# VERIZON UP TO SPEED LIVE August 2, 2021 12:00 PM ET

>> HELLO, HAPPY MONDAY.

WELCOME TO "UP TO SPEED" LIVE.

I'M STILL JAMMING FROM THE MUSIC.

I'M DIANA ALVEAR, NOT ANDY CHOY.

WE ARE SWITCHING THINGS UP THIS WEEK, BUT WE'RE STILL GOING TO START THE WEEK OFF RIGHT.

WE'VE GOT SOME GREAT LIVE GUESTS FOR YOU.

AS YOU ARE PROBABLY WELL AWARE, WE ARE THE MOST AWARDED NETWORK BY FAR, AND ROOT METRICS JUST ADDED MORE AWARDS TO OUR TOTAL, AND FOR GOOD REASON. SO WHILE MANY OF US WERE WORKING FROM HOME, OUR ENGINEERS NEVER STOPPED WORKING, MAKING OUR NETWORK THE BEST IT CAN BE.

SO WE ARE SO LUCKY TO HAVE ONE OF THEM WITH US LIVE TODAY.

I WANT TO BRING MIKE MCLAUGHLIN INTO THE CALL TO JOIN US AND TALK ABOUT WHAT HE DOES.

MIKE, THANKS SO MUCH FOR BEING WITH US.

TELL US A LITTLE BIT ABOUT YOUR DAY-TO-DAY.

>>MIKE MCLAUGHLIN: THANKS FOR HAVING ME. YEAH.

SO DAY TO DAY, WE GO OUT AND WE BUILD THE BEST NETWORK THAT WE CAN. WE -- SO MYSELF, AND THE TEAM HERE, WE BUILD CELL SITES, WIRELESS CELL SITES, WE BUILD MILLIMETER WAIVE NODES, SMALL CELLS, IN BUILDINGS, BUILD OUT THE NETWORK INFRASTRUCTURE FOR VENUES.

>>DIANA ALVEAR: THAT'S FANTASTIC.

YOU KNOW, WHEN I FIRST JOINED VERIZON, I SET OUT TO DO MY OWN LITTLE ENGINEERING AND 5G BUILD-OUT 101 EDUCATION, AND I WAS JUST BLOWN AWAY AT HOW MUCH IT TAKES TO BUILD OUT EACH AND EVERY 5G CITY.

SO CAN YOU TELL ME A LITTLE BIT ABOUT WHAT ATTRACTED YOU TO BECOMING AN ENGINEER HERE AT VERIZON AND BASICALLY CREATING THE FUTURE OF TECHNOLOGY?

>>MIKE MCLAUGHLIN: YEAH.

I THINK SO.

AT THE CORE OF WHAT ENGINEERING IS, IT REALLY IS SOLVING THE WORLD'S TOUGHEST PROBLEMS.

AND WITH ENGINEERING, THERE'S NEVER -- THERE GENERALLY ISN'T ONE PATH TO GO.

THERE GENERALLY ISN'T ONE SOLUTION TO THE ANSWER, AND WHAT REALLY DROVE ME TO VERIZON IS REALLY THE DIVERSE BACKGROUND OF PEOPLE, OF TALENT, THE INCLUSION THAT VERIZON BRINGS TO REALLY ALL OF ITS ENGINEERS.

WE COME TOGETHER AND BAND TOGETHER AND REALLY COME UP WITH CREATIVE SOLUTIONS TO DELIVER ON THE BEST NETWORK, AND THAT'S WHAT BROUGHT ME TO VERIZON AND KEEPS ME INTERESTED AND PURSUING A CAREER HERE.

>>DIANA ALVEAR: SO I'M GOING TO ASK YOU SOMETHING THAT I ALWAYS LIKE TO ASK PEOPLE THAT KNOW 5G SO WELL.

