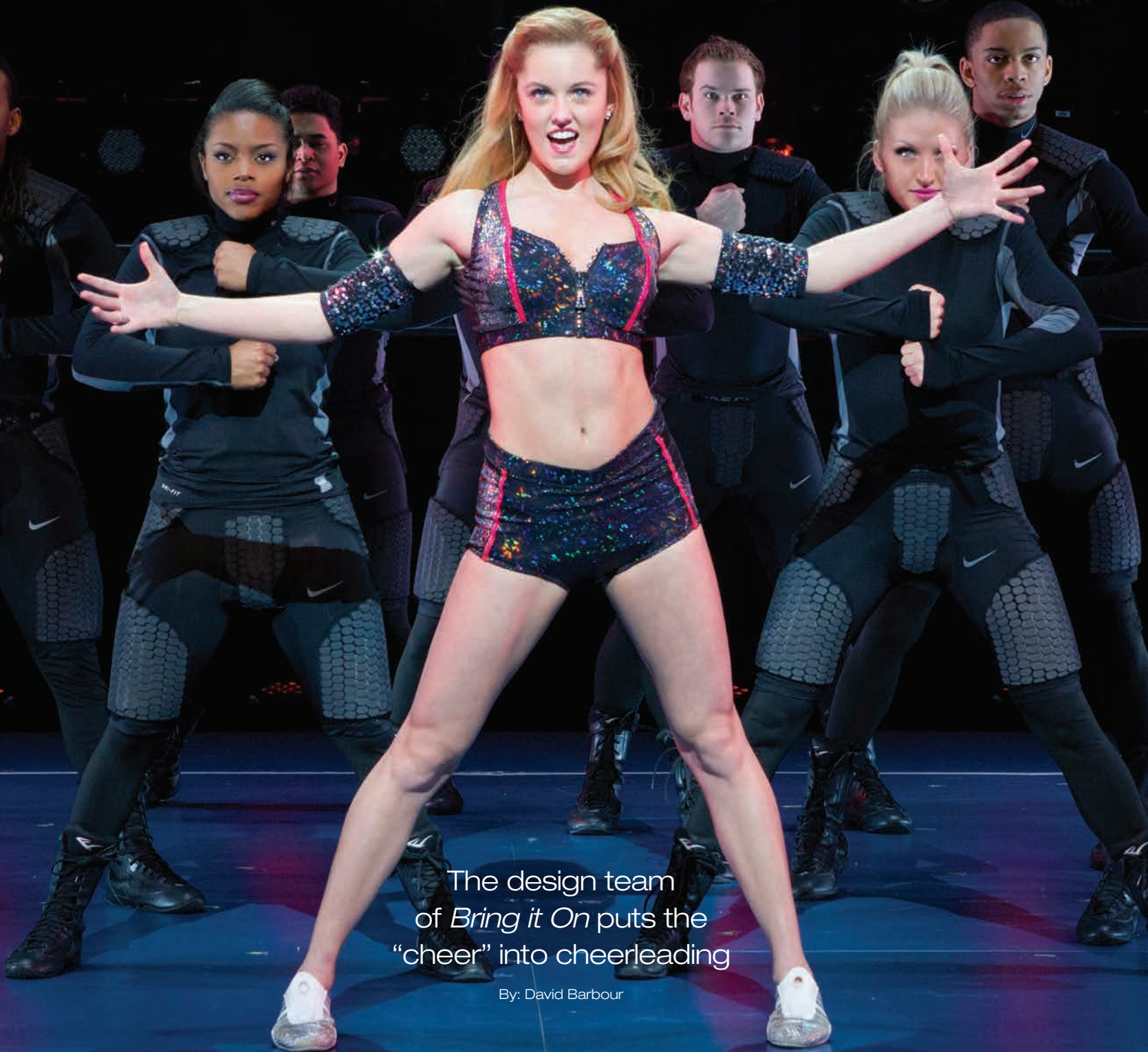


# PEP RALLY



The design team  
of *Bring it On* puts the  
“cheer” into cheerleading

By: David Barbour



Above: Danielle makes an entrance with her posse. Note the towers of LED units behind them.

