



Midwest Open Wheel Association

Race Procedure Manual

Updated 6/16/14

1. Car and Safety Specifications

- a. Technical Inspection
 - I. All cars entered and present at any MOWA Series event that are intended to compete in the racing event, must pass pre-race inspection prior to any on-track activity
 - II. Pre-race inspection may take place in a specified area and/or directly at the team's transporter
 - III. Refusal to present vehicle or preventing officials from completing pre-race inspection will result in disqualification from that event and any additional penalties prescribed by the MOWA Competition Committee
 - IV. Technical Inspection may also take place throughout the event
- b. Engine
 - I. 410 Cubic inch limit
 - II. No double overhead cam engines
 - III. No titanium cranks or rods
 - IV. No super or turbo chargers
 - V. One spark plug per cylinder
 - VI. Two valves per cylinder
- c. Fuel
 - I. Methanol based fuel only
 - II. Fuel tanks must have bladders
- d. Car Appearance
 - I. Must resemble a traditional Sprint Car
 - II. No aluminum or titanium frames
 - III. Wheelbase 83-90 inches
 - IV. Seat secured by bolts in 4 locations
 - V. Firewall required
- e. Seats
 - I. MOWA-approved full-containment seats are mandatory as of April 4, 2014
- f. Torsion Arm Stops
 - I. Torsion arm stops will be mandatory on both sides of the front torsion bar effective April 4, 2014
 - II. The retainer may be of the rod-type with a securing cap or insert with an expanding mandrel and/or any other approved Torsion arm stop design
- g. Ballast
 - I. Bolt-on ballast (weight) must be painted white with affixed legible car number and can only be mounted from axle to axle (Addendum C)
 - II. Any car that loses bolt-on ballast at any time will be disqualified
- h. Shocks
 - I. Cockpit adjustable shocks allowed
- i. Bumpers
 - I. Must have front and rear bumpers
- j. Drivelines
 - I. Must be completely enclosed
 - II. Torque tube hoop or strap is required
 - III. No carbon fiber torque tubes
- k. Wings
 - I. Must not exceed 25 square feet
 - II. Wicker bill not exceeding 1 inch allowed on flat wings
 - III. Wicker bills not allowed on dished wings
 - IV. NOTE: 2014 is a phase-out year for dished wings – In 2015, flat wings will be mandatory
- l. Brakes
 - I. One front and one rear brake required

- m. Drag Links
 - I. Must be tethered to frame
- n. Front Axles
 - I. Must be steel
- o. Wheels
 - I. Maximum right rear width of 18 inches
 - II. Maximum left rear width of 16 inches.
- p. Tires
 - I. Hoosiers must be run on all 4 corners
 - II. Front
 - i. 85/8.0-15 D12, D15, D20
 - III. Left Rear
 - i. 15.0/90-15 H12
 - ii. 15.0/92-15 H12, H15
 - iii. 15.0/94-15 H12, H15
 - iv. 15.0/96-15 H12, H15
 - IV. Right Rear
 - i. 105/16.0-15 H15, H20, Medium
- q. Muffler
 - I. Not required unless mandated by track (notice will be given)
 - II. If mufflers are required and fall off anytime during an event you will be disqualified for that event
 - III. Inserts will be allowed
- r. Driver Apparel
 - I. Flame retardant driver's suit (SFI 3.2A/5), gloves, and shoes are mandatory
 - II. Full face SA SNELL 2005 approved or better helmets required
- s. Driver Restraint System
 - I. Each car will be equipped with minimum of an SFI 16.5 or SFI 16.1 approved restraint system, until the date of the belt expiration (two years from the date of manufacturer)
 - II. Seat belt restraint systems shall be installed and used in accordance with manufacturer's instructions
 - III. In any type of manufacturer's installation the fasteners must be magnetic steel unless using type of mount in which the seat belt wraps around the roll cage
 - IV. **A seven-point harness is recommended**
- t. Communications/Electronics
 - I. Raceceivers are mandatory
 - i. A working Raceceiver is considered part of your safety equipment
 - II. Two way electronic communication devices are prohibited
 - III. No traction control devices
 - i. MOWA Series officials reserve the right to confiscate any ignition box and tachometer (pair) at any time provided a like replacement part is made available to the competitor
 - ii. Any competitor may present an anonymous \$50 protest fee to MOWA Series officials to confiscate any ignition box and tachometer (pair) at any time provided a like replacement part is made available to the competitor
 - IV. Electronic/computer engine, fuel or chassis controls are prohibited

