection process to ensure the machine is safe enough to compete at the Harvest Moon Fall Festival Punkin Chunk.
- 3. It is at the discretion of the Safety Inspector to require a 15 min. fully cocked stress test and test fire to ensure public safety. This is expected for new teams who have never proven performance on the field during a HMFF event. In all cases, inspections focus on the welfare and safety of the general public

and the chunkers. Changes made by the teams are to be pointed out by the captain for teams who have been inspected in the prior year's event. New Teams will get a full inspection for ability to meet requirements.

- 4. CEASE FIRE, No machine is to fire when a cease fire has been ordered. If you are locked and loaded or pressurized at this time, contact security, pit boss, safety committee, so you can safely discharge or bleed off air pressure. Pop off relief safety valves must have plastic shipping plugs removed when pressurizing any cannon or machine. Pop off relief safety valves are not to be altered or held down to prevent popping off. Pop off relief valves are not to be reclosed after opening on their own while machine is being pressurized to fire. 5. All members and/or captains are to contact safety official before climbing any machine during competition and must have clearance from the safety committee. No one is to climb any machine while cocked, elevated or in a dangerous situation. Teams using ladders to assemble, Load, repair, or dismantle equipment must have a spotter to hold the ladder and/or a tie off to the ladder to prevent injury. Teams are recommended to use a safety harness when climbing over 10 feet above the ground.
- 6. The HMFF reserves the right to request a team captain (4)

to dismantle his or her machine to inspect for foul play. For example, use of any propellant other than compressed air. If you are caught using any chemicals (NITROGEN, HELIUM, HYDROGEN or any illegal substances other than compressed air) you will be banned from The Harvest Moon Fall Festival Punkin Chunk.

7. All team captains must sign the field roster stating that they have received, read, and understand the 2013 rules of the Harvest Moon Fall Festival Punkin Chunkin. This sheet will be on the field and given to the pit boss, if it is not signed, you do not chunk. All team captains must attend all safety field meetings. If the meeting roster is not signed before the start (1 PM) of the Punkin Chunkin you will not be tracked down and the team will not compete in the competition.

- 8. Safety committee end of day meeting The safety committee will meet at the end of the event. If you have safety issues to present, we welcome team captains to do so at this time.
- 9. Only Team spotters and association spotters will be allowed on the landing field. They must sign in & out at designated area. All spotters on motorized vehicles will operate their vehicles responsibly at their own risk.
- 10. No children under 16 will be allowed to drive golf carts, four wheelers, dirt bikes, or ATVs alone. They may ride with an adult that has a valid driver's license. All golf carts, four wheelers, dirt bikes or ATVs must display their pit number on that vehicle in clear view. No golf carts, four wheelers, dirt bikes, or ATVs, are permitted on the field beyond firing line unless you are an association official or spotter actively engaged in spotting pumpkins.
- 11. Any machine found to have structural defects (weld fractures affecting the pressure vessel, load beams, firing pins, any load bearing members, supports or support subsystems) will be banned from chunking until repaired and re-inspected by a member of the safety committee.
- 12. Backstops will be required for any machine that can fire backwards (Regardless of previous performance). Teams may make their own backstops for the chunk but they must be constructed to a HMFF approved design standard. Any machine inspected on the field or approved in advance, as "not able to fire backwards" will be exempt from this requirement. Machines marked for backstops that fire without (5)

one will be disqualified from the chunk. This includes anytime they fire while on the field.

- 13. Small holes for stabilizers will be permitted. A 24" x24" x24" hole is acceptable and must be filled, tamped and topsoil replaced before leaving pit area. It is your responsibility to keep pedestrians from falling in your hole. Leave No Trace.
- 14. Hard Hats and Eye Protection to be worn by all fire line personnel in pit when firing

