STRATEGY

In general, lack of color and more black footballs on the cards mean the result of the play will favor the Defense. Lots of color means the results favor the Offense. Red, ivory and brown tend to mean less yardage; yellow, blue and green mean greater yardage gains. Plays at the top and the bottom of the cards tend to have great potential for yardage gains if the wrong defense is chosen, but also great loss potential if the correct defense is chosen. Plays in the middle of the card are more conservative on the yardage gains/losses.

EXPANSION TEAMS

Adding the dice for an expansion team allows you to have a team that has a different balance than the basic team that comes with the game. Choose between teams with stronger passing or stronger running or a better defense, etc. There are 24 RFL expansion teams available, with 6 divisions containing 4 unique teams each. Check on *www.RnRgames.com* for league play aids. Expansion teams also allow you and your friends to set up season play that can culminate in the 1st & Goal Bowl!

OPTIONAL RULE FOR KICKOFFS & PUNTS Requires 1–20 sided die (d20)

This rule is primarily for expansion set play to give specialty team plays a more balanced result across the teams.

KICKOFFS

PUNTS

Replace the basic kickoff return dice with the roll of 1-d20 and use this table:

Roll	Result	
1–19	Move that many yards from the 10 yard line	
20	Re-roll d20 and add to previous total. If 20 comes up again the ball is returned for a touchdown.	

GAME DESIGN: Stephen "Gridiron" Glenn DEVELOPMENT & EDITING: Frank "Fourth Down" DiLorenzo RULES EDITING: Anthony "Red Zone" Rubbo PLAY COACH: Dan "Dropkick" DiLorenzo GRAPHIC DESIGN: Jennifer "Juke" Vargas ILLUSTRATION: Scott "Fleaflicker" Fleenor & Matthan "Heisman" Heisel

For Punt returns, replace the green die with					
the d20 and roll it with the Play die.					
	Roll	Result			
	1–10	Add this number to 35 for total yardage of punt. Fair catch, no return allowed.			
	11–20	Add this number to 35 for total punt yard- age. Punt may be returned by receiving team using d20 and Play die.			

SPECIAL THANKS FOR MERITORIUS TESTING:

Replace the basic Punt/Return dice with the

roll of 1-d20 and use this table.

Brad Fuller, Valori Glenn, Alexander Marcelo, Robert Fox, Jon Pessano, Joe DiVecchio, Chuck and Peggy Ledger, Dana Richmond, David Debien and Dennis Bolin.





SUMMARY

1st & Goal is a head to head football game played in two halves. Players select offensive and defensive plays from cards held and roll the dice to advance the football. All of the excitement of a football game is here: breakaway plays, sacks, penalties and more. With two players, each coaches one team, either Home or Away.

PLAYING WITH 3 OR 4 PLAYERS

Play either **2 vs. 1** or **2 vs. 2**. On teams with two players, designate one player to play the Offense cards and the other player to play the Defense cards. Decide before the kickoff whether these two 'coaches' can or cannot discuss the plays they will choose.



*R&R Football League



1ST 2ND 3RD 4TH DOWN DOWN DOWN DOWN

Ex. Ball starts on the 10 yd line. 1st play advances the ball 6 yds to 2nd down. Next play results in (-4) yds, 3rd down. Third play gains 8 yds and new 1st down.



Ex. 1st and Goal Down Marker turned sideways

PREPARATION

The players decide between them who will be HOME vs. AWAY. Flip the RFL coin (AWAY calls Heads or Tails) to decide which team will start on OFFENSE and receive the first Kickoff. (Note, the other team starts with the ball at the beginning of the second half of the game).

- 1 Place two clear disks next to each scoreboard.
- Place the remaining two clear disks on the "3's" of the two Time Out charts.
- 3 Place the Referee and Penalty Dice on their spots on the board.

Each player gets one Fake/Kick card. Give the football, Offense deck and First Down Marker to the Offensive Player, and the Defense deck to the Defensive player. Each player shuffles their deck, draws a hand of 8 cards, and places the deck facedown on the table. Each card represents one play and shows the possible dice to be rolled based on the opponent's play.

After each play, the cards used are discarded faceup into Offense and Defense discard piles next to the decks.