WHEN YOU'RE EXPLAINING WHAT 5G IS AND WHY IT'S GOING TO TRANSFORM EVERYTHING, HOW DO YOU EXPLAIN IT TO YOUR FRIENDS AND FAMILY, PEOPLE THAT MAY NOT NECESSARILY HAVE AN ENGINEERING BACKGROUND?

>>MIKE MCLAUGHLIN: YEAH, SO THAT'S A GREAT QUESTION. IT'S FUNNY.

SO EVERY TIME I TALK TO FRIENDS OR FAMILY AND SAY I WORK FOR VERIZON, THE FIRST THING THEY ASK ME ABOUT EVERY TIME, WITHOUT QUESTION, IS 5G.

WHAT IS 5G.

AND REALLY, WHAT IT IS, IT BRINGS US LOWER LATENCY, IT BRINGS US LARGER BANDWIDTH AND ENABLES US TO DELIVER MORE DATA FASTER TO THE USER. YOU KNOW, APPLICATIONS, WHEN WE LOOKED AT -- WE USED TO REALLY ONLY BE ABLE TO RUN IN OUR HOME NETWORKS, CONNECTED TO WIRED NETWORKS, RIGHT, WHETHER IT BE FIBER OR COAX NETWORKS.

WE CAN NOW DELIVER THAT EXPERIENCE WIRELESSLY.

SO, YOU KNOW, BEING ABLE TO DOWNLOAD A MOVIE QUICKLY, YOU KNOW, IF YOU'VE GOT KIDS AND YOU'RE ON THE GO, OR PLAYING GAMES WIRELESSLY, YOU CAN DO ALL OF THAT OVER OUR WIRELESS NETWORK, AND THAT'S WHAT I TELL PEOPLE. AND THERE'S A LOT OF USE CASES THAT HAVEN'T EVEN BEEN DEVELOPED YET AND AREN'T EVEN OUT THERE IN THE MARKET, AND THAT'S WHAT'S MOST EXCITING ABOUT 5G.

>>DIANA ALVEAR: YEAH, YOU TOTALLY LIT UP THERE TALKING ABOUT 5G, LIT UP. IS THAT AN ENGINEERING JOKE?

I'M JUST KIDDING.

SO NOW WE'VE GOT THE WHOLE C-BAND SPECTRUM THING HAPPENING. TELL ME WHAT EXCITES YOU ABOUT C BAND.

>>MIKE MCLAUGHLIN: YEAH.

SO WE STARTED OFF, IF YOU LOOK AT OUR ULTRA WIDE BAND DEPLOYMENT, WE REALLY STARTED OFF IN SMALLER COVERAGE AREAS IN DENSE FOOTPRINT.

WHEN WE START TO INTRODUCE C BAND, I MEAN, THAT REALLY GIVES US A BROAD COVERAGE LAYER THROUGH ULTRA WIDE BAND, MEANING BEFORE WHEN WE WERE TARGETING THESE SMALL POCKETED AREAS WHERE YOU HAVE A LOT OF DENSE TRAFFIC, NOW YOU CAN REACH MORE OF THE USERS AND THE CONSUMER BASE ACROSS THE ENTIRE COUNTRY, WHICH IS SOMETHING THAT WE HAVEN'T BEEN ABLE TO DO IN OUR ULTRA WIDE BAND NETWORK.

SO REALLY WHAT C BAND GIVES US IS ANOTHER TOOL IN THE TOOL BOX TO DELIVER AN AWESOME USER EXPERIENCE FOR EVERYBODY, NOT JUST IN THESE DENSE URBAN AREAS.

>>DIANA ALVEAR: I LOVE THAT.

SO WHEN YOU'RE NOT TALKING ABOUT 5G, WHEN YOU'RE NOT BUILDING OUT ALL THESE AMAZING NETWORKS, WHAT DO YOU DO IN YOUR SPARE TIME? WHAT DO YOU FIND FUN?