- 15. (Requested but not mandatory) Each Machine must have Fire Extinguisher mounted to machine and First Aid Kit in plain view and clearly marked for all people to see, but not on machine.
- 16. All cables and cable clamps must be sized and installed properly. Any shackles on a machine must have a safety tie on the pin to prevent them from loosening.
- 17. No LAG BOLTS in load bearing applications. Lag bolts are considered low end load bearing components and will not be approved in any application where stress can fatigue the lag or the hole made for it. The approved method of attachment is with carriage, shoulder, or hex head bolts with washers and backing plates.
- 18. All winches and or cocking devices will need safety cages. Winch operators must be protected at all times when cocking their machine, or throwing device. This is for any team who is placed in the line of fire during winch operation. If you are in the line of fire of the winch, the machine must have a safety cage installed between the team member in the line of fire and the winch in case of winch or cable failure.
- 19. Inspect all hydraulic lines each time you cock or lift your machine. Make sure winches can handle the load and cables are in good condition. Make sure your release mechanisms are heavy enough to handle the load. Make sure you have an automatic brake or a dog lock on winch or cocking device.
- 20. All cannons must be secured to prevent upward recoil. It is the machine designer's responsibility to make sure winch and cables can handle the load put on them.
- 21. Compressed air machines must have a bleed off device (valve) to allow for safely removing the air if the machine cannot be fired. This device should be installed so that it does not blow directly to the dirt or face level to prevent Eye injury. If it is exposed to the body level it should have a shield installed to deflect the air. All Air inlets on tank must (6)

have a Check Valve Installed.

22. All sections of your cannon barrel must be properly secured so that they will not separate and will stay stationary. Make sure you do not pinch or collapse your barrel when

using aluminum barrel. All cannons not using an actuated valve powered by air or some other mechanical device must have a spring loaded normally open valve. The use of Plastic Polyvinyl Chloride (PVC) will not be allowed for air cannon barrels, due to the safety hazard of this type of pipe. This pipe is not for compressed air. The manufacturer of the pipe states it is unsafe to transport air in PVC pipe no matter what schedule you use. Air vessels made of PVC will be illegal. No PVC or plastic is allowed in pressurized areas of the vessel. A smaller A. S. M. E. relief valve can be placed on the vessel when the operation requires the tank to be filled from a cylinder tank. This valve will be set at or below the allowable working pressure of the vessel. All relief valves must be maintained in proper working order during operation of the machine.

- 23. Aluminum barrels suspended by cables must have the cables anchored to a substantial base to prevent whipping around. Plastic coated cable will not be allowed. 24. All portable air storage vessels used to fill their cannon must be stood upright and secured to a stationary device. No tanks or vessels may be stored lying down on the ground or transported lying down in any vehicle. Every vessel must have a safety cap on it when not in use. All nipples, fittings, manifolds, or airlines must be capable of handling the pressure of air on them. This is your responsibility. All propane tanks must be secured to a stationary device. 25. Any air vessel under 5 cu. ft. is the responsibility of the owner or team captain to make sure it is safe to use. If the safety committee feels your vessel is not safe due to rust, pitted or damage, you will have to correct the problem before the vessel can be used.
- 26. Hoses must be in good operating condition. Chafed or cut hoses must not be used. If using Chicago type quick connects, safety pins must be installed in each of the two holes. Any recommended safety equipment designed for any type of coupler must be used! All air lines 1" in diameter and larger must be cabled to a stationary device.
- 27. All catapult and trebuchet machines must have a safety

strap or mechanism to hold the throwing arm or boom in case of misfire when loading. You are responsible for making sure everyone stays clear of your machine, in case of a misfire. Personnel handling ropes or cable should wear gloves such as a sailing or repelling type to prevent burns.

- 28. All Team Captains are responsible for clearing the areas around and behind their machines while cocking or firing machines at all times.
- 29. All machines must be fully relieved before being loaded. (Example: Do not load cannon while pressurizing tank)
- 30. No machine may fire or discharge without sounding a horn or warning device. (Boat horns work great for this.)
- 31. All theatrical machines require a safety inspection.

# Adult Air Class (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds.
- 2. "Compressed air only
- 3. Pumpkin must be loaded before Pressurizing vessels, and an Official must see you load it
- 4. All Air inlets on vessel must have a Check Valve Installed.
- 5. Horn or sound device must sound when firing down range for safety or spotter on the field.
- 6. See Safety and General Rules.