2. Race Line-ups/Order of Events

- a. Order of Events
 - I. Warm-ups
 - II. Driver's Meeting
 - III. Hot Laps
 - IV. Heat Races
 - V. Fast Dash
 - VI. B-Main(s)
 - VII. A-Main
- b. Warm-ups
 - I. Firing of the motors will generally occur 30 minutes prior to the Driver's Meeting
 - II. Drivers are strongly encouraged to wear all safety equipment during the Warm-up session
- c. Driver's Meeting
 - I. The Driver's Meeting will generally occur 15 minutes prior to Hot Laps
 - II. Driver's Meeting attendance is highly recommended – ignorance does not serve as an excuse
- d. Hot Laps
 - I. Drivers are allowed only one (1) Hot Lap Session per event
 - II. Unless otherwise stated at drivers meeting, each car must Hot Lap in its assigned session, which corresponds with its assigned Heat Race
- e. Heat Races
 - I. Heat Race starting position will be determined and staggered by Pill Draw
 - II. A modified passing point system will be used (see Addendum A)
 - III. Number of cars that transfer from heat will be announced at driver's meeting
 - i. As a general rule, sixteen (16) cars qualify from the Heat Races
- f. Fast Dash
 - I. The winner from each heat will make the 6-car Fast Dash
 - II. The remainder of the dash will be filled by the cars with the most points through the passing point system, until the dash field is filled
 - III. The driver with the most passing points will draw an inversion pill (1-6)
 - IV. For inversion purposes, rankings of 1-6 are determined by Total Passing Points
- g. B-Main
 - I. Cars not transferring from the Heat Races directly to the A-Feature will line-up heads-up according to passing points results
 - i. If there are two (2) B-Mains, the non-qualified cars will be staggered by passing points results
- h. A-Main
 - I. The standard A-Main starting field that advances through a race program through preliminary and/or qualifying events will consist of 20-cars
 - II. The finish of the Fast Dash will set the front three (3) rows of the A-Main
 - III. The non-Fast Dash cars with the highest passing points totals from the Heat Races will line up behind the Fast Dash cars
 - IV. Cars that transfer from the B-Main will line up behind the Fast Dash/Heat Race transfers in the order of finish from the B-Main(s)
 - V. Provisional Starters will start on the last row as prescribed in Section J
 - VI. 4-Abreast Parade Lap
 - i. Odd rows move out and even rows fill middle
- i. A-Main Alternates
 - I. The alternate for the A-Main will only be pushed off if a car already in the A-Main has scratched
 - II. If one (1) B-Main is run the alternate for the A-Main is the first non-qualifier from the B-Main
 - III. If two (2) or more B-Mains are run the alternate for the A-Main will be determined by highest MOWA driver in current season standings among the first non-qualifiers from each B-Main

- i. If neither car is a MOWA member then we will revert back to total points, if there is still a tie then pill draw number will break the tie
 - IV. If someone fails to fire for the A-Main, the rows move straight up to fill the vacancy and the alternate starts on the last row, either inside or outside, depending where the scratched car was to start
 - V. The scratched car will not receive A-Main points or money, actually swapping B-Main points with the alternate
 - i. A car that scratches out of the Fast Dash is considered qualified for the A-Main and falls under this scenario
 - VI. Once the green flag is displayed to the field, the race is considered started and an alternate will not be allowed to enter the A-Main
- j. Provisional starters
 - I. Any track can choose to add provisional starters in addition to the standard 20-car field up until the driver's meeting prior to the event
 - i. Provisional starters are paid for by the track
 - II. If provisional starters are used, at least one (1) provisional must be a MOWA-based provisional that would be the highest non-qualified car in the current season point standings
 - i. The first race of the year is based on the prior season's final point standings
 - ii. The MOWA provisional starter will start twenty-first (21st) on the grid
 - III. Provisional starters receive full points and pay earned according to the position earned in the A-Main
 - IV. Maximum of two (2) provisional starters per event
 - V. This protocol shall be administered to situations where a promoter adds cars to the starting field based on limited cars available for the racing program
- k. Changes and alterations to this procedure may be made on race night as necessary by MOWA officials to address any unexpected situations or when car counts, weather, curfews, delays or unforeseen events require