>>MIKE MCLAUGHLIN: I SPEND A LOT OF TIME WITH THE FAMILY.
IT'S FUNNY, THE 5G EXPERIENCE HAS ENCROACHED A LITTLE BIT IN MY LIFE BECAUSE
AS I'M DRIVING AROUND WITH MY WIFE AND MY KIDS, WE'RE LOOKING AT -- I'M
LOOKING AT TELEPHONE POLES, I'M LOOKING AT -- SAID HEY, YOU KNOW, LOOK
AT THAT, YOU KNOW, WE COULD PUT SOMETHING ON THAT STRUCTURE THERE, BUT
I REALLY LIKE SPENDING TIME WITH THEM AT THE BEACH, SPEND A LOT OF TIME
OUTSIDE, AND BUILDING THINGS, AND JUST SPENDING TIME WITH THE FAMILY.
SO THAT'S WHAT I LIKE TO DO IN MY PERSONAL TIME.

>>DIANA ALVEAR: OH, THAT'S SO MUCH FUN.

WELL, THANK YOU SO MUCH, MIKE, FOR TELLING US A LITTLE BIT ABOUT YOURSELF, ABOUT YOUR WIFE AND YOUR KIDS.

MAYBE YOU'VE GOT SOME FUTURE ENGINEERS IN THERE.

I KNOW YOU'VE PROBABLY GOT LEGO KIDS FOR THEM TO PLAY WITH, RIGHT?

>>MIKE MCLAUGHLIN: YEAH.

SO REAL QUICK, FUNNY STORY.

I'M WALKING WITH MY DAUGHTER THE OTHER DAY, AND SHE'S THREE YEARS OLD, AND SHE'S TURNING AROUND, SHE'S PLAYING WITH HER BUCKLE ON HER SEAT, AND I SAID, YOU'RE GOING TO TIP OVER, AND SHE LOOKED AT ME, AND SHE SAID, I'M NOT GOING TO TIP OVER.

THE BOTTOM OF THE CARRIAGE IS TOO HEAVY.

AND I SAID, I GOT NOTHING TO TELL YOU, I GUESS KEEP DOING WHAT YOU'RE DOING, SO I THINK I MIGHT HAVE SOME FUTURE ENGINEERS.

>>DIANA ALVEAR: THE MCLAUGHLIN GENES ARE STRONG!

I'M GLAD TO HEAR THAT!

WELL, THANK YOU SO MUCH FOR ALL THE HARD WORK THAT YOU PUT IN EVERY DAY.

THANK YOU TO ALL OF YOUR FELLOW ENGINEERS, MIKE.

WE'RE SO LUCKY TO HAVE ALL OF YOU ON THE V-TEAM.

AND THANKS FOR TALKING TO ME TODAY!

>>MIKE MCLAUGHLIN: THANK YOU.

AND THANK YOU EVERYBODY ON THE TEAM.

EVERYBODY, THIS REALLY TAKES A TEAM, SO I APPRECIATE IT.

>>DIANA ALVEAR: AWESOME.

HAVE A GOOD ONE.

ALL RIGHT.

SO WE'RE GOING TO STICK WITH TALKING ABOUT OUR NETWORK.

WE'RE GOING TO DIVE RIGHT IN TO WHAT'S HAPPENING WITH OUR C BAND SPECTRUM. AND WE HAVE OUR VERY OWN ANDY CAUGHT UP WITH HEIDI HEMMER, SENIOR VICE PRESIDENT OF ENGINEERING, TO LEARN MORE.

>> WE WANT TO TAKE SOME TIME NOW TO DIG DEEP INTO THE TOPIC OF OUR NETWORK SUPERIORITY.

WE'RE TALKING SPECTRUM.

WE'RE TALKING ABOUT WHY THERE'S \$53 BILLION INVESTMENT SETS OUR NETWORK APART FROM THE COMPETITION.

HELPING US DO THAT, HEIDI HEMMER IS HERE FROM OUR NETWORK TEAM.