# Adult Centrifugal Class (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds.
- 2. Machines shall spin at least 1 revolution before chunkin.
- 3. These Machines require Back Stops.
- 4. All Centrifugal machines must be equipped with a safety hub.
- 5. Horn or sound device must sound when firing down range for safety or spotter on the field.
- 6. See Safety and General Rules.

# Adult Catapult Class (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds
- 2. Machine shall consist of springs, cords, rubber, dead weights, or other mechanical means of creating a stored energy.
- 3. A mechanical Device may be used to cock machine.

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- 4. These Machines require Back Stops
- 5. Horn or sound device must sound when firing down range for safety or spotter on the field.
- 6. See Safety and General Rules.

#### Adult Trebuchet Class (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds.
- 2. Machine shall consist of swinging, or fixed counterweights. They can be made of wood, metal, or plastic.
- 3. A mechanical Device may be used to cock machine.
- 4. These Machines require Back Stops
- 5. Horn or sound device must sound when firing down range for safety of spotter on the field.
- 6. See Safety and General Rules.

#### Adult Human Power Class (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds.
- 2. Machines can use any kind of stored energy that can be stored by a single person in two minutes. (Energy must be stored by the power of this one person, not by other means.)
- 3. Contestants shall be given a maximum of (2) two minutes from the start of cocking their machine until fully cocked. The machine is then locked for safety. (This does not include the three (3) minute rule for being ready to fire).
- 4. Some may require Backstops due to the type of machine.
- 5. Horn or sound device must sound when firing down range for safety of spotter on the field.
- 6. See Safety and General Rules.

#### Adult Human Power Centrifugal Class

#### (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds.
- 2. Machines can use any kind of stored energy that can be stored by a single person in two minutes. (Energy must be stored by the power of this one person, not by other means.)
- 3. Contestants shall be given a maximum of (2) two minutes from the start of cocking their machine until fully cocked. The machine is then locked for safety. (This does not include the three (3) minute rule for being ready to fire)
- 4. These machines require Backstops.

(9)

- 5. Centrifugal machines are any machines that spin the pumpkin more than 1 full revolution. Human power machines will be allowed time to cock plus time to secure and fire.
- 6. Horn or sound device must sound when firing down range for safety of spotter on the field.
- 7. See Safety and General Rules.

#### Adult Torsion Catapult Class (18 and older)

- 1. Pumpkins must weigh between 8 & 10 pounds.
- 2. Machine shall consist of torsion springs, or cords that once wrapped around its axle (pivot point) will create a stored energy.
- 3. A mechanical Device may be used to cock machine.
- 4. These Machines require Back Stops
- 5. Horn or sound device must sound when firing down range for the safety of the spotter on the field.
- 6. See Safety and General Rules.

### Youth 11-17 Air Class

- 1. Pumpkins must weigh no less than 41bs.
- 2. "Compressed air only"
- 3. Youth machines must be designed so that a child of the class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able

to perform all tasks the machine will be scored in the equivalent adult class.

- 4. Pumpkin must be loaded before pressurizing vessels, and Official must see you load it
- 5. All Air inlets on vessel must have a Check Valve Installed.
- 6. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 7. Horn or sound device must sound when firing down range for the safety of the spotter on the field.
- 8. See Safety and General Rules.

#### Youth 11-17 Catapult Class

- 1. Pumpkins must weigh no less than 4 pounds.
- 2. Youth machines must be designed o that a child of the (10)

class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able to perform all tasks the machine will be scored in the equivalent adult class.

- 3. A mechanical Device may be used to cock machine.
- 4. Machine shall consist of springs, cords, rubber, dead weights, or other mechanical means of creating a stored energy.
- 5. These machines need a back stop
- 6. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 7. Horn or sound device must sound when firing down range for the safety of the spotter on the field.
- 8. See Safety and General Rules.

#### Youth 11-17 Trebuchet Class

- 1. Pumpkins must weigh no less than 4 pounds
- 2. Machine shall consist of swinging, or fixed counterweights.
- 3. Youth machines must be designed so that a child of the

class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able to perform all tasks the machine will be scored in the equivalent adult class.