3. Special Rules

- a. Special rules for specific events along with the race format will be announced in advance
- b. All purse money will be administered by Last Chance Promotions

4. Season Points

- a. Event finishing points are awarded to the driver according to the attached points chart (Addendum B)
- b. A bonus of one point for each finishing position improved from the start will be added for the A-Main
- c. A car that attempts to compete in either the Fast Dash, a B-Main or the A-Main will receive a total of 25 show up points
 - I. Any driver that attempts to compete but does not start a Fast Dash, a B-Main or the A-Main will receive 10 show up points
- d. Total points for an event consists of show up points, heat points, finishing points and passing points
- e. A driver must be a MOWA member prior to the start of an event to receive any season points for that event
- f. A driver must compete in 75% of the races to be eligible for season points fund
- g. To be eligible for Rookie of the Year, a driver must declare prior to the pill draw of their first event that they intend to compete for Rookie of the Year
 - I. A rookie driver must compete in 75% of the races and must not have competed in 50% or more MOWA Series events the previous year
- h. Product
 - I. To be eligible for any product given away at any event, a driver/or car owner must have purchased a MOWA membership with insurance
 - II. Driver/Owner is required to display required decals of sponsor/product for eligibility
 - III. MOWA requires specific "series" sponsor stickers displayed on car, any car failing to display mandated stickers from any sponsor, will not be allowed to benefit from any funds that particular sponsor provides
 - IV. MOWA sticker and Hoosier sticker must be displayed on outside of both top wing side panel (mandatory)

- i. Tow Money
 - I. Any driver that competes in 75% of the first four (4) events becomes eligible for Tow Money to be distributed to the Top 10 in series standings
 - II. Beginning with the fifth event, drivers that maintain 75% attendance and Top 10 status are awarded Tow Money
 - i. Top 10 Status begins on Monday and ends on Sunday (i.e. Tow Money is paid for multi-event weekends based on the Top 10 in series standings on the Monday prior to the event and remains based on the "Monday Top 10" through the course of the weekend)

5. Interpretation, Enforcement, Waivers, Membership & Series Credentials

- a. The MOWA Board may alter or amend these rules as necessary to provide for fair and safe competition and may grant waivers in specific instances when deemed appropriate.
- b. All rules decisions on race day will be applied by the Director of Competition in consultation with MOWA staff at the event
- c. The Director of Competition has discretion on race night to apply and interpret these rules consistently with the "spirit of the rule" (see Section 8)
- d. The decisions of the scorers and flagman regarding issues within their area of responsibilities is final
- e. Any waiver granted by the Director of Competition on race night shall be reported to the MOWA board following the conclusion of the event
- f. Membership & Series Credentials
 - 1. Every member that signs in to compete at a MOWA Sprint Car Series event must be either a Full Member or a Temporary Member in good standing
 - 2. All MOWA team members in good standing will be eligible for discounted Pit Passes throughout the season at selected tracks, the series' \$50,000 secondary medical insurance policy through K&K Insurance, the series points fund, any contingency awards, and Tow Money
 - 3. To remain in good standing, all Members agree to act in a professional manner including but not limited to verbal representation, written representation, any conduct that may represent the Midwest Open Wheel Association, the sport of Sprint Car racing and/or motorsports in general and/or any affiliates
 - 4. Full Membership
 - A. \$75 prior to April 1, 2014; \$100 after April 1, 2014
 - 5. Temporary Membership
 - A. \$25 per event for up to three (3) events (paid at Pill Draw)
 - B. At the fourth event, the Temporary Member must purchase a Full Membership at full value (\$100) – no credit is given for prior purchases of Temporary Membership
- g. Banquet & Series Awards
 - 1. Banquet attendance is mandatory for the receipt of point fund and/or any bonus post season awards
 - 2. Any driver that is not present at the banquet forfeits 50% of his or her points fund and/or any bonus post season awards
 - 3. In the event of a forfeiture, the driver has the right to submit a written appeal to the Board of Directors

6. Race Procedures

- a. Car Entry
 - I. Once a driver attempts to qualify for an event, either by Time Trial attempt or starting a Heat Race, that is the final assigned car/driver combination for the event
 - i. No car changes of any kind are allowed once that car/driver combination attempts to qualify as defined in 6.a.I
- b. Chief Starter
 - I. The MOWA-appointed Chief Starter will be in control of all on-track events
 - II. Any ruling made by a flagman or track official during a race will be final