HEIDI LEADS THE RADIO ACCESS NETWORK ENGINEERING TEAMS AND THE CENTRAL ENGINEERING TEAMS.

IN HEIDI'S WORLD, IT'S ALL ABOUT DEVELOPING ENGINEERING AND GROWING THE BEST WIRELESS NETWORK.

THANKS FOR JOINING US, HEIDI.

>> THANKS, ANDY.

APPRECIATE YOU HAVING ME.

#### >> YEAH.

SO LET'S GET DOWN TO THE BASICS.

WE'VE TALKED A LOT ABOUT SPECTRUM FOR A WHILE NOW, BUT I WANT TO MAKE SURE EVERYONE ON OUR TEAM UNDERSTANDS WHAT WE'RE TALKING ABOUT.

WHAT DOES IT MEAN TO BUILD SPECTRUM?

WHAT'S THE BEST WAY TO DESCRIBE THIS TO SAY OUR NON TECHNOLOGISTS.

## >> YEAH.

SO RECENTLY WE WERE AWARDED AS PART OF AN AUCTION -- AS YOU SAID, WE SPENT \$53 BILLION FOR WHAT IS KNOWN AS C BAND SPECTRUM OR MID BAND SPECTRUM. AND WHAT THAT MEANS IS THE GOVERNMENT REALLY GAVE US PERMISSION TO GO OUT AND BUILD A ROAD.

THEY SAID, HEY, HERE'S THE AREA THAT YOU'RE ALLOWED TO BUILD IN, BUT NOW WE HAVE TO GO BUILD IT AND SO WHAT WE NEED TO DO IS GRADE THAT ROAD, PAVE THAT ROAD, LINE THAT ROAD, SO THAT WHEN -- AND ACTUALLY EVEN PUT SPECIAL SENSORS IN THE CARS, AND I'LL EXPLAIN THAT IN A BIT, TO ALLOW THEM ON TO THE ROAD.

SO THAT'S WHAT WE'RE DOING RIGHT NOW SO THAT OUR CUSTOMERS CAN ACCESS THAT SPECTRUM THAT WE'VE JUST BEEN AWARDED.

SO WE ARE OUT TOUCHING IN THE 46 GEOGRAPHIC AREAS WHERE WE HAVE THE RIGHTS TO THE SPECTRUM THIS YEAR, WE ARE RETROFITTING OR MODIFYING EVERY ONE OF THE CELL SITES IN THAT AREA TO INCLUDE RADIOS AND EQUIPMENT THAT CAN ACCESS

THE SPECTRUM THAT WE'VE BEEN GIVEN, AND THEN WE'RE ALSO PUTTING SOFTWARE IN TO THE DEVICES, AND THAT'S SORT OF THE SPECIAL TOLL TAGS THAT OUR CARS NEED TO GET ON THAT HIGHWAY AND BE ABLE TO PUT TRAFFIC ON THAT HIGHWAY.

- >> I LOVE THAT --
- >> AND IT'S A REALLY WIDE HIGHWAY, ANDY, AND IT'S A REALLY FAST HIGHWAY.
- >> I LOVE THAT HIGHWAY ANALOGY.
- IT'S SO EASY TO UNDERSTAND, AND AS KYLE SAID, WE HAVE STEWARDS OF THIS NETWORK, AND CERTAINLY WE'LL TAKE CARE OF THAT ROAD AS WE CONTINUE TO BUILD OUT.
- SO HEIDI, CUSTOMERS HAVE SEEN AND HEART A LOT OF TALK RECENTLY, DIFFERENT PROVIDERS TALKING ABOUT WHO'S THE BEST, WHO'S THE FASTEST, AND, QUITE FRANKLY, IT CAN BE A LOT FOR ANY CUSTOMER TO DECIPHER WHAT'S JUST TALK, WHAT IT MEANS TO BUILD OUT THE NETWORK THE RIGHT WAY.
- I WANTED TO GET YOUR TAKE ON HOW VERIZON IS DOING THE LATTER.