NOTES ON THE FIELD

The field is divided into four columns representing the four downs available per 10 yard drive. The 1st down flags marks the 10 yds needed for a new 1st down. When a 1st down is reached with the ball at the 9 yard line or less, turn the down marker sideways to mark 1st and goal.

When starting a drive, the ball will be on a yard line in the leftmost column. Each 1 of a die roll equals 1 yard on the board and moves the ball up that many lines. After moving the ball forward (or backward) due to a play, slide the ball one column to the right to indicate a new down. The second column from the left is 2nd down. The third column from the left is 3rd down, and the final column is 4th down.

BRIEF DESCRIPTION OF DICE

The numbers on the dice reflect yardage (lines) gained. So rolling a total of five is a 5 yard gain (5 lines).

- RED VORY BROWN Yardage Dice: These are mostly for the running plays.
- YELLOW OBLUE GREEN Yardage Dice: These are mostly for the passing plays.
- BLACK Defense Die: This die is rolled by the Defensive player on every play. It's usually a negative amount that subtracts from the positive total of the Offensive dice. If a play shows multiple black die rolls, only count the single best roll of that die for the defense.
- Play Die: This die is rolled with every play to determine if anything special happens on the play.
- **Referee Die:** This die is occasionally rolled in response to rolls of the Play die.
- Penalty Die: This die is rolled with the Referee die on plays when P or T is the Play die result.

SUMMARY OF PLAY:

- 1. Defense will kickoff to receiving team (Offense).
- 2. Both Offense and Defense players select a card from their hand and reveal them simultaneously.
- 3. Resulting dice from the card matchup are rolled. Play die result is resolved, then ball is advanced up the field by the total yardage rolled to a new yardage line. Move it right one column to indicate next down. Cards played are discarded faceup and each player draws a new card.
- 4. Offense has 4 attempts (downs) to move 10 yards. If successful, they get 4 more downs otherwise the ball is turned over to the Defense.
- Repeat until Punt, Turnover or Score occurs. At that point, players shuffle their hands into their deck and switch decks with their opponent. Each player draws a new hand of 8 cards from their new deck.







5





5 🖬 Hall =4



Ex. Ball advances 4 yds: up 4 lines and over 1 (2nd down).



Rules of the Game

KICKOFF

Kickoffs happen at the beginning of the game, at the beginning of the 2nd half, and after either team scores.

The receiving team decides to either take a *touchback* or *run the ball out.* Once they choose, place the ball as follows:

1. Touchback. Place the ball on 20-yard line.

-0ľ-

2. Run the ball out. Roll these dice. *O O O P* Starting from the goal line at your endzone, move the football a number of yards equal to the numbers on your dice. The Play Die (*pg. 6*) may affect this roll.

Whether starting on the 20-yard or elsewhere, place the football on that line in the leftmost column. The left column indicates 1st down. Place the red 1st down marker so one flag pointer indicates the yard line that the ball is on and the other indicates the 10 yards needed for 1st down.

PLAY

1. Both players choose one card from their hand and place it face down or calls a TIME OUT.

If either player called a TIME OUT, then **both players** are permitted to do **one** of the following:

- A. Secretly search their discard deck for the play of their choice and add it to their hand.
- B. Shuffle their hand into deck, then take an equal number of new cards.

Mark on the board how many TIME OUTS remain for the player who called it. Once a player has zero TIME OUTS, they can no longer call TIME OUT for that half of the game.

Example: Offense calls a TIME OUT, secretly takes a card from their discard pile, and plays it face down. Defense may play a card from their hand; play a card taken from the Defense discard pile; or opt to shuffle their hand into the deck, take 8 new cards and play one from their new hand.

2. Reveal cards simultaneously and announce plays. If the Offense plays a Running play, immediately burn/discard the top card of the Offense deck. If the deck is empty, the Offensive player discards a card from his hand. Running plays eat up more of the game clock.

Match the Offense with the Defense to see which dice are to be rolled (*A*). Offense rolls their colored dice (if any) and the white Play die (*see pg. 6 for effects*). Defense rolls their black die. Advance the ball the yardage equal to the total of the values on the dice (*B*). When the ball reaches or crosses the line of the 1st down marker, move the ball to the leftmost (1st down) column and move the 1st down marker so one flag marks the line where the football is and the other marks 10 yards away (*C*). Otherwise, move the ball to the right one column to show next down. Repeat until the Offense scores, turns the ball over, or punts.