- c. 8-Minute Warning Horn
 - I. Generally, an event will be broken into thirds, the Heat Race portion, the Fast Dash/B-Main(s) portion, and the A-Main portion
 - II. Prior to each segment, the Competition Director will sound an 8-Minute Warning Horn
 - III. Any competitor that is not ready to race at the end of the 8-Minute Warning Horn period once your event is called to the track will be docked one (1) row for that event
- d. Scoring
 - I. The entire field must complete a lap before a single file restart occurs
 - II. When a yellow or red flag is displayed, scoring terminates
 - III. After the completion of the first lap, a lap will be considered complete if 75% of the field crosses the start/finish line (Timing & Scoring will always have discretion)
 - IV. The rank for the restart order is as follows:
 - i. All cars that crossed the scoring loop, in the order they crossed the scoring loop on the last completed lap
 - ii. All cars that did not cross the scoring loop, in the order they crossed the scoring loop on the previously completed lap
 - iii. All cars that were involved in the caution period, in the order that they crossed the scoring loop on the previously completed lap (defined in Section G)
 - V. If a yellow or red should be displayed within the last five (5) laps of the A-Main, lapped cars will be moved to the tail of the field, and those cars will be considered lapped – otherwise, all lapped cars remain in the restart order as they last crossed the scoring loop
 - VI. Leaving the track - If a car leaves the track during green flag condition it will not be allowed to rejoin the field
- e. A-Main Work Area
 - I. Generally, every effort will be made to have a designated Work Area at each event
 - i. Only two (2) crew members will be allowed in the A-Main Work Area from each team
 - ii. It may be an area away from your personal pit space or it may be your personal pit space
 - II. No refueling is allowed in the A-Main Work Area unless during a designated Open Red Flag / Fuel Stop
 - III. Courtesy Laps
 - i. The A-Main Work Area will open once the initial green flag is displayed to the field
 - ii. Once the line-up is corrected by scoring, there will be two (2) Courtesy Laps awarded if there are cars in the A-Main Work Area
 - iii. The Courtesy Laps are awarded one (1) time and do not restart if additional cars enter the A-Main Work Area
 - iv. Once the one-to-go signal is given to the field, no cars may return to the track from the A-Main Work Area until the next available race stoppage
- f. Control Car
 - I. The control car is the car that the starting field will use as a reference point for lining up prior to an event
 - i. The control car is either a designated pace vehicle or it is the car that is assigned the front row pole position
 - II. Once the field is given the command over the one-way radio to assemble into double-file order, the field will line up as efficiently and safely as possible using the control car as a reference point and will refrain from excessive hot laps
 - III. Once the field is in proper formation, the command will be given on the one-way radio that the race will start the next time by the flagstand
 - IV. A driver that engages in excessive hot laps that causes a disruption in the event may be penalized to the rear of the field by the MOWA Sprint Car Series flagman

- g. Green Flag - When the green flag waves, it constitutes the beginning of a race, even if the initial lap is not completed
 - I. Starts/Restarts
 - i. Initial start should have rows roughly even
 - ii. A restart cone will be used
 - iii. The leader may begin accelerating upon exiting the last turn before the cone
 - iv. Drivers that pass before the cone, hit the cone, or go below the cone will be penalized immediately to the rear of the field
 - a. “Passing before the cone” is defined as any car that breaks the plane of the rear bumper of the car ahead of them at the restart cone
 - b. Any car that is assessed two (2) restart cone violations in any one (1) event will be disqualified
 - v. Penalties for violations will be assessed by the flagman
- h. Yellow Flag - Proceed with caution, DO NOT PASS, DO NOT RACE BACK TO THE START/FINISH LINE
 - I. When the yellow flag is displayed, pull up to the car directly in front of you, whether it be lapped or not and form a single-file line, nose to tail
 - II. Officials will correct the line-up when they receive it from the scorers
 - III. Drivers who fail to get into a single file order or do not go to assigned spot by officials will be sent to tail of field or disqualified
 - IV. 360 Spin – The yellow may come out upon Chief Starter’s discretion
 - i. There is no guarantee that the yellow will be displayed
 - V. Caution Rules
 - i. Initial Push
 - a. Once a car fires its engine after an assist from a safety vehicle, it is considered ready for competition in that event
 - ii. Additional Push
 - a. Once the original one-to-go signal is given to the field, any car that fires its engine after an assist from a safety vehicle that is in addition to the Initial Push for any reason will go to the rear
 - iii. Two Push Rule
 - a. Any car that requires a second assist from a safety vehicle that is in addition to the Initial Push will be disqualified from the event
 - b. Credit will be given for all laps scored up until the point of disqualification
 - iv. Safety Discretion
 - a. A competitor may be directed over the one-way radio to stop at the nearest MOWA Official for examination of a safety-related issue
 - b. If MOWA Officials determine the car is safe to continue, the car will not be charged an “Additional Push” and will be re-aligned where it was scored on the prior completed lap
 - i. Please note that this exception can only be granted by MOWA Race Control and not the driver
- i. Red Flag – The race is being stopped, slow your car and bring it to a stop as quickly and safely as possible
 - I. Except in rare instances, a Red Flag situation is considered closed
 - II. Cars involved in the Red Flag condition may return to the A-Main Work Area to make repairs
 - i. Cars returning from the A-Main Work Area under Red condition must be ready to restart with the rest of the field – we will not wait
 - III. DO NOT drive through a RED crash scene
 - IV. Any car that stops with contact is considered involved
 - i. Drivers that spin to avoid a wreck and do not make contact will get their spot back and will not be charged with a caution

