Ahead of Super Bowl, Trump Raises Doubts on Tackle Football for His Son

ATLANTA — Hours before the sport's biggest game, President Trump joined the growing ranks of parents anxious over tackle football, saying in an interview he "would have a hard time" letting his 12-year-old son play.

"I mean, it's a dangerous sport and I think it's, I, it's really tough" if his son wanted to take up the game, Mr. Trump said in an interview with CBS ahead of its Sunday evening broadcast of the Super Bowl.

The president's concerns are at odds with his previous criticism that the N.F.L. has been making the game too soft to avoid concussions and other injuries, and suggest that he is struggling with many of the same questions that parents across the country are asking about the safety of youth tackle football.

Mr. Trump said he would ultimately let his youngest son, Barron, who plays soccer, decide if he wanted to play tackle football and would not steer him away from the sport.

But

the president said he had seen reports about the dangers of playing
tackle football, and heard that some N.F.L. players were not letting
their sons play tackle football.

His comments added another wrinkle to his ambivalent relationship with the game he often celebrates, but also laments. His doubts about the safety of the game come five years after President Barack Obama said that if he had a son, he would not let him play professional football.

Some studies have suggested that playing tackle football before age 12 puts athletes at a higher risk of developing cognitive problems later in life, but the issue has not been widely studied. In general, there has been growing awareness of C.T.E., a degenerative brain disease many former players have developed from repeated hits to the head.

As a result of such concerns, participation in flag football has exploded.

Yet while Mr. Obama held a forum at the White House on the dangers of concussions, Mr. Trump has repeatedly said the N.F.L. is being overprotective.

In September 2017, for instance, Mr. Trump complained that the N.F.L. was ruining the game because the referees were trying to control unnecessarily rough tackles.

“Today
if you hit too hard — 15 yards! Throw him out of the game!” he said,
adding: “They’re ruining the game! They’re ruining the game. That’s what
they want to do. They want to hit. They want to hit! It is hurting the
game.”

At a campaign rally in 2016, Mr. Trump referred to a woman in the audience who fainted, but returned to the crowd.

“The woman was out cold and now she’s coming back,” he said. “See? We don’t go by these new, and very much softer, N.F.L. rules. Concussion. Oh, oh! Got a little ding on the head. No, no, you can’t play for the rest of the season. Our people are tough.”

Trump also called the N.F.L. “soft” for penalizing helmet-to-helmet hits.

In the CBS interview, however, he sounded more cautionary notes.

“I
hate to say it, because I love to watch football,” Mr. Trump said. “I
think the N.F.L. is a great product, but I really think that as far as
my son — well, I’ve heard N.F.L. players saying they wouldn’t let their
sons play football. So, it’s not totally unique, but I, I would have a
hard time with it.”

Sports court delays Caster Semenya verdict until April

LAUSANNE: The Court of Arbitration for Sport said Thursday that it was delaying until next month its ruling on a challenge filed by South African double Olympic champion Caster Semenya against the IAAF.

A decision in the controversial case had been due next week, but the world’s top sport court said it would not issue a verdict “until the end of April” because both sides had filed additional material since the hearing in February.

Recommended By Colombia

Semenya is challenging proposals by the International Association of Athletics Federations that aim to restrict female athletes’ testosterone levels.

The IAAF is seeking to force so-called “hyperandrogenic” athletes or those with “differences of sexual development” (DSD) to seek treatment to lower their testosterone levels below a prescribed amount if they wish to continue competing as women.

The athletics governing body has argued the moves are necessary to create a “level playing field” for other female athletes.

A wide coalition has rallied behind Semenya’s cause, including the government in her native South Africa and rights activists worldwide.

Some scientific experts have argued that barring Semenya from competition due to naturally high testosterone levels would be like excluding basketball players because they are too tall.

