U.S.S. BONCHUNE
NEBULA CLASS
SPECIAL ISSUE
Smaller than the Galaxy class, the Nebula class shared a similar design ethic to the larger ship.
The Nebula class started life as a kitbashed model but soon earned a place as one of STAR TREK’s most significant secondary ships.

When work began on STAR TREK: THE NEXT GENERATION the producers hoped to save an enormous amount of money on visual effects by reusing the models that had been made for the movies. In the beginning, their ambitions were relatively modest: ILM would film a certain number of stock shots showing different ships that could then be combined as the story required. Ships would only be made when they were needed for new races such as the Ferengi. The same approach had been used on the original series and no-one had complained. But, as VFX supervisor Gary Hutzel once remarked, “Nobody told the writers.” The scripts started to call for more and more new ships and the use of video technology as opposed to film brought more visual effects shots into reach financially. A model of a ship was still a major investment that ran into the tens of thousands of dollars, so in TNG’s first three seasons new ships were relatively rare. When a Federation ship was required, it would most likely be a redressed version of the U.S.S. Excelsior or the U.S.S. Grissom, or perhaps one of the Enterprise-D’s sister ships.

One new Starfleet model had been commissioned – the Stargazer, which soon reappeared as the U.S.S. Hathaway – but there was a feeling in the art department and the VFX team that there was a lack of variety in Starfleet’s ships and that the fleet mostly consisted of designs that had been...

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introduced a hundred years ago. At the beginning of the third season, Greg Jein made a new four-foot model of the Enterprise-D that was easier to work with. This opened up some new possibilities: since the team had access to the molds, they could make components that could be combined in different ways to make new starships. This wouldn’t be free, but a lot of the costs were incurred by making the molds in the first place, so it was affordable.

Mike Okuda in the art department discussed the idea with modelmaker Ed Miarecki, asking him to see what he could come up with. Okuda specifically remembers asking him to come up with modern takes on the Reliant and the Excelsior. The Reliant in particular had been deliberately designed to have the same components as the Enterprise, only without the secondary hull.

Miarecki took some commercially available model kits and made a series of study models to show what would be possible. By the beginning of the fourth season, he had brought several of these study models into the art department. One of them was clearly based on the Reliant.

Like Khan’s ship, it was a compact design with the nacelles under the saucer. However, it still had the full secondary hull, which Miarecki had pushed underneath the saucer, and on this early study model it also had a second pair of smaller warp nacelles that were mounted at the back of the ship. Miarecki also brought in some alternative designs, which combined familiar elements in other ways.

As it happened, there was an immediate need for more Starfleet ships. The season opened with “The Best of Both Worlds, Part II” which showed the aftermath of a massive battle with the Borg. Okuda and his colleague Rick Sternbach took a Dremel to Miarecki’s models, added a few extra elements such as highlighter pens painted to look like Starfleet components, and created the wreckage of a massive fleet. The design that would become the Nebula class was named the U.S.S. Melbourne and given the registry NCC-62043. Because the ships were barely seen, the fact that they were made...
The Sutherland was the ship that Data commanded in the blockade of the Neutral Zone in "Redemption, II." This was the first time we saw the bridge of a Nebula class ship.

Two years later the Nebula class made its big screen debut when it was redressed as the U.S.S. Farragut for STAR TREK GENERATIONS.

The ship was named for the ship Kirk revealed he was the helmsman on in the original series episode 'Obsession.'

Nobody was particularly happy with the pod that was designed for the U.S.S. Phoenix, so when the ship appeared again Rick Sternbach designed an alternative version.

The pod was added to Jein's original model, which was detailed out to become the U.S.S. Sutherland.

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Of unlit plastic model kits wasn't an issue. Most of those ships were never seen again but Miarecki's 'modern Reliant' had a future. A second study model of the ship was used as the basis for a full-scale shooting model of the ship, which appeared twelve episodes later in "The Wounded," a story that featured Picard chasing down a renegade Starfleet captain called Benjamin Maxwell. The script named the U.S.S. Phoenix as a Nebula class ship.