V. 35-Minute Fuel Stop Clock

- i. Once the last car pushes off for the A-Main, MOWA Timing & Scoring will start the 35-minute clock
 - a. The 35-minute clock stops if no motors are fired during a Red Flag period
- ii. If the 35-minute clock expires, a Fuel Stop will occur at the next race stoppage
- iii. The MOWA Sprint Car Series Flagman will display the designated Fuel Stop Flag from the starter's stand (either a White Flag or a Diagonally Split Red & Yellow Flag)
- iv. Once all cars have stopped and all crews are in position, an Air Horn will sound to start the 2-Minute Fuel Stop Clock
- v. Crews from the A-Main Work Area (only two (2) crew members) will have two (2) minutes to perform refueling and add/or add/remove air from tires
- vi. At the end of the 2-Minute Fuel Stop Clock, an Air Horn will sound a second time and crews are required to return to the A-Main Work Area
- vii. Any crew that continues to service the car after the track returns to caution condition and cars begin to push off will be considered to have entered the A-Main Work Area and will be realigned for the restart accordingly

j. Black Flag

- I. Pull safely OFF the track and leave the racing surface without causing a yellow
- II. Something is wrong with your car that is jeopardizing the safety of yourself and your fellow drivers
- III. Failing to acknowledge a black flag is automatic disqualification

IV. Disqualification

- i. Minor Driving Violations
 - a. Drivers that are disqualified for Minor Driving Violations, such as the Two (2) Yellow Rule or multiple restart violations are awarded the position at the time they are forced to leave the track
- ii. Major Driving Violations
 - a. Drivers that are disqualified for Major Driving Violations (i.e. rough driving) are awarded no points or pay for the event and may be subject to additional penalties prescribed by the MOWA Series Competition Director
- iii. Mechanical
 - a. Drivers that are disqualified due to mechanical and/or technical infractions during pre-race and/or post-race inspection are awarded last place points and pay for the event(s) completed

k. White Flag

- I. One (1) lap to go before the completion of a race
- II. If a yellow or red flag is needed on this lap, when racing resumes there will be a GREEN AND WHITE, CHECKERED, finish

I. Checkered Flag - The race has been finished

I. Yellow/Checkered

- i. An incident has occurred on the track after the checkered has been shown to the leader
- ii. The cars crossing the line prior to the yellow flag will be scored as finished
- iii. The remainder of the field will be scored from the previous lap, except for the cars involved in the incident, they will tag the last scored lap
- iv. Weather, curfew, or track conditions can also cause a yellow/checkered

II. Red/Checkered

- i. Same as yellow/checkered, however, the incident is more severe and cars need to stop immediately and follow normal "closed" red flag procedures, the race is over

- III. In an event where the A-Main race is stopped before its posted distance, it will be deemed an official race if more than half the distance has been completed

- i. If a race is stopped prior to that point, one half of the points and pay for that event will be based on the position at the time the race is stopped with the other half allocated equally among all A-Main cars.
- m. If a race is made up due to a rain out the lineup will be filled as was before, if a driver change is done the position goes to the car not the driver, if a driver change is made then that car will start at the rear of the field