How to Build the Ultimate American Football Player

One of our favorite times of the year at my facility is when our

college football sessions begin in May. What makes our job unique when it comes to this 12-week program is our near absolute control over what Mike Robertson and Patrick Ward call the athletes' stress bucket. When these guys come to train, there's no external stress. Aside from a girlfriend and a landscaping job, their lives are a piece of cake. And it shows every day during the warm-up. We simply cannot get them to shut up (a very simple way to determine their level of central fatigue or lack thereof).

What do I mean when I say we control their level of stress? To today's physical preparation coaches, the figure below is nothing new, but it demonstrates how we truly are the organisms' stress managers over the course of the summer. We structure our athletes' training around the General Adaptation Syndrome (GAS) by the day, by the week, and by the month. Seems simple enough, right? Apply a stimulus to the point of fatigue and watch the athlete recover and supercompensate leading to the next training session.

Wrong. In reality, each athlete has his own GAS, if you will. Different positions (lineman, receiver, etc.) require not only different stressors but also varying levels of intensity and volume. Our program fills the need for the application of unaccustomed stress. I

believe
this system is the ultimate guide for building today's American football
player.

The Summer Macrocycle

Before we dive into the daily training sessions, let's look at a
10,000-foot view of the whole program for the three months we have these
guys in-house. Let it be known, I in no way consider myself a "programming sensei," I simply try to instill what others much smarter
than I have found successful.

At first glance, you're probably rolling your eyes with the assumption that there are too many moving pieces to this puzzle. It is
much simpler than it appears. I like to refer to it as *Modified Block Periodization*
where we're linearly building athletic movement, meaning triphasic,
concurrently raising all aspects of athleticism, all while respecting
residual training effects (aerobic endurance, maximal strength, maximal
speed, etc.). The big picture is nothing more than transitions from slow
to fast, general to specific, and simple to complex using legend Al
Miller's suggested prescription of volume first, intensity second.

Mesocycle One

When the session begins in early May, some of the guys have been keeping up on their training since the end of spring ball while others have kept up with *Call of Duty* and Taco Bell. With that in mind, we adhere to the least common denominator and take everyone through two weeks of anatomical adaptation.

The benefits of this period are two-fold:

- It raises work capacity.
- It increases resiliency in the connective tissue while preparing the players for the more violent demands to come, i.e. sprinting.

Our speed work for the four weeks focuses on starts from a static position and is incredibly simple. Our go-to is two-point starts with the emphasis on front side arm mechanics and, most importantly, posture. We also emphasize posture, rhythm, and relaxation through extensive tempos during this block. In the weight room, we want the speed of the barbell to maintain relatively high speed. We are constantly cueing the guys to “rattle the plates,” as athletic movement starts from the ground up.

The first four weeks is a fan favorite (sarcasm) as we employ slow eccentrics to the main movement in the weight room, and we

perform them
in a cluster fashion. I would be remiss if I failed to mention that Cal
Dietz and his work greatly influenced the resistance portion of our
training session.

The goals of the eccentric phase, or block, are:

- To reach a level of hypertrophy necessary for the sport's violent demands.
- To improve neuromuscular synchronization of the afferent/efferent
  pathways between the muscle spindles and central nervous system and
  desensitizing the Golgi tendon organ (GTO), which will then allow the
  organism to absorb high levels of force all while not triggering the
  over protective mother (GTO).

The only problem with eccentrics? They're extremely stressful to the
organism, which is why we use cluster sets during this block. Clusters
are phenomenal for performing each rep at or near maximal velocity
during the movement's concentric contraction. This results in maximal
power output, ultimately leading to greater improvements over time.

If you're familiar with Coach Joe Kenn, you are without a doubt
acquainted with his Tier System Strength Training template. I'll explain
why we implement it later in the article. For now, know our focus is on

hypertrophy (“R” for repetition effort, or in our case, slow eccentrics
and time-under-tension), then max effort, followed by a dynamic
movement which could be a jump, throw, or use of accommodating resistance.

As for jumps during this block, we’ve had tremendous success with max
effort, single response jumps. More specifically, static overcome by
ballistic jumps (seated box jumps) with knee bends of at least 90
degrees to mimic the start of the acceleration phase.

