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HIROGEN
WARSHIP

TYPE: WARSHIP

LAUNCHED: 24th C

CREW: 2

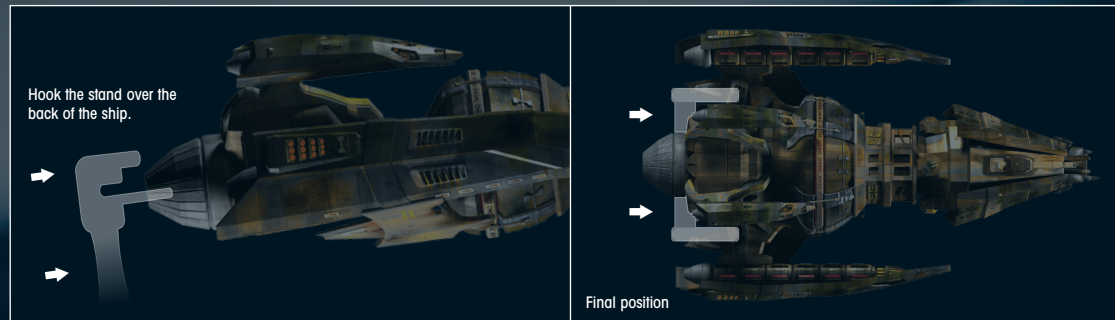
LENGTH: 150 METERS

HIROGEN WARSHIP

Contents

- 04: HIROGEN WARSHIP
- 10: DESIGNING THE SHIP
- 14: DESIGNING HIROGEN TECHNOLOGY
- 18: ON SCREEN

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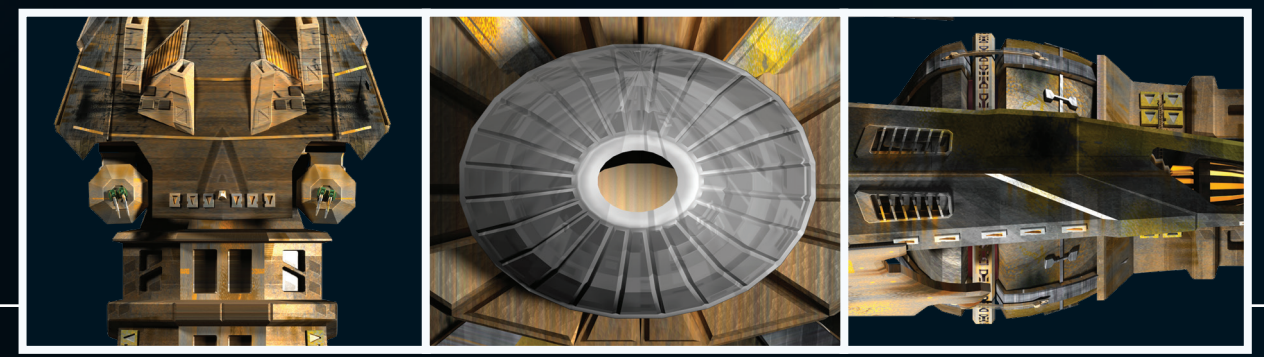
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HIROGEN WARSHIP SPECIFICATION



TYPE:	WARSHIP
OPERATED BY:	THE HIROGEN
IN SERVICE:	24th CENTURY
LENGTH:	150 METERS (APPROX.)
CREW:	2
DEFENSES:	MONOTANIUM ARMOR PLATING
WEAPONRY:	SUBNUCLEONIC BEAM, WEAPON TURRETS, TORPEDO LAUNCHERS



► Hirogen warships were distinguished by their dicyclic warp signatures and monatanium armor plating. This metallic armor covered the hull and was able to scatter the particle beam fire from other ships, rendering it largely ineffective.



HIROGEN WARSHIP

Tactically advanced and extremely robust, Hirogen warships were used to hunt prey over vast distances.

The vessels operated by the Hirogen were very important to them, as they were intrinsic not only to their way of life but to their very survival. The Hirogen based their society on hunting other species to such an extent that they spent their lives aboard spaceships constantly roaming the Galaxy looking for new species to pursue.