The model was made by Jein rather than Miarecki and the design was modified to make it more attractive. The additional pair of nacelles at the back was eliminated. The secondary hull was cut short and an oval "AWACS" pod was added at the back, which was reminiscent of the Reliant's rollbar and helped to balance the design. It also suggested that Maxwell had access to detailed scans that fed into his suspicions about the Cardassians. Jein also made modifications to the shape of the secondary hull, giving it a slightly different look to the Enterprise. Okuda had hoped to make more modifications, altering the scale of the bridge module and the windows to suggest that the Nebula class was a smaller ship than the Enterprise, but the pressures of TV production meant that this didn't happen, and the model also lacked some additional details such as RCS thrusters.

Miarecki’s surviving study model also made an appearance in the episode where it can be seen on a table in Maxwell's ready room. It would reappear in the TNG episode "Future Imperfect" before finally finding a home in Ben Silico's office on Deep Space 9.

The new studio model next appeared at the beginning of TNG's fifth season in "Redemption, Part II." The pod was changed out on the back of the model, which also received some upgrades, including the addition of the missing RCS thrusters. This version of the model also made
appearances in DEEP SPACE NINE. The pilot, ‘Emissary’ showed us more of the Battle of Wolf 359 and established that the U.S.S. Melbourne was actually an Excelsior-class ship. This wasn’t an issue because the registry on the original Nebula class study model had never been shown on screen.

In 1994 Jein’s model was sent to ILM for use in the film STAR TREK GENERATIONS. Since the big screen would expose it to the kind of scrutiny it had never had before, the ILM team gave it an upgrade. Larry Tan and John Goodson stripped the paint off the surface and repainted the model with a more detailed version and applied a new registry identifying it as the U.S.S. Farragut. Once it had been used for GENERATIONS, the model was returned to the DS9 and VOYAGER VFX teams where it made a number of appearances, including a shot in DS9’s upgraded title sequence, which made its debut in the fourth season.

By 1997 the STAR TREK VFX team had started the transition to CG ships rather than practical models. The main existing physical models were gradually rebuilt in CG as stories called for them. The VOYAGER season 4 episode ‘Message in a Bottle’ ended with several Starfleet ships taking on the experimental U.S.S. Prometheus, which they believed was under Romulan control. It was decided that it made sense for the Nebula class to be part of the battle. The task was handed to Foundation Imaging where VFX supervisor Rob Bonchune relished the chance to build a CG version of a major Starfleet vessel. To his amazement, Paramount sent the original studio model to Foundation’s offices, where it took up residence on his desk so he could study it. Because time was tight, he built the ship from existing parts of a CG Galaxy-class ship, meaning that many of Jein’s modifications, most obviously to the secondary hull, were abandoned. The paint scheme was also brought in line with the existing CG fleet. This version of the Nebula class was used on both DS9 and VOYAGER, making its final appearance in the closing scenes of the VOYAGER finale when it is one of the ships that greets Voyager when it returns to Earth.

Jein’s model had only been built with TV in mind so ILM’s Larry Tan (left) and John Goodson (right) upgraded it for its cinematic appearance.

The Farragut is one of the ships that retrieves the crew of the Enterprise-D after they have crashed on the surface of Veridian III.

The CG version of the Nebula class appeared in several episodes of DS9 and two episodes of VOYAGER starting with ‘Message in a Bottle.’
THE WOUNDED

The episode that introduced the Cardassians, also gave us two new ships and put Chief O’Brien in the center of the story for the first time.

The Nebula class makes its full debut in the fourth season of STAR TREK: THE NEXT GENERATION in “The Wounded,” an episode that would turn out to have a lasting impact on the franchise. It’s the first story to feature Colm Meaney’s Chief O’Brien prominently. It introduced the Cardassians, who would become a major presence on the show, and the Cardassian Galor-class warship makes its debut alongside the U.S.S. Phoenix.