Mesocycles Two and Three

June

As we progress further into the summer, the program becomes more
demanding. The emphasis continues to center on the one biomotor ability
that separates the terrible from the bad, the bad from the good, and the
good from the great: speed. From a bioenergetic standpoint, we focus on
alactic power rather than capacity. Why? It does not matter how many
times a guy can run a 5-flat forty, he’s still slow. We find it more
prudent to start building a Ferrari rather than a Ford Bronco.

As far as biodynamics are concerned, we begin to push the alactic envelope with longer accelerations and sprints. A staple in our program is flying 10’s (build 30, sprint 10) and medicine ball starts with great awareness on the height of their hips and their front side mechanics.

The fun part for my staff and me during this block is to witness the athletes realizing that as their speed increases, they're able to generate more force with each ground contact. It's even more rewarding to explain that the challenge they face as speed increases is that there's less time available to apply force. A cue that's worked time and time again for us is, "The only difference between flying and sprinting is ground contact."The only difference between flying and sprinting is ground contact. Click To Tweet

Once they meet the sprinting requirements, they transition to the
weight room with isometrics as well as true dynamic effort a la Westside
Barbell. Isometrics seem to be all the rage again in the industry, so
I'll spare you the physiology lesson. Here are the benefits from
isometrics that deserve mention:

- Motor unit recruitment which will increase the number of muscle fibers that will engage or fire.
- Rate coding will increase the rate at which the motor units fire, which then leads to a spike in muscular tension.
- Isometrics will divert maximal energy from the eccentric phase
  directly to the concentric phase with minimal (or no) loss of energy.

During this block, we've had great buy-in and greater success with
max effort, double response jumps to mimic the acceleration phase by
still employing a somewhat deep knee bend. A tried and true variation we
love is double broad jumps—effective and efficient. That's a win-win.

July and August

Moving into July, we progress toward sport specific or what I prefer to call *sport transferable.*
Our tempos become more intensive, and we center sprints on absolute
speed. Bioenergetically, by having shorter distances and rest times for
the tempos while giving the athletes a more powerful engine and larger
speed reserve, we're giving them the best opportunity to not only
survive during a game but to thrive. Football is an alactic-aerobic
sport with an emphasis on capacity.

Here's how we prepare our athletes on a typical Saturday afternoon:

- Average play is 5 seconds.
- Average rest between plays is 28-37 seconds.
- Average series is 5-6 plays.
- Average rest between series is 9-10 minutes.
- Average special teams play 7-8 seconds.

The game dictates what we do bioenergetically. While we're not perfect, I'm confident we're on the right track.

It doesn't take an MIT graduate to understand we're now placing a
premium on "displaying your strength quickly" in the weight room, with
the institution of the concentric or reactive phase, the short and
multiple response jumps and plyometrics, and the priority Tier being
dynamic.
A quick note on deloads: use them before your athletes need

them. We
back our guys down once a month. As Dr. Bryan Mann said, “Our body runs
in three-week adaptation waves.” With that, we extract as much as we can
from a given stimulus and then rejuvenate the organism. It’s not what
you can do; it’s what you can recover from.

High/Low CNS Training

We use the high/low approach made famous by the late Charlie Francis.
We are our athletes’ stress managers for the twelve weeks they’re with
us, and this approach allows them to supercompensate constantly rather
than seek homeostasis.

High CNS Training

After reviewing our weekly template, one could safely assume that our
program revolves around sprinting. Why shouldn’t it? Speed kills. Allow
me to quell your concerns regarding having only one day that addresses
agility and jumps/plyometrics. We’re able to improve agility without
venturing into that realm through linear acceleration and sprinting.
How? Having your athletes sprint farther and faster in training allows
them to reach higher speeds, thus achieving higher ground force. As we
all know, high velocity=high force. Derek Hansen has touched on the

multitude of benefits sprinting has when it comes to agility:

- Improved change of direction.
- Improved jumping ability (sprinting is a plyometric due to the flight phase).
- Ability to decelerate quicker.
- Less wear and tear (due to a decrease in agility/COD training).