**E**ven as a legion of new Broadway musicals jousts for attention during the typical end-of-season rush, one show has chosen to see America first. *Bring It On*, which is suggested, very loosely, by the 2000 Kirsten Dunst film about competitive cheerleading, has been on the road since last fall. And why not? It has everything you need for commercial success—name recognition, a wisecracking book, a score that crossbreeds Broadway and hip-hop, and astonishing, cheer-influenced choreography that calls up ovations in mid-number. Put together by a top Broadway team, the production has picked up some peppy reviews—along with a Los Angeles Drama Critics Circle award for director/choreographer Andy Blankenbuehler. *Lighting&Sound America* attended a performance at the Dallas Music Hall in February, where the house was jammed with enthusiastic young people.

Jeff Whitty's book, which is full of snappy comebacks and *All About Eve*-style skullduggery, focuses on Campbell, the captain of a cheerleading team that, in competition, regularly annihilates all comers. A cheer-

leader's cheerleader, Campbell happily dictates to her fellow teammates making the most of her elevated social status, the perks of which include a romance with the school's star athlete. It all proves to be a house of cards, however, when, thanks to a city redistricting plan, she gets transferred from all-white suburban Truman High to the ethnically mixed inner-city Jackson High. Convinced that she is the victim of a plot—keep your eye on Eva, her most "devoted" acolyte—Campbell struggles to put together a new cheerleading squad out of Jackson's hugely talented, if undisciplined, dance crew. To do so, she has to face off against Danielle, Jackson's top dancer and reigning diva; she also has to embrace a looser, more urban style. Waiting in the wings is Randall, who may be boyfriend material even if he blasphemously believes that there's more to life than cheer camp.

As staged by Blankenbuehler (winner of a Tony Award for the choreography of *In the Heights*), and with a cast that combines musical theatre specialists with veteran competitive cheerleaders—all of them rocking out to songs by Tom Kitt, Amanda Green, and Lin-Manuel Miranda—*Bring It On* is high-energy, high-style fun for all.

The designers assembled for *Bring It On* have provided



Jackson High's cheerleading team gets ready to rumble. The upstage LED units are visible behind them.

their own energy current, making use of the latest technology to keep things hopping on stage. If it looks easy, it isn't. The project presented multiple challenges, most of which stemmed from the subject matter. As it happens, a musical about cheerleading comes with very specific requirements.

### In the gym

"Andy was interested in presenting the visceral underbelly of competitive sports, and we knew from the beginning that it would involve real cheerleading," says David Korins, *Bring It On*'s set designer. "This created very singular space issues. We had to keep the air space overhead in the clear, but we also had to serve many scenes with dramaturgical detail. We needed a set that could iris in for smaller scenes, but get out of the way for the cheerleading sequences."

Korins isn't kidding about having to provide space; bodies are flung through the air at regular intervals during the musical numbers, a fact that ruled out the use of much flown-in scenery or anything with a low trim. Also, says, Korins, "This show has something for everyone, but, obviously, it skews young. The characters live in a screened world. They're texting, tweeting, and posting on Facebook"—a fact that strongly suggested

the use of video content.

Combining these ideas with the need to create a tourable design, Korins came up with a concept that is highly visual, kinetic, and clutter-free. It is dominated by four LED screens attached to vertical arms, which can form any number of configurations. When first seen, they are arranged directly above center stage in a four-sided scoreboard arrangement. At other times, they drop down almost to the deck level, forming a row. And they can be assembled in various ways to provide a digital backdrop. For example, in scenes set in Campbell's bedroom, the screens are seen in a loose circular arrangement; each focuses on a different detail of the room. This creates a slightly Cubist effect that is far more visually interesting than any straightforward rendition might be.

The beauty of Korins' approach is its flexibility. The screens can provide highly detailed visual information—bedrooms, school hallways, the Pacific Ocean—when needed, but can fly out for the big movement sequences. And, because they are suggestive of scoreboards, they contribute to the design's gymnasium atmosphere, which also includes several portals made of truss.

The screens are the product of much research. "Andy and I went on a listening tour of all the shows that, in the

last three or four years, have used projections,” says Korins. [They began working on *Bring it On* in 2009, while collaborating on the Encores! at City Center production of *The Wiz*]. “We probably saw 15-20 shows. What’s interesting about our screens is they’re just big enough to give you a window into the world they’re depicting, but are small enough not to overwhelm the action. They’re modern-day backdrops, and we can get them out of the way as needed.” The screens are not overused, he notes. “They disappear when we go to Jackson High School; they’re only a part of the more affluent environment of Truman. They don’t come back until the final scenes, featuring the cheer competition.”