This symbol means burn an Offense card, FB STRONG Reasing Play COAL LINE © © © SHORT RUN DEF. © © INSIDE BLITZ © ©







C-1st down achieved. Adjust ball and marker accordingly.

1st **DOWNS:** The Offense has 4 'downs' to advance the ball 10 yards. If successful, they get another 4 downs to advance again. Once the marker reaches the end zone, it is 1st and Goal. The Offense then has only 4 more downs left. Turn the 1st down marker sideways to signify this. On 4th down, the Offense must either punt the ball to turn it over to the receiving team, attempt a field goal, or try one more play to go for it. Failure to reach the 1st down marker after the 4th down turns the ball over to the other team where it rests (in the same column). Place the 1st down marker accordingly to mark the new direction.

3. After determining the play results, players draw a new card from their decks if they have less than 8 cards.

CHANGING HANDS

When the ball changes hands (after a Punt, Score, or Turnover), the players drop the cards held onto the remainder of their decks, shuffle them together, then pass that deck to the other player. The Offensive player always has Offense cards, and the Defensive player always has Defense cards. Each player draws a hand of 8 cards (less if deck runs out) before play resumes.



Ex. Touchback



Ex. TIME OUT Away player calls a timeout.



THE PLAY DIE

When the Play die is rolled, these are the possible results:



The play is broken up. The colored yardage dice are all '0' for this play. If an 'X' is rolled on a KICKOFF RETURN, the result is a touchback and the ball is placed on the 20.



Breakaway! The player moves the ball forward (or backward) as indicated by the colored dice. Reroll all the dice used, move the ball again, and continue to reroll if the icon appears again. Rerolling stops once any other icon appears. (Ignore any effects of other icons when rerolling). *NOTE: If the total is negative, the Offense has the option to stop the reroll, declaring the runner down and the ball dead.*

Potential Turnover! Move the ball forward the yardage indicated by the colored dice. Then roll the Referee die. If a 'I''' is rolled, a turnover (fumble/pass interception) has taken place. Change hands (see CHANGING HANDS, pg. 5) and move the 1st down marker appropriately. If any other result appears on the Referee die, the result is NO TURNOVER. Turnovers in an opponent's endzone result in a touchback. The new team takes over the ball on their 20-yard line.



5

Potential Penalty! Before the football is moved, roll the Referee die and the Penalty die. If a shows on the Referee die, the penalty is on the Defense and they will give up yardage. If g, the penalty is on the Offense and they will lose yardage. (Either way, the Penalty die shows the result.) If any other result comes up on the Referee die, the result is NO PENALTY, so move the ball the yardage rolled.

Results of Penalty die:

 $\mathbf{5} = 5$ yards, move the ball 5 yards.

5A = 5 yards with automatic 1st down if the penalty is on the Defense. Move the 1st down marker to the new ball location.

10 = 10 yards, move the ball 10 yards.

15 = 15 yards, move the ball 15 yards.

On penalties, ignore yardage rolled. Do not adjust the down. Return the played cards to your hands and repeat the down. (The one exception to this is the automatic 1st down.) Also, as a Penalty stops the clock, do not burn a card for the Offensive play, even if declined.

On a Defensive penalty, the Offensive player can decline the penalty. If so, move yardage rolled and adjust the down.

On Offensive penalties, if the penalty moves the ball back into the Offense player's endzone, move the ball half the distance to the goal line (rounded up), but no farther than the 1-yard line. Note that the Defensive player may also decline an Offensive penalty and leave the play as is.

HAIL/MARY - The HAIL/MARY has no effect except on a Hail Mary play (*pg. 10*) or on a punt (below).

SPECIAL TEAMS RULES

The Kickoff Return, Field Goal, Onside Kick and Punt/Return plays are noted on the board under Special Teams.

Kickoff Return *Constant Constant Con*

- 1. Touchback. Place the ball at the 20-yard line. or
- 2. Run the ball out starting at the goal line and moving the total yardage of the dice rolled.

Field Goal Each side plays their Fake/Kick cards (see pg. 11) and Offense must discard one card from their hand. If kick is not faked, the Defense then rolls the Referee and Play dice to try to block this kick. If they roll two X's, then the field goal is blocked and the ball is turned over where it is. Otherwise, the Offense rolls the yardage dice and moves the ball forward that many yards. If the ball fails to reach or cross the 0-yard line into the endzone, the opposing team gets the ball from the point of the attempt. If the ball reaches or crosses the 0-yard line into the endzone, a field goal is scored. Score three points, then Kickoff to the other team.