When the organism is in a state of high velocity and high force, they reap the rewards of agility training without any of the risk. If we're honest, we know agility and change of direction are hard on the organism. Knowing that, why venture into that realm of risk when it's accomplished by sprinting full-speed?Linear acceleration and sprints train agility, allowing us to reduce risky plyometrics. Click To Tweet

Real world example: when Michael Vick was in his prime, he achieved
maximal speeds at over 20 miles per hour (21.63 mph to be exact). When
he was achieving at least 95% of his best times in max velocity speed
training, submaximal velocities would be that much easier on him.
I believe that all team sport athletes need to tap into max velocity
(absolute speed). Forget the benefits it has regarding jumping and
change of direction, sprinting alone has a plethora of benefits,
including:

- If it's strength you seek, max velocity sprinting will drive up
  weights, because it is 5x ground reaction forces, 7x muscle-skeletal
  forces, and the organism is applying anywhere from 600

to 1,000lbs of
force with each stride.

- It’s the safest expression of fight or flight. Derek Hansen said,
“When a cheetah is chasing a springbok, does either animal pull a
hamstring?”
- Sprinting enhances the organism’s speed reserve. Simply put, as we
increase an athlete’s absolute speed, their submaximal velocity (or game
speed) raises as well. Sprinting builds endurance; endurance does not
build speed.
- Performing max velocity sprinting is a method of injury prevention.
We’ve all seen a breakaway run in American football where the player
blows his hamstring. This is because he did not do max velocity
sprinting in training or practice, which led to a neurological misstep
in his recruitment patterns.

Aside from the benefits of exposing our athletes to sprint work
thrice during the work week, there are also substantial costs. The most
glaring is the residual training effect of maximal speed. The benefits
gained from training at or above 95% of maximal speed last a measly two
days (depending on the athlete) as the residual training effects of this
biomotor ability are five days ± three days.

A Typical CNS Day

On a typical high CNS day, we use my friend Mike Robertson's R7 protocol:

- R1: Release
- R2: Reset
- Dynamic Warm-Up
- R3: Reactive
- R4: Readiness (Game Changers)
- R5: Resistance
- R6: Resiliency
- R7: Recovery

Release—For the release portion, we prescribe no more than three areas for the athletes to perform self-myofascial release. We stick to three because I believe if we prescribe more, we start to venture into the parasympathetic realm. As all of you know, we're trying to shift to sympathetic dominance on a high CNS day.

Resets—I admit we're not postural restoration wizards, nor are we great with functional movement screening when it comes to resets. However, my director of performance, Thomas Bowes, is a mobility guru on all things *Supple Leopard*. We know what we're proficient at, and our guys feel good, mobile and stable, and that's all that matters.

Dynamic Warm-Ups—After we've relieved some tension and moved the guys into more advantageous positions, we start our dynamic warm-up. Trust me, it's nothing earth shattering. Again, I may not be the smartest guy in the room; I just apply what the best have

done. We have great success with flowing yoga movement patterns as well
as Buddy Morris' high CNS warm-up.

Reactive—The optimal volume for a world-class sprinter is 600 meters of max velocity. Newsflash, I do not work with world-class sprinters, so we adjusted our sprinting volumes based on position to meet the demands of our athletes. Our reactive segment taps into 100-300 meters of sprint volume. Dan Pfaff says, "Acceleration is a skill." We believe that any skill needs to be addressed daily. The lineman will do at least 60 meters every single day, big skill will perform at least 100 meters every single day, and skill will be exposed to at least 150 meters every single day.The closer an athlete is to the football, the more he requires strength. Click To Tweet

This is where our program may be unique: a linemen's exposure to the
reactive segment is rather brief, but his time during our resistance
segment is much more extensive. This is because the closer an athlete is
to the football, the more he requires strength. The relationship
between strength and speed is inverse for our skill players. Their time
during the reactive portion will be far greater than time spent in the
weight room as their position demands more sprint volume with less of a
premium on strength and weights.

