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CBS Enhances Tradition at Masters

Network achieves 'full HD' at every hole

by Ken Freed, April 2, 2007

AUGUSTA, GA.

When CBS Sports presents the 71st U.S. Masters Golf Tournament April 5-8, viewers for the first time ever will have 100 percent HD video coverage of the course.

"The Masters may have the most complete HD hard camera coverage of any event in sports," said Ken Aagaard, senior vice president of operations for CBS Sports. "We've added four more hard cameras this year, so now we have full coverage of every hole at Augusta National Golf Club."

In previous years, CBS Sports had covered four difficult blind spots with handheld cameras, he said, "but now we have HD cameras on 100 percent of the course."



Phil Mickelson, 2006 Masters golf champion, tees off on the 10th hole during first round play in the 2006 Masters golf tournament at the Augusta National Country Club in Augusta, GA, April 6, 2006.

Aagaard added, "The Masters in HD is breathtaking. HD lets us see all the contours of the course, and the greens are spectacular in HD. Once you've seen The Masters in HD, you'll never want to watch it any other way."

HARD WIRED

CBS Sports began broadcasting the Masters with a mix of HD and SD in 2001 and 2002. Since 2003, the network has covered the event only in HD.

Of 58 total HD cameras on the course in 2007, Aagaard said, 38 will be hard wired into fixed positions on the 18-hole course. The remainder will be handheld cameras plus a few mounted on mobile jibs and several assigned to a studio for special reports on Thursday and Friday nights, a first this year.

CBS Sports will bring in four trucks for the Masters. The front nine holes are being covered by the NEP SS24HD Supershooter, comprised of two 53-foot double expando trailers.

NEP Broadcasting Vice President Errol Foremaster said the SS24 features "one of the largest control rooms on the road today" with 138 color monitors, a Sony MVS 8000 switcher with internal DVE and Accom HD DVEous, EVS HD Live Slo Motion Disc Recorders, and up to eight VTRs recording video from Sony HDC/900/950 cameras with Canon 100:1 lenses. The SS24 also carries a Calrec Alpha 5.1 Digital Audio Console.

Covering the back nine is the D12 truck from National Mobile Television (NMT). "The D12 was built to our specs with Sony cameras and switchers," said Aagaard.

Comprised of three 53-foot double expandos, the D12 features advanced characteristics from the D11, which debuted at NAB last year.

"There are many bells and whistles designed into the truck," said John Kempf, vice president of engineering for NMT.

The D12 is equipped with a Sony MVS 8000 HD switcher, Calrec Alpha Digital and Sigma Audio Consoles, Sony HDC-1000 Fiber HD Cameras, 101x1 Lens, EVS LSM XT HD, EVS Spot Box, DVW-A500, Sony SRW 5500, Panasonic DVCPRO 1700, Sony DME 8000 and 9000, and Vizrt HD graphics.

Two other trucks support the entire production, said Aagaard. The 53-foot triple expando Complex Platinum serves as a control room with extra support space. It features Sony HDC-1500 cameras with Fujinon and Canon lenses, according to spokesman Scott West for Complex in Northfield, Ill.

In the control room is a Grass Valley Kalypso switcher, Accom DVEous MX, EVS HD LSM XT VDR's, EVS XFile Digital Archive Station, three Sony HDW-M2000 HDCAM recorders, two Sony DVW-A500 Digital Betacam recorders, six DNF ST-300 slow-motion recorders, and a Calrec Alpha 100 digital audio console with full surround mixing. The Platinum's B-Unit with lift gate offers an expanded graphics area.

The fourth 53-foot single-width HD truck is the F&F Productions' GTX-12 with a dozen Ikegami HDK 79EC cameras and a Panasonic HD-ENG cam, both mounting Fujinon lenses, plus two HDL-40S IFE Robotics Cameras, and Hitachi CCD clock cameras.

The GTX-12 control room has a Grass Valley Kalypso switcher, DVEous MX, EVS HD Spot Box XT, Chyron Duet LEX system, and a Yamaha PM 1D digital audio board, according to Bill McKechney, vice president of engineering for F&F Productions in Clearwater, Fla.

Except for the Ikegami cameras from the GTX-12, "we're shooting everything with the Sony cameras," Aagaard said. "While we are not mixing the cameras on the same hole, both deliver quality images, so we could mix them and the viewer would never know."

Viewers also will never see a camera cable on the course, he said. "All the cables are buried underground, including where we have the four new hard cameras, and everything is fiber."

Telecast Fiber Systems provides the fiber to shoot the Masters, according to Joe Commare, vice president of marketing and international sales for the Worcester, Mass.-based company.

"Since all the fiber for CBS Sports at Augusta National is already installed, all they have to do at each camera position is fit the camera operator with a harness belt that has a stinger cable going to an optical beam connector on the ground inside a tupperware container," Commare said. "That stinger cable can be up to 100 feet long, so they can move cameras around on the greens or tees. The camera is connected to the SHED [SMPTE Hybrid Elimination Device], which links it to a production truck."

On some courses, Commare said, CBS is using a new wireless SHED, "but because Augusta has so many hills and trees, line-of sight is impossible so our Telecast fiber system is their only option."

Aagaard noted that CBS Sports has been working with Augusta National for 50 years, "so we've evolved coverage of the Masters in close cooperation with them, such as where to place the camera platforms. It's an ongoing process."

Despite the advanced digital gear, Aagaard said CBS and Augusta agreed to keep coverage fairly traditional.

"We have instant playback with EVS and slow-motion capabilities, but there's nothing fancy in our video presentation," he said. "We're not using any gimmicks like cameras inside the cup or digitally tracking the ball in flight. We never do that at the Masters."

Within the traditions of the Masters, constant improvement in coverage is the goal, he said. "The Masters is one of the most prestigious events in all of sports, and we pay a lot of attention to it here at CBS Sports."

A new tradition for the Masters is its presence online.

"Once per hour before broadcast coverage starts each day, we'll stream broadcasts on the official Web site, Masters.org, and on CBS.Sportsline.com," Aagaard said.

During play, starting at 10:30 a.m. (EST), CBS Sports will maintain a live stream from the 11th, 12th and 13th holes, also known as "Amen Corner." The term came from an old jazz recording "Shouting at Amen Corner," and its usage in Augusta was coined in 1958 by Sports Illustrated writer Herbert Warren to describe the first major victory by Arnold Palmer.

Like last year, CBS Sports will cover Amen Corner with a separate announcer and special graphics.

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