Jeff Sugg, who designed the video, says that, by the time he came on board—for the initial production of

*Bring it On* at the Alliance Theatre in Atlanta—“the idea of the screens was in place and also the idea of their sizing. Andy already had a strong sense of their role. David was very generous in giving me as much free rein as he could manage.”

The screens are Everbrighten LED panels with a 6mm pixel pitch. “I was going for 4mm, but the screens were really heavy and the price was prohibitive,” says Sugg, who adds that, even so, the 6mm version is remarkably high-res. “You don’t see that pixel pitch on stage very often. It really enabled us to represent realistic, or semi-realistic, images without having to worry about LED pixelization.” The screens were supplied by Los Angeles-based Senovva. Imagery is delivered by a Dataton WATCHOUT media server, which is linked to the show’s lighting console,



Truman High’s team is ready to take on all comers. The video screens behind them are in their lowest position.

an ETC Eos. Some sequences, Sugg notes, are linked to the action via SMPTE time code.

Sugg says that, working with Korins, “We split the imagery up into various types. There’s the identification of place, which we try to keep in an aesthetic world that is offbeat and cool while establishing the reality of each location. Other stuff is more bombastic and music-driven.” Korins adds, “Some scenes, like Campbell’s bedroom, are literal. Some of it is thought-bubble stuff. And some of it is eye candy.”

Even the realistic imagery was stylized, however. “I’m not a big fan of photorealist stills or video as scenic backdrops, but, in a void-like set, there were many locations that had to be defined,” says Sugg. “We needed to see the wealthier world of Truman High, for example. Once we figured out how to stylize those locations”—presenting them as massed fragments of images, for example—“that became the vocabulary of the approach.” The images, he adds, “were either shot by me or manufactured using AfterEffects by several animators, led by my associate, Daniel Brodie. There’s very little stock footage.”

Picking up on Korins’ comment about the necessity of making room for athletic feats, Sugg says, “We had to keep 25’-35’ clear for any scene that involved cheerleading. In some of those sequences, the screens are on stage, but in a thoroughly choreographed stance—you don’t want to have someone hitting them.”

Interestingly, Sugg echoes Korins’ comment about Blankenbuehler’s desire for a grittier approach. “I had a preconceived notion that we were doing something cute, and it became clear very quickly I was wrong,” he says. “It wanted to be bad-ass. The big realization was that, for 16- and 17-year-olds, high school is not a cute world; it’s the moment when you’re trying to become an adult. When I met with Andy the first time, I said, ‘I’m not a flashy musical kind of guy,’ and he made it very clear that that wasn’t his expectation.”

At the same time, Korins had other considerations to deal with. “The floor is a huge component of the design,” he says, adding that it had to be crafted to accommodate the cheerleading sequences. “We went through 21 prototypes,” he says. “Gymnasts need a springy floor but, if it is too firm or loose, the dancers will hurt themselves. Also, it had to tour.” The result is a custom-designed floor from PRG Scenic Technologies, the provider of much of the show’s scenery and all of its automation. “There are something like 10-15 layers of different materials in the floor,” the designer says. To test it, he adds, “We brought up one of the gymnasts to the shop to try it out; also, Andy danced on it.” The floor breaks down easily for touring and locks into place for performances.

Other key pieces of scenery include the furnishings in Campbell’s bedroom, the counter at Burger Pagoda (the

fast food chain where Danielle works), a series of graphic drops announcing cheerleading competitions, and a large, V-shaped set of school lockers. The latter “have retractable legs on their backs, which is something Andy came up with in the first design meeting,” says Korins. “That way, we can also use them like ramps [in certain dance sequences]. You know, 90% of directors mention things like that, but they don’t follow through; nearly everything Andy mentioned made it into the show.”

“We made the lockers metal to begin with, and came up with a polycarbonate front,” he adds. “Proof Productions made them, and they did a beautiful job of molding them, making that louvered front that all lockers have. The rest of the structure is metal, so it’s no small challenge to move it around.”

Then again, Korins says the set is highly tourable. “Jake Bell, our production manager, did a great job of making it come apart and put back together. It loads in eight hours. Rick Howard, the production carpenter, has done an amazing job of getting it down.”