Readiness—The bridge from sprint work to the weight room is what we call *game changers*, or readiness. Joe Kenn calls it *halftime*. Vernacular does not matter, substance does. This portion consists of:

- Posterior chain—hinge, knee flexion, or spinal erector

- Posterior shoulder—abduction, adduction; downward, upward rotation; protraction, retraction, or elevation, depression
- Abdominals—anti-extension, flexion, rotation
- Neck

We've found this is highly effective at the beginning of the weights segment to ensure the proper muscles are firing before the "meat" of the lift. For example, hinging before a deadlift or performing a knee flexion variation before squatting. From a more practical standpoint, as the workout nears the end, what athlete is going to be fully engaged if we place this portion at the end?

Resistance—We love Coach Kenn's Tier System for resistance; this game is played head-to-toe, toe-to-head. I have yet to see a football player use only his upper body in the first half and his lower body in the second half. That alone provides enough rationale to address the total body each weight session. Our weights are extremely simple, efficient, and effective. We only use three exercises each workout—yes, only three. Volumes are adjusted based on position, but we make it known that we are concerned with speed, not weights. A typical session would look similar to this:

Resiliency—For us, resiliency means bringing the athletes through movements that are cyclical (running A's, ankle jumps)

because of the following:

- Typically all movements in the weight room are acyclical.
- Sport is cyclical. We want to bring them back to what they'll face on the field.
- Cyclical movements re-establish proper intermuscular coordination between the agonist and antagonist. As Charlie Francis once said, "It is not how fast you can contract a muscle, it is how quickly you can relax."

Recovery—Again, nothing ground breaking when it comes to recovery. We prescribe the guys elevate their feet and achieve a parasympathetic state, or "rest and digest" to help kick-start the recovery process. With early 20-year-olds, this is a popular time for Snapchat sharing and selfies—not a bad promotion for our facility. If it gets them to relax, I'll take it.

Low CNS Training

On the low days, we prescribe tempos based on position. Larger athletes (lineman) won't have the same volume that a cornerback performs. Our ranges will vary anywhere from 1000-2000 meters; at the beginning of the summer we focus more on extensive tempos and progress toward (slightly) more intensive and glycolytic tempos in July and August.

Along with the tempos, we prescribe upper body circuits that include medicine ball throws. This accomplishes a few things for the athletes:

- The nutrient rich blood, or the pump, will flush out any toxins and waste accumulated from the previous day's high CNS session. And let's be honest, it provides a psychological benefit as well. The guys feel good after a brief upper body workout.
- The low volume from the circuit will aid in recovery for the next day's high CNS session.
- If you pay attention to Charlie's system, you can have a high CNS component on a low CNS day as long as it's brief. With that in mind, we moved our medicine ball throws (with indirect transfer to sprinting based on the specific variation) to our low days a la Buddy Morris.

Conclusion

By the end of the summer, these young men have developed bonds that carry over into the season as they mention one another on Twitter, post pics of their new friends' success on Instagram, and are truly invested in each other's careers. It's one of the best parts of being in the private sector—the relationships.

My goal for this article is not to brag or boast, but to simply shed light on how we've found great success. And, speaking

candidly, I hope
this will encourage other coaches to be as open as I am so we may all
benefit and continue to learn from one another. I am not naïve to the
fact that, with this article, may come criticism. I have zero issue with
this, as there is no perfect program. The program I presented to you is
different from what we did in years past and will continue to change
and evolve because training, by nature, is incomplete. In fact, as Buddy
Morris once told me, “The best program is the one you’re *not*
on!” With that in mind, let us professionals continue to pay it forward,
grow, and ultimately help those we serve. This is truly what this
industry is all about.

SRAM Force eTap AXS unlocks 12 speed, Red-like performance for less

SRAM has clearly been busy. Less than two months after launching the new RED eTap AXS group to the world, they’re already onto the next. That of course being the new SRAM Force eTap AXS group. As is often the case, the group is extremely similar to RED, but with some key differences that will be significant to many consumers – particularly when it comes to price.