- 4. A mechanical Device may be used to cock machine.
- 5. These Machines require Back Stops
- 6. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 7. Horn or sound device must sound when firing down range for safety of spotter on the field.
- 8. See Safety and General Rules.

#### Youth 11-17 Human Power Class

- 1. Pumpkins must weigh no less than 4 pounds.
- 2. Machines can use any kind of stored energy that can be stored by a single person in two minutes.
- 3. Contestants shall be given a maximum of (2) two minutes from the start of cocking their machine until fully cocked and locked for safety. (This does not include the three (3) minute (11)

rule for being ready to fire)

- 4. Youth machines must be designed so that a child of the class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able to perform all tasks the machine will be scored in the equivalent adult class.
- 5. Some may require Backstops due to the type of machine.
- 6. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 7. Horn or sound device must sound when firing down range for safety of spotter on the field.
- 8. See Safety and General Rules.

#### Youth 10-Under Catapult Class

1. Pumpkins must weigh no less than 2 pounds.

- 2. Machine shall consist of springs, cords, rubber, dead weights, or other mechanical means of creating a stored energy.
- 3. Youth machines must be designed so that a child of the class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able to perform all tasks the machine will be scored in the equivalent adult class.
- 4. A mechanical Device may be used to cock machine.
- 5. These Machines need a Back Stop
- 6. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 7. Horn or sound device must sound when firing down range for the safety of the spotter on the field.
- 8. See Safety and General Rules.

#### Youth 10-Under Trebuchet Class

- 1. Pumpkins must weigh no less than 2 pounds.
- 2. Machine shall consist of swinging, or fixed counterweights
- 3. Youth machines must be designed so that a child of the class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able to perform all tasks the machine will be scored in the equivalent adult class.

(12)

- 4. A mechanical Device may be used to cock machine.
- 5. These Machines require Back Stops
- 6. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 7. Horn or sound device must sound when firing down range for the safety of the spotter on the field.
- 8. See Safety and General Rules.

#### Youth 10-Under Human Power Class

1. Pumpkins must weigh no less than 2 pounds.

- 2. Youth machines must be designed so that a child of the class age can perform all aspects of the set-up, loading, and full operation of the machine. If the team youth are not able to perform all tasks the machine will be scored in the equivalent adult class.
- 3. Machines can use any kind of stored energy that can be stored by a single person in two minutes. (Energy must be stored by the power of this one person, not by other means.)
- 4. Contestants shall be given a maximum of (2) two minutes from the start of cocking their machine until fully cocked. The machine is then locked for safety. (This does not include the three (3) minute rule for being ready to fire).
- 5. Some may require Backstops due to the type of machine.
- 6. Horn or sound device must sound when firing down range for the safety of the spotter on the field.
- 7. Youth in pits must be under adult supervision at all times. Example: Youth could fire machine while unattended and be injured or injure someone else.
- 8. See Safety and General Rules.

#### Theatrical Class

- 1. Pumpkins can weigh anything you want them to weigh.
- 2. Pumpkin must leave the machine intact. (To stay with the theme)
- 3. No part of the machine shall cross the firing line. Wadding sounds like fun for this class must look great... (You are responsible for cleanup)
- 4. No age limit.
- 5. Machines limited to chunkin 100' or less. (Distance is not the goal; ability to ham it up is the goal).

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6. Teams will be judged on the show, each team can hold as

many shows per day that they wish to perform.

- 7. The selected PCA judges will set judging times.
- 8. Horn or sound device must sound when firing down range for the safety of the spotter on the field.

- 9. Any Cannon or throwing device on theatrical division must be inspection by safety inspector.
- 10. See Safety and General Rules.

REGISTRATION FORM BELOW TO PRE REGISTER FOR EVENT

# **REGISTRATION FORM**

CLASS:			
TEAM CAPTAIN	N:	NAME	
		THE THEFT	
		ADDRESS	
		TOWN	
STATE	ZIP		
		PHONE #	
TEAM MATES:			
(1)			_
(2)			
(3)			_
(4)			_

ENTERY FEE \$25 PER MACHINE