6





Offense punts from the 20 Defense returns 10 yds.



Onside Kick *O* **P P B** = >10 + **B**

A player may kick an onside kick instead of a normal kickoff in order to recover the ball. The ball is placed on their 30-yard line and they roll the Red die, the Brown die, the Play die and the Referee die. Advance the ball the distance rolled. For the kick to be successful, two things must occur:

- 1. The sum of the dice must be 10 or more and...
- **2**. A 'T' must appear on at least one of the white dice.

If both occur, the kicking team gets the ball and remains on Offense. Otherwise, the receiving team gets the ball.

Punt *Punt Punt Pun*

- A. Roll all the 'punt' dice and move the ball forward the yards indicated by the total rolled. The Defense may either roll the return dice, (Green + Play, shown after the slash) and move the ball that distance back down the field OR declare Fair Catch and take over the ball where it lands. (Note the Play die may cause a Penalty, Turnover or Breakaway on the Defense's return.) ...OR
- B. Opt to remove one 'punt' die of their choice and replace it with the Play die. If so, the Play die has the following Special Effects:

Blocked Punt! Receiving team takes over the ball.

- 🛜 Extra bounce! Roll red die 🏉 and add to total.
- 📴 Roll Referee die. If 'T', Offense recovers ball downfield.
- Roll Referee & Penalty dice. If Penalty occurs, adjust ball, then repeat punt attempt from new spot. (Note, a Penalty may give the punting team a new 1st down).

Mary Ball out of bounds or fair catch. No return allowed.

Note: A punt that causes the ball to cross the opponent's goal line results in a Touchback; place the ball on the 20-yard line.

SCORING

Indicate points scored by placing the clear disks onto the appropriate scoreboard numbers.

TOUCHDOWN

On a play, if the ball reaches or crosses the 0-yard line into the opponent's endzone, the Offense scores 6 points. They then must try for the extra point by rolling the Play and Referee dice. If two 'X' are rolled, the attempt is blocked. Any other result earns an additional point for a total of 7.

FIELD GOAL

If the Offense has at least one down and one card remaining, they may kick a Field Goal. If the ball reaches or crosses the O-yard line into the endzone, they score 3 points. After any field goal attempt, the Offense must burn one card.

TWO POINT CONVERSION

Instead of kicking an extra point, a player has the option to score two more points after a touch down. Place the ball on the 2-yard line and try one play to get into the endzone. If successful, score two points; otherwise, nothing is scored. If a Turnover or Offensive Penalty occurs, nothing is scored.

SAFETY

If the ball crosses into the Offense's endzone, the Defense scores 2 points. The Offense then turns the ball over to the Defense by kicking a normal punt from their 20-yard line.

GAME CLOCK

TIME OUTS

If both players have not played a card, waiting for the other to call a TIME OUT, the Offense must decide first.

END OF HALF

The half ends immediately when the Offense has no cards left in hand and deck. Note that once the Offense Player is out of cards, any remaining TIME OUTS become useless. The team who received the ball initially in the first half, will kickoff to the opposing team at the start of the second half. Reset the TIME OUTS back to 3 for each team.













Offense pushed back. Safety! Defense scores 2 pts.



END OF GAME

After two halves of play, the team with the most points wins. If tied, flip the coin to determine who starts on Offense with the ball. Continue playing with a fresh overtime half and 3 new TIME OUTS each. First team to score in overtime wins.

SPECIAL SITUATION RULES

PLAY SELECTION IN THE RED ZONE

Some Offensive passing cards have red '10's or '20's in the upper corner. Cards with '10's on it may not be played once on or past the 10-yard line, i.e. within 10 yards of the opposing end zone. Likewise, cards with '20's may not be played within 20 yards of the opposing end zone.

RUNNING OUT THE CLOCK

The Offensive player may opt to run the clock down after any completed pass (i.e not sacked, play not BROKEN UP nor ball TURNED OVER), by announcing it and burning one card from their deck. The Defense can prevent this (even on a normal running play burn!) by immediately calling a TIME OUT. (The TIME OUT is played out normally for both players, do not burn the card.)