The newest member of the AXS (access) wireless family, SRAM Force eTap AXS is an electronic drivetrain with wireless shifting and options for either hydraulic disc or mechanical rim brakes. Other than a few very small details, Force is nearly identical in performance to the new RED AXS, with the main differences being materials, construction, and therefore weight. That means that the batteries are the same between the two groups (and older eTap groups as well) which is good news for teams or individuals with multiple bikes. Even the motors and chipsets are the same meaning the shift speed is identical between the two groups.
Ultimately, Force ends up about 300g heavier than RED, but it's also over $1000 less expensive which seems like a worthy trade off.

Force also has a completely different look which comes down to a difference in finishes. While forged aluminum parts can be polished to a beautiful shine, cast pieces can't be polished – which requires a coat of paint. Overall, the finish on Force is less sophisticated which is where SRAM was able to drop some of the price.

AXS App

Like RED, Force is able to take advantage of the AXS app and component integration system which allows you to monitor and customize

the performance of individual components. From checking each battery's power level to customizing your shift patterns, updating firmware, and more, Force is joining the way of the app-based world.

Also like RED, this is a *completely* new group, so other than the mechanical rim brakes, none of the new parts will be compatible with older SRAM components – except of course the new SRAM RED eTap AXS. These two groups are completely interchangeable – which is good news for those who were upset by SRAM's choice to integrate the power meter and chain ring on RED (but for a good reason, more on that below).

New gearing options just like RED… mostly

Following right along, gearing is also one of the biggest changes for SRAM Force. Yeah, they've gone to 12 speed in the rear, but as usual, it's about more than just adding another gear. The new X-Range gearing ends up wider on both ends while the added cog results in better gear progression. The addition of the 10t cog allows for an increase in gear range without an increase in overall size of the drivetrain package with SRAM pointing out that smaller drivetrains will be lighter, less costly, and simpler overall.

In terms of chainring options, Force will see 48/35 and 46/33t

double
combinations with the largest 50/37t combination only available in RED.
By moving to a 13t jump between chainrings, SRAM says this 20% reduction
in jump size results in better shift quality and better front shifting
overall.

To keep the overall range, the rear cassettes move to a 10t at the
small end, and up to 26, 28, or 33t as the largest cog with 260, 280,
and 330% range respectively. Even the smallest cassette at 10-26 offers a
wider range than an 11-28t. Moving the range from the front of the bike
to the rear should mean you can stay in that current front chainring
longer without having to shift. Obviously, if you're running 1x, wider
range in the rear is also a very good thing. The new cassettes also
offer more single-tooth jumps between cogs for better shift progression
when you're moving through the gears.

Cassette options

In terms of construction, the XG-1270 cassette uses a
Mini-cluster/Pin-Dome configuration with the first four cogs machined
from a steel billet, and the remainder of the cassette using their
Pin-Dome technology similar to their GX mountain bike cassettes. Looking
at the cassette in profile, Pin-Dome makes more sense as you

can see
the pins that hold all of the steel cogs together after the first four
cogs. The largest cog is aluminum which cuts down on weight and allows
for a secure connection between the cassette and the freehub body that
won’t dig into the new XDR drivers. The Mini-cluster/Pin-Dome cassette
ends up about 50g heavier than a comparable RED cassette.

XDR Required

The
addition of a 12 speed cassette meant that SRAM had to move to the XDR
freehub standard like RED, which is just like XD, just 1.85mm longer.
The added width is needed for the road since the largest cogs aren’t
nearly as big as those on a MTB cassette and can’t be dished over the
spokes. It also now matches up with the width of HG 11 speed freehub
bodies for road.

Importantly, you can still run cassettes meant for XD freehubs on XDR
freehubs with the addition of a 1.85mm spacer. You can’t however run
cassettes meant for XDR freehubs on XD freehubs. SRAM points out that
any Zipp wheels post April 2015 (176, 177, Super 9, and Cognition hubs)
are XDR ready meaning you can add an XDR freehub. Also, the SRAM 900
hubset has included an XDR drive for awhile now – before you

really
needed it.