HOW ARE WE DIFFERENTIATING FROM OUR COMPETITORS?

#### >> YEAH.

AND I THINK IT'S CONFUSING FOR COMPETITORS, BECAUSE 5G CAN MEAN A COUPLE DIFFERENT THINGS.

SO YOU MIGHT REMEMBER BACK IN APRIL OF 2019, WE WERE FIRST IN THE WORLD FOR MILLIMETER -- WE WERE FIRST IN THE WORLD WITH 5G.

SO WE BUILT OUT MILLIMETER WAVE, WHICH IS A HIGH BAND SPECTRUM, AND THAT REALLY GAVE US A GAME-CHANGING EXPERIENCE FOR OUR CUSTOMERS.

IT'S INCREDIBLY FAST.

IT HAS A TON OF CAPACITY.

IT ALLOWS US TO PROVIDE EXPERIENCES THAT WE CAN'T ON 4G, LIKE MOBILE GAMING, FOR EXAMPLE.

THE PROBLEM, OR THE CHALLENGE WITH THAT HIGH BAND IS THAT IT REQUIRES A HUGE DENSITY OF SMALL CELLS.

IT DOESN'T TRAVEL VERY FAR, AND SO WE'VE BUILT IT OUT IN AREAS WHERE WE NEED TO HAVE THAT EXPERIENCE FOR OUR CUSTOMERS, WHETHER THEY'RE

ENTERPRISES OR IN BUILDINGS AND USE LARGE GATHERING PLACES, THAT TYPE OF THING.

AND THEN IN OCTOBER OF 2020, WE BUILT OUR NATIONWIDE NETWORK, AND THAT HAS FAR REACH, BUT IT REALLY IS THE SAME SPECTRUM THAT WE USE FOR 4G. SO TODAY, IN THE EARLY PORTIONS OF THIS EVOLUTION, IT FEELS VERY MUCH LIKE 4G.

THE SPEEDS ARE ABOUT THE SAME, AND THE CAPACITY.

T-MOBILE REALLY HAS DONE A LOT TO BUILD OUT IN THAT SPECTRUM, SO THEY'VE GOT A MAP THAT SHOWS A LOT OF COVERAGE, BUT THEIR 5G IS OFTEN SLOWER THAN OUR 4G.

SO NOW THE NEXT REALLY CRITICAL PIECE HERE IS TO GET THAT MID BAND OUT THERE, WHICH WILL BE THE SWEET SPOT IN BETWEEN THE HIGH BAND AND THE LOW BAND, AND WE'RE BUILDING THAT IN METRO AREAS FIRST TO SORT OF FILL IN THE SPACES WHERE MILLIMETER WAVE DOESN'T REACH, AND TO PROVIDE ADDITIONAL CAPACITY AND SPEED FOR BOTH MOBILITY AND HOME.

## >> YEAH.

DEFINITELY TAKES SOME FORWARD-THINKING TO UNDERSTAND.

I MEAN, WHEN YOU LOOK AT JUST HOW GREAT OUR 4G NETWORK IS, WE ARE PLANTING THE SEEDS, AND WE'RE MAKING SURE THAT WHEN THAT MID BAND COMES, THAT WE ARE JUST AS SUPERIOR.

THAT'S AWESOME, HEIDI.

FINALLY, WHAT IS --

>> AND A GREAT POINT, ANDY, IF I MAY, IS THIS IS BUILT ON A ROCK SOLID 4G NETWORK, AND SO OUR CUSTOMERS ARE EXPERIENCING BOTH OUR 5G AND OUR 4G NETWORK WHEN THEY'RE ON OUR DEVICES.

>> ABSOLUTELY.

AND SO HEIDI, AS WE CONCLUDE OUR CONVERSATION HERE, WHAT'S THE BEST WAY ALL OF US CAN SHARE WITH OUR FAMILY AND FRIENDS THIS COMPETITIVE ADVANTAGE THAT WE'VE BEEN TALKING ABOUT?