## Walls of light

In one sense, *Bring It On* is a lighting designer’s dream. Thanks to the necessity of keeping the stage relatively free of scenery, Jason Lyons has access to an extraordinary number of positions. Given the lighting grids at stages left and right and the upstage wall of lighting units, it’s not too much to say that lighting makes up a substantial portion of the set design. This is all to the good, because it allows him to create a series of vivid, pulsing looks that help to pace the action on stage.

“From the outset, we wanted a very contemporary feeling, something active,” says Lyons. “Our research included Gatorade commercials, which feature very intense, athletic movement with a stark feeling, with everyone sweating the vibrant colors of Gatorade. That’s where we started in terms of palette; the rest was driven by Andy’s choreography.”

Another driving factor had to do with creating the show’s two very different worlds. “The scenes at Truman High feel slicker and airier,” Lyons says. “They’re based on research showing those beautiful outdoor schoolyards that you find in California. Even when you’re in the gym, there’s light streaming in through big windows. The scenes at Jackson High feel more oppressive, what with David’s trussing coming in lower; also, in these scenes, we have more of a cacophony of colors.” He also marshals his rig to give Danielle an effect-filled grand-diva entrance. “It shows that she is looked up to,” he says. “She has the respect that Campbell always wanted at her own school.”

The automated portion of Lyons’ rig includes 12 Martin Professional MAC IIIs, 46 Mac 2000 Wash units, 29 Mac 350 Entours and four Mac 200 Wash XBs. The upstage



Korins also developed a number of graphic pieces for the Truman and Jackson teams.

and side walls feature 168 Mac 101s and 206 Elation ELAR PARs (the latter are static). There are a dozen Mac 101s on the floor upstage and also on an electric that appears in various positions; it even flies down almost to the deck for the number “Crossing the Line.”

With his side positions, Lyons creates colorful washes that carve the athletic bodies out of the stage space. However, he says, “I was very concerned about mixing LED units with old-fashioned movers; I wasn’t sure how I would use them.” He was particularly worried about blending the various units’ color palettes, and mixing incandescent units with RGB LEDs. “The ELARs have a white circuit in them, which gives us much more flexibility in terms of color mixing,” he says. “In Atlanta, we had inexpensive PAR 39 LED fixtures instead of the Mac 101s. Right around the time we started planning the tour, Martin released the 101, and it was an incredible thing to have them become a part of our show.” Filling out the rig are 15 Chroma-Q Color Force 72s and 18 Color Force 12s, three ETC Selador Vivid ICE, 79 ETC Source Fours, six High End Systems Dataflash AF1000 strobes, 100 GAM star strobes,

and two Ultratec Radiance hazers.

Although the show has its share of flashy, rock-concert effects, Lyons knows how to dial it down for the ballads and quieter, more intimate scenes. Also, there was the issue of how to light the cheerleading sequences. “In Atlanta, our first pass was to create bright, static washes,” he says. “Then I sat down with Andy and the cheer consultants and, every time we teched a number, we stopped at each stunt and asked about it,” slowly figuring out how far the lighting could go. As Lyons notes, “It’s not just about the people in the air; it’s about the people on the floor, trying to catch them.” Working this way, he adds, “We created a language for the stunts, and, by the time we got to Los Angeles [an early stop on the tour], we got much bolder and more interesting—adding, say, a sweep of light when they’re in the air. It was a little stressful for them at first, but it got better as we continued, and the cheerleaders got more excited about it.”

Lighting is controlled on an ETC Eos console. “It’s totally up to the job,” Lyons says, “even if there are more cues than I’ve ever had on a show. The Eos has really



The show's highly athletic choreography required a clutter-free space, a fact that had profound implications for Korins' set design. Opposite: Ronan, who avoided using boom mics, notes that the female performers who get tossed in the air have their mics attached to their bras.

come into its own as a moving light console. I've been using it on a number of rock concert-style shows, and it's amazing." He also uses the Eos to pixel map the walls of LED units.

The overhead lighting is pre-rigged, Lyons says, and the side lighting is constructed out of customized versions of touring towers built by Christie Lites, the production's lighting supplier. Overall, Lyons says, "The biggest challenges were practical—how to get this show to tour? I spent a lot of time with Larry Thomas, of Christie Lites [the lighting supplier], along with my production electrician [J. Michael Pitzer] and production supervisor to make it work. It's a lot of lights, even for a sit-down production, and the whole show has to fit into seven trucks. It's exciting that we were able to make this work."

### Getting physical with sound

Given the contemporary sound of the score and the fact that *Bring It On* is playing some very big theatres, Brian Ronan, the sound designer, faces some major challenges.

