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Section 1  
Introduction

Located in Kansas City, Missouri, Kauffmann Stadium is home to the Kansas City Royals of Major League Baseball and features one of the most recognizable video boards in all of professional sports.

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First built in 2008, the now-iconic centerfield board features a crown atop the structure's highest point and has a unique vertical layout.

In the spring of 2021, the board received a significant upgrade as the panels were replaced to become HDR-capable.

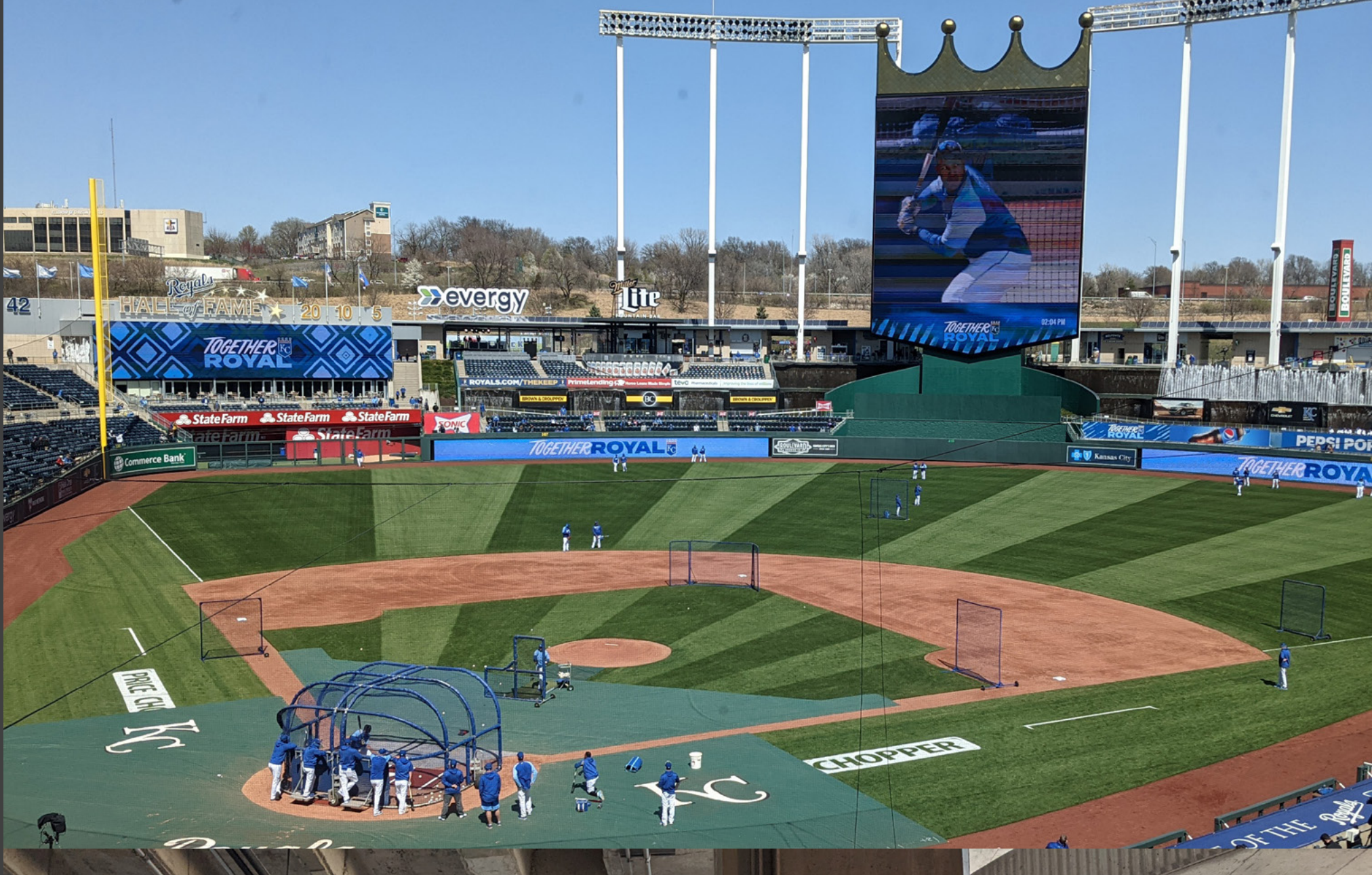
In addition to the crown-adorned centerfield board, the Royals upgraded other LED displays throughout the stadium, including the Hall of Fame display in left centerfield and two ribbon boards which occupy the outfield wall.



Section 2  
The Challenge

With more than 5 million LED pixels contained within the all-new displays, the Royals production team, also known as CrownVision, needed a solution to drive the HDR-capable screens with pixel-accurate content.

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Section 3  
The Solution

To handle the complexity of an HDR CrownVision's goal was to find a way to drive pixel-accurate content to the new HDR LED boards throughout the venue while simultaneously displaying data in real-time on the screens. To accomplish this, the CrownVision group needed a solution with a tightly integrated workflow between the production control room and the LED display control room technology.

Having followed the blueprint laid out by other major league baseball teams such as the Colorado Rockies, San Diego Padres, and Cincinnati Reds, the CrownVision group turned to the Ross Sports & Live Events team for help. The Ross team worked with CrownVision to draw up plans for an end-to-end solution that would unify the production across the entire ballpark.



The full slate of Ross products at Kauffman Stadium includes:

- **Acuity Production Switcher** with 5 M/E
- **Carbonite Ultra** processor to composite the vertical layout of the centerfield board
- **XPression Tessera** for LED display control across the centerfield board, the new Hall of Fame board, outfield ribbons, and 1st and 3rd base fascia
- Three outputs of **XPression** real-time motion graphics for traditional character generation
- **Kiva+** live presentation video server
- **DashBoard** for full venue control
- Brushback for instant statistical data integration into 2D and 3D graphical representations
- **Inception** for social media integration
- **openGear** frames for HDR signal conversion



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Section 4  
The Impact

By unifying the Production Control Room with a Display Control solution, the Royals were able to achieve a single workflow for generating and displaying content to their new screens in HDR. With the addition of custom DashBoard panels, control of the entire venue can now be achieved at the push of a button.achieved at the push of a button.

In addition to providing the technology to support an HDR workflow, Ross Video's Creative Services Department, Rocket Surgery, was charged with creating the overall design of all the stadium's displays and the supporting workflow.

As part of the design efforts, Rocket Surgery developed Brushback to support the Royals' vision of bringing enhanced statistical information to their in-venue experience.

Brushback is an advanced statistical parser utilizing Major League Baseball's Stats API, allowing the team to recall Statcast metrics of any play during the game moments after it had occurred. It also provides a host of new seasonal statistics not previously available by any other supplier.

Backed by this new data, Rocket Surgery then developed a visually stunning way to dynamically relay these environmental stories within an interactive 3D field environment incorporated into the overall design of the display.



To learn more about how Ross Video is creating unforgettable game-day experiences for sports fans while streamlining operations for in-house production teams, [explore our Sports Venue Solutions page](#) or contact [Shawn Hutcheson](#), Sports & Live Events Business Development Manager for North America.