One Rear Derailleur to Rule them All

When it comes to choosing your drivetrain, you can run any cassette
with any chainring combination all with the same rear derailleur – 1x or
2x. The new rear derailleur has been optimized to work with all of the
cassette options in either chainring configuration and includes larger
X-Sync pulleys with steel bearings, and the Orbit fluid damper in place
of a mechanical clutch. Note that there is no longer a Cage Lock
feature, but the Orbit damper works a bit differently and doesn’t really
affect wheel changes. Compared to RED, the Force rear derailleur uses
an aluminum derailleur cage instead of carbon, and steel hardware in
place of titanium and aluminum.

Front Derailleur is Still There, and Better Than Ever

Up front, the new Force front derailleur is very similar to RED, but
it swaps in a stamped steel derailleur cage for the CNC machined
aluminum cage on RED. Riders who are pushing larger tires will be happy
to hear that the derailleur has been streamlined to offer better tire
clearance at the rear as well.

Force gets a Flattop

Completing the gearing is the new FRC-D1 Flattop chain. This new
chain style is required for the group with SRAM stating that this chain
represents their biggest investment in tooling on their part when it
came to the new group. While it did get narrower to fit another cog,
there is more to the story as usual. The shape of the chain is purely
driven by their strength testing – the top of the chain never rides on a
gear, so it can be shaped differently to provide increased strength.

Proportionately, the chain is also narrower to the cog spacing than a
comparative 11 speed group which SRAM claims results in a quieter ride
overall. The FRC-D1 chain is interchangeable with the SRAM RED chain,
with the Force chain using solid pins as the only noticeable difference.
Note that Flattop chains require a specific Flattop PowerLock. Also
note that you definitely don’t want to run the new chain on 11 speed
cassettes (think putting your bike on a direct drive trainer with an 11
speed cassette mounted). Apparently, the new chain will destroy the
cassette, which is why companies like Wahoo are quickly working to add
XDR driver capabilities to their trainers.

Acronym Glossary

If you haven’t already picked it up from RED, the new SRAM Force group comes with its own lingo, so here’s the breakdown:

- **AXS** – Refers to the new digital family of wireless/electronic components that will all work together. Check our AXS overview story for everything you need to know on that. Basically, anything with the AXS logo can communicate with each other.
- **X-Range** – The name for this entire new gearing concept.
- **Orbit Chain Management** – A new fluid damper system that improves chain retention while still allowing for fast shifting.
- **AXS app** – Lets you customize the setup and integrate cross-category components, check riding time, battery level, how many times you’ve shifted, and when you’re due for service.
- **FlatTop** – The new, narrower chain that’s also stronger, quieter and more durable. It’s not backwards compatible (nor is any other component), everything here is designed as a system to maximize performance.

SRAM Force Cranks

With the launch of RED AXS, one of the things that seemed to catch *everybody’s*
attention was the decision to integrate the power meter into the
chainring. Yes, this means that when the chainring is dead, so is your
power meter. But SRAM stands by the design, and here’s why: SRAM RED is
meant to be the highest tier group for pro racers and consumers willing
to pay top dollar in exchange for the lightest system possible.

The integration of the power meter into the chainring meant that SRAM could add power to the same crankset at a weight penalty of just 36g. It also ends up with a more accurate power reading because you've eliminated one of the connections at the spider/chainring interface. SRAM also claims that the new drivetrain offers much longer chainring and component life than previous groups, with field testing showing a whopping 2-4x increase in longevity – so it should take you much longer to wear out those rings.

Is it wasteful to create a one-time use power meter/chainring? Sort of. But that all depends if you take advantage of the SRAM support program where they take your old power meter/chainring back and recycle it while providing a new one to you supposedly at or near the cost of standard chainrings. That integrated power meter/chainring is starting to sound a lot better all of a sudden.

Change your rings without changing your power meter

BUT… what if none of that matters and you simply want to run power on your SRAM AXS crank without an integrated power meter/chainring?