The story started with an idea that was pitched to the producers by husband and wife team Sara and Stuart Charno. The writing staff liked the story because it had an element of the classic novel “Heart of Darkness” about it, with Picard pursuing a Starfleet captain, Benjamin Maxwell, who has gone rogue. As supervising producer Jeri Taylor, who wrote the teleplay, told “Cinefantastique,” they were also intrigued by the idea that even if conflicts could be resolved, it wasn’t easy for everyone to just move on. “It started with the idea that if you had been at war with a country and now you are not at war with them anymore, you can’t just immediately become friends. If you’re trained to look at people as the enemy, it’s hard to now be their friends. While in the 24th century people have a much more expansive view of the Galaxy and are able to do it a little better, we planted the idea that some people had just a little more residual problem with that sort of thing, and harbored some resentment.”

CHANGING TIMES

It was easier to tackle themes like this by TNG’s fourth season since Gene Roddenberry had stepped back from day to day involvement and his strictures about humans having flaws were being relaxed. Maxwell had taken his ship, the U.S.S. Phoenix, off the grid and started to attack the Cardassians, who he was convinced were still plotting against the Federation. Picard is sent to hunt him down and put a stop to his actions.

By this point, the writing staff were keen to introduce a new recurring villain. “There are two kinds of aliens on STAR TREK,” executive producer Michael Piller remembered. “the
Marc Alaimo was the first person to be cast as a Cardassian and his features inspired the design of the makeup. However, he played a character called Gul Macet, rather than the role that he would be remembered for: Gul Dukat. Two things were designed for the Cardassians that would never be seen again: helmets that covered part of their heads, and facial hair. When they made their debut, the Cardassians had different costumes. Bob Blackman designed the more familiar version for their next appearance.

When Michael Westmore began work on the design of the makeup, he started by looking at Alaimo's features. "I did a plaster cast of Marc Alaimo's head, and I was sitting there looking at it. He has this very long neck. This was a character that we were probably going to bring back again, so we wanted to design something neat. The producers had said this was going to be a sneaky character, so all the adjectives indicated that this would be a sneaky, lizardy personality, and for inspiration I went to reptiles.

"I slowly put him together, but the main thing was the forehead. I had gone to dinner at a Thai restaurant called 'Siam' in Studio City and next to it was an art gallery, with a picture of a girl in the window with a spoon in the middle of her forehead. It was an abstract picture, but it had the impression of a spoon. My wife said, 'Why don't you come back and take a picture of it?' and I said, 'No, I'll remember it. Some day I'm gonna use that!' When I was putting Marc together, all of a sudden this spoon jingled in my mind and I incorporated that, and the rest of the makeup was built from there. Marc has a very narrow face, so I thought, 'Let's accentuate his cheekbones.' And the end of the nose was too human, so I fooled with the nose. Then I realized, 'Oh, my gosh, you've got human ears! What can we do there?' so I designed an ear. And then I decided he needed something else, so we did the chin. Every one of these pieces has little bony, scaly textures to them. Then all of a sudden you have this great head with a long human neck, so I started to broaden the shoulders and gave them a bony look that gave almost a king cobra type of a flare. Then I painted the whole thing gray and took the blood out of his look."

When the producers were casting other Cardassians for TNG, they looked for people who had features similar to Alaimo's, in particular his long neck. Meanwhile, Bob Blackman set about designing costumes for the Cardassians. He

The episode was directed by Chip Chalmers, who had been working on the series as a first assistant director. For him it was important that the Cardassians were intelligent enemies who were on a level with Picard, something that he felt made them far more sinister than many other species. Marc Alaimo, who had already appeared as an Antican and a Romulan in TNG's first season, was cast as the lead Cardassian, Gul Macet. His appearance would prove key to the look of the Cardassians.
The relationship between Maxwell and O’Brien is at the heart of the episode. The two men served together, fighting the Cardassians, but unlike his former captain, O’Brien is able to move past his bitterness.

The episode was designed to show how difficult it can be to make peace after the end of a war. It’s suggested that Maxwell is right and the Cardassians are preparing for a potential attack, but it is also clear that keeping the peace is more important to Starfleet and Picard.

Marc Alaimo was the original Cardassian and his performance went a long way to establishing their nature. The original plan was to use a different actor for Gul Dukat, but when this didn’t work out, they called Alaimo in.