HAIL MARY PASS



Plays with this icon

can not be used within

20 yds. of an endzone.

BOMB

Plays with this icon

can not be used within

10 vds. of an endzone.

SLANT

GOAL LINE 🥥 🖉 🗊 Hort run def. 🥥 🖉 🗊

The Offensive player may attempt a Hail Mary pass as the absolute last play of the half. To do this they must:

1. Have only 1 or 2 cards in their hand.

an

2. Be on or past their 35-yard line.

Roll the Play and Referee dice. If 'HAIL' and 'MARY' both appear, then a touchdown is scored!

UNPLAYABLE HAND – If the Offensive player can't play a card (left with restricted passes), they discard 1 or 2 cards and draw that many from the deck. Repeat if necessary. If no cards are left to draw, the half ends.

QUARTERBACK KNEEL - If their deck is empty, the Offense may 'take a knee' to burn time off the clock. Discard one card from hand, lose 1 yard and 1 down. **QUARTERBACK SNEAK** – Can only be called if the Offense has 1 yard to go for 1st down. Offense calls QB sneak and rolls the Play Die.

Play Die Roll	Results
Hail Mary, Or 🥢	Move ball 1 yard & gain new 1 st down.
🔀 or 🔢	Ball does not advance. Lose 1 down.
	Roll Referee and Penalty dice. If 🔯 or 🧝 , assess normal Penalty. Any other result, ball does not advance. Lose 1 down.

FAKE PUNT/FIELD GOAL – Each player gets one Fake/Kick card. Before EVERY punt and field goal, each player secretly selects a side, then reveals it simultaneously.

Offense Picks	Defense Picks	Results
KICK	KICK	Normal FG or Punt kick
KICK	FAKE	Offense adds 5 yards to the yardage rolled for the FG attempt or Punt
FAKE	KICK	Kick is faked! Offense/Defense both choose and play a card as normal. Play is carried out WITHOUT rolling the black defensive die.
FAKE	FAKE	Fake kick fails! Play is broken up. Turnover occurs at location of ball.

OPTIONAL RULES

TURNOVERS – On Turnovers, always roll the Referee and the Penalty dice. If the Offense chose a Passing Play, then an interception occurs if a 😰 or 16 is rolled. Also, whenever a Turnover occurs, roll the Red and Black dice and move the ball accordingly to show where it ends up and is recovered.

BREAKAWAYS – For an added boost to breakaways, try this rule. If you roll a Breakaway ' three times in a row, the player with the ball has broken free and runs it in for an immediate touchdown. Score!

SQUIB KICK - This is a short yardage Kickoff that bounces the ball directly into the receivers to prevent returns. Place the ball on the kicking team's 30-yard line and roll these dice:

ADVANCED BROKEN PLAYS - When an 🐼 occurs on a Passing play, it's an incomplete pass with normal X effect. If an 🐼 occurs on a Running play, do not zero the yardage dice! Instead, they count but the X adds a **-3** to the total.

RUNNING PLAYS



HALFBACK DIVE - This play is designed to play smash mouth football as the running back plows directly into the opposition. Executed correctly, this play can often gain five or more yards easily.



FULLBACK STRONG - This is a play that is meant to confuse the Defense. The fullback runs quickly into the line between the center and the guard while the halfback runs in an opposite direction. This play can catch your opponent off guard and create a rapid short yardage gain before the Defense realizes what hit them.



DRAW - This is a deception play that lines up in an apparent passing formation, with an overload of receivers to one side. As the quarterback takes the ball, the running back hesitates in the backfield, faking a side run. As the fake pass is negotiated, a handoff occurs and the running back drives up the middle of the line. If the fake is successful, this play can open up a wide gap for a big gain!



OFF TACKLE - This appears to be a passing play. Instead, the halfback runs the ball outside of either tackle while the offensive line pushes the defenders away from the outside running lane to create some confusion. Wide receivers stay back to assist the blocking to turn a short run into a long gain!



SWEEP - A power running play to the outside of either side of the line, this muscle play is designed to create an outside running lane. The guard and the tackle pull from their assignments to create a lane outside of the line. The receiver can also assist in blocking to create a formidable wall that the halfback can run behind.