You’re in luck. The Force chainrings and DZero power meter are *not* one piece, and the Force DZero power meter spider is compatible with SRAM RED crank arms using the same 8 bolt direct mount interface. That means if you buy a SRAM RED AXS crank with power and wear out the chainrings super fast (or just want to upgrade a non-power model), you can purchase a Force power meter spider and the Force AXS asymmetric 107 BCD (same as RED 1x) chainrings to go with it. This also allows for mixing and matching 1x chainrings from the RED group or their aero 1x chainring for TT/Tri bikes.

SRAM Force cranks will be available with or without power meters in 1x or 2x configurations, both of which separate the chainring from the power meter.

Keeping in line with all of the new cranks from SRAM, the Force cranks will include a DUB spindle option, but they will still offer a GXP version for Trek’s BB90 frames, Pinarellos with Italian threaded BBs, and other frames that require it.

SRAM Force eTap AXS brake/shift levers

At the controls, Force eTap AXS is all about wireless shifting –

though not necessarily about hydraulic brakes. For those keeping the rim brakes alive, the Force eTap AXS group will be available in two versions; wireless shifting with mechanical rim brakes, or wireless shifting with hydraulic disc brakes.

The hydraulic option uses their Hydro HC platform specifically developed for eTap which means these brake calipers are different than those found on Force 1. The Force group uses a two piece caliper design with steel hardware, and the same brake pad as RED. Also, the Force brakes are flat mount only. Still running a post mount frame? The RED brakes are available in post mount as well as flat mount.

SRAM's new Centerline XR (CLX-R) rotors are a thing of beauty and are the same rotors that you'll find with SRAM Red. The rotors use an aluminum carrier and a steel CenterLine braking surface with rounded edges to be UCI-Compliant.

Rim Brakes Still Stop

The new Force group even includes a new mechanical rim brake if you are retrofitting an older bike or just don't want to switch to disc. The brakes use a dual pivot design that is updated to fit wider rims and tires (up to 28mm), and include Swissstop Platinum Flash Pro pads for carbon or BHP pads for aluminum rims.

Offering independent reach and contact point adjustment, the levers are nearly identical to RED other than they have just one Blip port rather than two on each shifter. You'll also find a composite lever blade rather than true carbon fiber which makes a negligible difference in weight. While the derailleurs get their own rechargeable batteries (which are the same as all eTap groups), the levers use a CR2032 coin cell battery housed in the bottom of the lever. Since these simply have to power a single button, the batteries should last quite a while. How long? We aim to find out (maybe) in a long term review.

The AXS app offers the same tuneability with this group, letting you switch the way the buttons and levers work the derailleurs, switch shift modes between regular, compensating and sequential, and even pair with a dropper seatpost or whatever else comes down the pipe.

Tri HRD

There's also a complete 1x TRI HRD group available with hydraulic aero levers for the hydraulic disc brakes and a new, smaller Blip Box.
SRAM states that running a 1x drivetrain with a 48t chainring and the 10-33 cassette would give you the same range as a 53/39 with 11-26. That happens to be the most prevalent Ironman gearing combo they

see on
11-speed bikes, only now you don’t have a front derailleur to shift, you
have a lighter drivetrain, and you still get six 1-tooth gear steps on
the cassette.

Availability, pricing, and actual weights

As much as we love knowing about new products ahead of time, it’s
much better when you can go out and buy a new product as soon as you
read about it. That’s the case with Force eTap AXS – groups are shipping
as of today and you’ll find more than 150 different bike models
equipped with the group hitting showroom floors. Initially, Force will
only be available as a complete groupset, but in a few months you’ll
have the ability to purchase individual parts.

In the U.S., complete groups will run from $2,078 to $2,678, well under the price of RED.

We got all of the loose parts we could find on the scale at Road Bike Connection, but because of all the options and things like the fact that the FD and RD didn’t include batteries, SRAM has provided the list of weights above. As mentioned, the group should work out to be about 300g more than SRAM RED eTap AXS.