However, he has assembled a rig that is flexible enough to deal with all situations, making use of supplemental gear in each stop along the tour.

The loudspeaker hang includes left and right towers of L-Acoustics dV-DOSC, "in groups of four that allow for flexibility," says Ronan. There's also a center array of dV-DOSC, the exact number of which changes from theatre to theatre. He notes that the L-Acoustics gear "combines the best of a very powerful speaker with uniform wide coverage and a compact size." In addition, he says, "We carry [Meyer Sound] UPAs, which we can put at left and right when we need coverage slightly outside the range of the towers."

Because the load-in happens so quickly, he says, "we have to rely on house gear for stuff like under-balcony coverage." He has, however, provided a fairly substantial on-stage foldback system for the cast, including a set of Meyer UP jrs placed on stage and, just offstage, some Meyer UPM-1Ps, which allow the cast to pick up the dialogue.

Interestingly, despite the score's very contemporary sound, Ronan stayed away from using boom mics. "This is more of a traditional book musical, and it didn't want that approach," he says. "We want you to believe in the characters, to have a closer attachment to them as regular kids. The physicality of boom mics would have gotten in the way of that."

For the most part, the cast members use Sennheiser MKE2 mics, with cocoa-colored DPA 4061s used to match skin tones in a couple of cases. "For a couple of women with wig issues, we have Countryman B6 mics, which fit better in hairnets," Ronan adds. All of them are using Sennheiser 5012 transmitters.

"About half of the cast consists of musical theatre people and the other half are cheerleading people," says Ronan. The latter, he adds, "are physically tough, and most of them are wearing a mic for the first time. The ladies have them clipped onto their bras. *At Nice Work [If You Can Get It, the '20s-era musical he is currently designing for Broadway], we have period gowns with exposed backs, which forces mics into the performers' wigs. But there aren't a lot of wigs in *Bring It On*, so, for example, the three girls who fly through the air took the mics on their bras. It's partly a matter of the performers' preferences."*

The eight band members are on an Aviom personal monitor mixing system, which is linked to a Yamaha DSP5D digital mixing unit. "We're only traveling with two guitars and a bass and drummer; we pick up the rest of the band in each city," says Ronan. "Once in a while, we run into a musician who isn't too used to the Aviom system, but it's not typical." The overall sound system is controlled by a DiGiCo SD7 console. "To split the signal," says Ronan, "instead of a pre-amp rack, we upgraded to a [Digico] SD-Rack." This is Digico's leading I/O rack, which delivers up to 192kHz high-resolution analog I/O converters and multiple digital formats including MADI, AES, ADAT, and Aviom. With it, says Ronan, "we were able to eliminate a whole rack of pre-amps; it's good on floor space, too."

Ronan cites the "physicality" of the show as the big challenge. "We're trying to allow the kids to deliver the vocals without having to sing louder than they have to, since they have so much physical work." Taylor Louderman, who plays Campbell, he says, "is flipping, dancing, and coming up singing. The challenge was to create a system that allows them to perform without having to think about it."

### The rest of the team

Other members of the *Bring It On* team include Andrea Lauer (costume designer); Bonnie Panson (production stage manager); Amanda Stephens (associate scenic designer); Peter Hoerbuerger (associate lighting designer); Timothy F. Rogers (lighting programmer); Cody Spencer (associate sound designer); Arianna Knapp, of SenovVA (video supervisor); Daniel Brodie and Shawn Duan (associate video designers); Matthew Mellinger (video programmer); Gabriel Aronson, Michael Bell-Smith, and Pablo N. Molina (video animators); Mike Farfalla (head sound engineer); Brian Shoemaker (production sound); Grant Wilcoxon (assistant lighting designer); Sharon January (assistant production electrician); J. Marvin Crosland (production props); Kevin Hoekstra (head carpenter); Randy Deboer (flyman); Keith A. Keene (automation); Steve LaPlante (head electrician); Patrick Harrington (assistant electrician); Nicole Laeger (followspot); Gregory Tassinaro (head props); Courtney O'Neill (assistant props); and Matt Raudabaugh (assistant sound engineer).

As we go to press, the *Bring It On* tour is scheduled to end in June. A Broadway stopover is possible, depending on the availability of a suitable theatre. In any case, the production's eminently tourable design should feel right at home in the Times Square District. 📶