>> SO I LIKE TO TELL EVERYBODY THAT NOW WE HAVE ALL THE ASSETS THAT WE NEED.

WE HAVE SPECTRUM IN LOW BAND, MID BAND AND HIGH BAND, BUT WHAT MAKES VERIZON UNIQUE IS WE HAVE THE BEST ENGINEERING TEAM IN THE WORLD AND WE CAN OUT-EXECUTE ANYONE.

JUST BECAUSE YOU HAVE RIGHTS TO SPECTRUM, DOESN'T MEAN YOU HAVE THE BEST NETWORK.

REALLY, IT'S ABOUT HOW WE DESIGN, ENGINEER AND BUILD IT THAT MAKES THE DIFFERENCE FOR OUR CUSTOMERS AND THE EXPERIENCE THEY HAVE ON OUR NETWORK.

>> HEIDI HEMMER, THANK YOU VERY MUCH FOR YOUR TIME AND YOUR KNOWLEDGE, AND WE'RE LOOKING FORWARD TO CELEBRATING WITH YOU AS WE CONTINUE TO BUILD THE BEST NETWORK AND SAY THAT THERE REALLY IS ONLY ONE BEST NETWORK. THANKS SO MUCH.

>> ABSOLUTELY.

WE'RE SUPER PROUD.

THANKS SO MUCH, ANDY.

>> THANK YOU, ANDY AND HEIDI.

AND FINALLY, HEIDI, I LOVE THAT SWAGGER THAT YOU WERE SHOWING THERE TALKING ABOUT WHY OUR NETWORK IS SO IMPRESSIVE.

SO WE LEARNED SO MUCH TODAY, RIGHT?

I MEAN, NOTHING BEATS OUR NETWORK.

SO WE'RE GOING TO SWEETEN THE POT WHEN IT COMES TO FINALLY MAKING THAT SWITCH TO VERIZON.

OKAY?

IF YOU'VE BEEN SITTING AROUND THE DINNER TABLE, LIKE HANS ALWAYS SAYS, YOU MAY REMEMBER BACK IN APRIL WE LAUNCHED OUR UNPRECEDENTED BROKEN PHONE TRADE-IN OFFER.

OKAY.

AT THAT DINNER TABLE, YOU'RE GOING TO SAY, IT IS BACK AND BETTER THAN EVER. NOW, NEW CUSTOMERS AND EXISTING CUSTOMERS ADDING A NEW SMARTPHONE LINE CAN GET UP TO \$800 TOWARDS OUR BEST 5G PHONES WITH A SELECT TRADE-IN AND SELECT UNLIMITED PLANS.

BUT WAIT!

THERE'S MORE!

NEW CUSTOMERS CAN ALSO GET UP TO \$500 TO HELP COVER THEIR COST TO SWITCH WHEN THEY HAVE TO BREAK UP WITH THEIR X.

SO THERE'S NEVER BEEN A BETTER TIME TO SWITCH TO VERIZON.

ALL RIGHT.

SO HOW ABOUT THAT FOR A MONDAY.

THAT'S GOING TO DO IT FOR US TODAY.

I HOPE THAT YOU HAVE A WONDERFUL AND SAFE WEEK.

WE'RE GOING TO HAVE A BUSY WEEK.

LOTS OF GOOD STUFF PLANNED.

I AM DIANA ALVEAR.

TOMORROW, YOU'RE GOING TO SEE AN AMAZING PROFILE OF A V-TEAMER DOING SO MUCH GOOD.

I HAPPEN TO BE A LITTLE BIASED.

HE'S ONE OF MY MENTEES, AND I CARE FOR HIM VERY MUCH.

SO WITH THAT I'M GOING TO LEAVE YOU UNTIL NEXT TIME.

YOU'RE UP TO SPEED.