7. Conduct

- a. Any driver who stops his car on the track to protest or initiate an argument will be disqualified.
- b. Fighting WILL NOT be tolerated! Any driver deemed the instigator in any “physical” altercation will receive a minimum suspension of two (2) race dates along with any other sanction deemed appropriate by the MOWA board and will lose all points and money for that night
- c. Blatant incidents of rough driving will be subject to penalty, disqualification and/or suspension.
- d. Anyone who destroys MOWA or race track property, abuses or threatens MOWA officials, and/or enters the scoring tower to debate a scoring decision is subject to penalty, disqualification and/or suspension.
- e. If a protest is needed or a rule needs reviewed, you must submit it to the Competition Director and that rule will be brought to the rule committee’s attention, but it will not be changed that night, unless it is a safety rule, any other rule will be reviewed for following year

8. Spirit of the Rule – These rules are intended to create fair competition among members. The overriding goal of MOWA is to encourage participation in MOWA events without unnecessarily punishing or disqualifying participants. All reasonable efforts will be made to find a way to allow participation without creating a situation that is unfair to others. The preferred method of enforcement is a warning and agreement for corrective action prior to the next MOWA event. MOWA officials will periodically check compliance with these rules as time and opportunity permit. By entering a car in a MOWA event, a driver represents that to the best of his knowledge his car conforms to these rules. While the rules are intended to be interpreted and enforced in a manner to encourage participation to the extent possible, any blatant disregard for a MOWA rule will not be tolerate

Addendum A – MOWA Modified Passing Points System

MOWA Passing Points Grid												
	<- STARTING POSITION ->											
FINISH	1	2	3	4	5	6	7	8	9	10	11	12
1	100.0	105.0	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0
2	91.5	93.0	98.0	103.0	108.0	113.0	118.0	123.0	128.0	133.0	138.0	143.0
3	83.0	84.5	86.0	91.0	96.0	101.0	106.0	111.0	116.0	121.0	126.0	131.0
4	74.5	76.0	77.5	79.0	84.0	89.0	94.0	99.0	104.0	109.0	114.0	119.0
5	66.0	67.5	69.0	70.5	72.0	77.0	82.0	87.0	92.0	97.0	102.0	107.0
6	57.5	59.0	60.5	62.0	63.5	65.0	70.0	75.0	80.0	85.0	90.0	95.0
7	49.0	50.5	52.0	53.5	55.0	56.5	58.0	63.0	68.0	73.0	78.0	83.0
8	40.5	42.0	43.5	45.0	46.5	48.0	49.5	51.0	56.0	61.0	66.0	71.0
9	32.0	33.5	35.0	36.5	38.0	39.5	41.0	42.5	44.0	49.0	54.0	59.0
10	23.5	25.0	26.5	28.0	29.5	31.0	32.5	34.0	35.5	37.0	42.0	47.0
11	15.0	16.5	18.0	19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	35.0
12	6.5	8.0	9.5	11.0	12.5	14.0	15.5	17.0	18.5	20.0	21.5	23.0
*Starting position is figured based on the original draw - we do NOT recalculate once the cars hit the track												
*Driver that earns points FIRST wins a TIE *If you scratch (DNS), you receive ZERO (0.0) Points												
*If you 1) Elect to start on the rear or 2) Miss the Draw, you will only receive Finish Position Points (DIAGONAL)												
*If you know you want to start in the rear (rookie, car isn't running right), don't draw! Please ask to start the rear!												

Addendum "B" – Season Finish Position Points

Finish	Heat Race	A-Main	Show-up	
1	10	65	Start a Main (A, B, C)	25
2	8	60	Attempt	10
3	6	56		
4	4	52	Passing Points (A-Main)	
5	2	48	1 per improved position	
6		45		
7		42		
8		39		
9		36		
10		33		
11		31		
12		29		
13		27		
14		25		
15		23		
16		22		
17		21		
18		20		
19		19		
20		18		
21		17		
22		17		
23		17		
24		17		
25		16		
26		15		
27		14		
28		13		
29		12		
30		11		
31		10		
32		9		
33		8		
34		7		
35		6		
36		5		
37		4		
38		3		
39		2		
40		1		

NO BALLAST AREA