RUN/PASS OPTION - This play offers several options for the Offense to take a short run to either side or to run a quick pass pattern. The decision to pass or run is elected by the quarterback in response to the defensive formation.

NOTE: The 'S' represents the Quarterback.

PASSING PLAYS



SCREEN - This play presents a long pass route as a deception for a short dump off pass to a running back on the opposite side of the line. A screen is a good choice for short and quick yardage.



SLANT - This formation is best used to create an overload on one side of the field. Four or five receivers run direct routes either to the inside of the secondary or to the sidelines. In order to be most effective, one receiver draws the secondary deep, thereby opening up the short secondary for the other receivers.



BUTTON HOOK - This is a multiple route option play that draws defenders into an open zone of the field, one on one. One receiver cuts back to the ball quickly to receive a short quick pass from the QB. If the Defense is caught off guard, this short pass can turn into a long gain!



SHORT PASS - This formation sets up as if a strong side run will occur. Four receivers will cross their routes to create confusion with the Defense. The receivers routes must be short to allow the quarterback to unload the ball quickly if pressured. Expecting a run play, the Defense will attempt to plug any holes in the line. If a large gap opens in the secondary, this could result in a long gain!



MEDIUM PASS - This formation is best used on 2nd or 3rd down to pick up five plus yards. Five receivers are used to set three different stages on the field. Both running backs become short route options. The tight end can run a short slant route or cross patterns with a wide receiver. The confused Defense will likely leave at least one receiver open resulting in a medium to long gain.



BOMB - This formation has the receivers sprinting long routes. This long pass is most effectively used when not looking for a large gain, as a Defense expecting the pass can easily shut it down. For the Offense to be effective, they'll try to create a mismatch with a speedy receiver who can turn the defender inside out.

RUN DEFENSE



GOAL LINE - This is a powerful short yardage formation that creates plenty of push against the offensive line, making it difficult for runners to penetrate the line.



INSIDE BLITZ - This is a quick power move that brings defenders from the secondary into the middle of the defensive line. The linemen attempt to create gaps in the offensive line by their blocking routes. This permits the secondary to cover gaps, thus stuffing any potential for short yardage gain on a run.



SHORT RUN DEFENSE - This formation anticipates a run up the middle of the line, as well as the possible short pass into the secondary. With quick reaction, both sides of the line can be protected to disrupt any attempt of a long gain. But should the Offense try a long pass play with a speed burner for a receiver, this formation could prove fatal for the Defense.



STRONG SAFETY - This alignment allows for a quick response to a short pass pattern or an off tackle run. It requires quick decision making by the secondary to read and shut down the play.



COVER - A formation that allows for one on one receiver coverage while keeping the focus on the run. If the Offense decides to pass, most areas of the secondary are adequately protected.



COVER 2 SPY - A formation that provides a broad based coverage pattern able to shift to either side of the field in response to the ball. Primary focus is to stop run plays. With a quick reversal of direction, short pass patterns can be easily protected against.

NOTE: The ovals indicated here represent the areas covered by the specific 'X' defenders.

PASSING DEFENSE



COVER 3 - This alignment allows for a simple broad based coverage, picking up both the short run and most pass routes. The linebacker calls out the proper setup and the defenders drop into the corresponding area of coverage. This formation makes long gains difficult to attain.



NICKEL - A base formation meant to cover short to medium yardage plays. With this setup, most runs will be stopped and passes will be well covered unless the receivers can get open for a quick long route. Watch for the Offense running the ball wide. If not stopped, there could be long gains.



 \mathbb{X}

CORNER BLITZ - A variation of the nickel defense formation which disrupts short runs and can result in the sack of the quarterback. The cornerback will charge across the line of scrimmage just as the ball is snapped. Generally the play is run on the weak/blind side of the quarterback so that they don't see the rush until it is too late.



SAFETY BLITZ - This is another nickel formation that puts intense pressure on the Offense to clog the middle of the field. The safety moves forward to tip the rush, attempting to prevent any short burst through the line. If the run goes to the outside of the tackles, the safeties can also quickly adjust to stuff the runner.



DIME - This is an overall pass protection focusing on multiple coverage to shut down passing. The defense sets up in zones to ensure rapid response to the offensive routes. Generally, this system is used to defend against obvious passing situations.



PREVENT - This formation is used primarily for long passing scenarios. It is a flex dime package that covers all deep areas of the secondary.