Their nomadic way of life had continued for so long that the Hirogen no longer had a home planet, and they lived aboard their ships. A large part of this devotion to the hunt could be attributed to the rewards it brought in Hirogen society. Individuals who captured unusual and resilient prey were envied by their peers and desired and sought after by females.

FIGHTING MACHINES

The most common type of vessel used by the Hirogen appeared to be the warship. It measured approximately 150 meters in length, but was normally operated by just two crew members. Despite plenty of interior space, no concessions were made to comfort. Instead they were designed solely from the standpoint of making them more efficient in chasing down prey.

The Hirogen warship featured numerous devices protruding from the exterior, including weapon turrets, torpedo launchers, defensive shield emitters and sensors. While all these devices were essential for stalking and capturing their prey, it gave the ship a cluttered look.

DATA FEED

Each Hirogen vessel was led by an alpha male. Any other members of the crew were subordinate to the Alpha-Hirogen, although his position could be challenged if he showed any signs of weakness.



◀ The Hirogen's warships used sophisticated sensors and stealth technology to track their prey without being observed. If their prey did detect them and sought refuge on a planet, the Hirogen armed themselves with huge energy-directed rifles and beamed down to continue the hunt.



▶ As well as weapon turrets and torpedo launchers, the warships were equipped with subnucleonic weaponry. These devices emitted a beam that could perform rapid scans of other vessels and severely disable them by disrupting their engines, weapons, sensors and communications.



▶ Onboard one ship, Chakofay and Tuvok found large cylindrical containers full of a liquid that was being used to break down the internal organs of prey, possibly for consumption.

▼ The Hirogen would mount the skeletal remains of prey they had killed on the walls of their warships, displaying them like trophies. The more unusual the prey, the more it was prized.



◀ The warp nacelles on warships emitted a red, yellow and orange glow. Carapaces encased the nacelles, helping to shield them from enemy fire and making it more difficult for ships to disable them.



▲ Hirogen warships may not have been the most aesthetically pleasing, but they were heavily armed and extremely well protected. They were certainly more than a match for the *U.S.S. Voyager* when they were first encountered in 2374.

Hirogen warships were bristling with weaponry. These included torpedo launchers located near the front of the ship, and weapon turrets at various locations around the hull that fired directed-energy beams.

In addition to these conventional weapons, Hirogen warships were equipped with a subnucleonic beam that could perform rapid scans of other vessels. This beam also had a destructive effect, and could severely disable another ship, disrupting its navigational sensors, communications and propulsion. Once a target ship was disabled, the Hirogen could use their ship's tractor beam technology to bring their unwilling victim closer.

Offensive technology was not the only strength of Hirogen warships. As well as being protected by

strong defensive shields, the hull was covered with monotonium armor plating. This metallic plating offered extra protection as it was able to scatter a particle beam, making it virtually impossible to fire upon the ship.

TRAVELING THE GALAXY

Hirogen warships often covered huge areas of the Galaxy in the course of their hunts. One warship encountered by the crew of the *U.S.S. Voyager* NCC-74656 was found to have spanned a radius of 1,000 light years in just five years; it had also visited as many as 90 star systems in a single year.

At top speed, Hirogen vessels were capable of traveling 4,000 'ketricks' in about an hour (a speed of one light year every eight hours). To be able to cover these huge distances, Hirogen warships

were equipped with impressive propulsion units. These engines emitted a distinctive dicyclic warp signature, while the warp nacelles that were attached on either side of the main hull were covered with a protective carapace to shield them from enemy fire.

Hirogen warships were also able to mask their engine emissions by operating in stealth mode when they wished to track a vessel without alerting it to their presence.

Occasionally Hirogen warships were encountered in packs. This appeared to happen only when they were hunting a particularly challenging and resilient prey. However, most warships traveled alone, as in their society there was more prestige and skill attached to hunting down prey without help from other ships.



DATA FEED

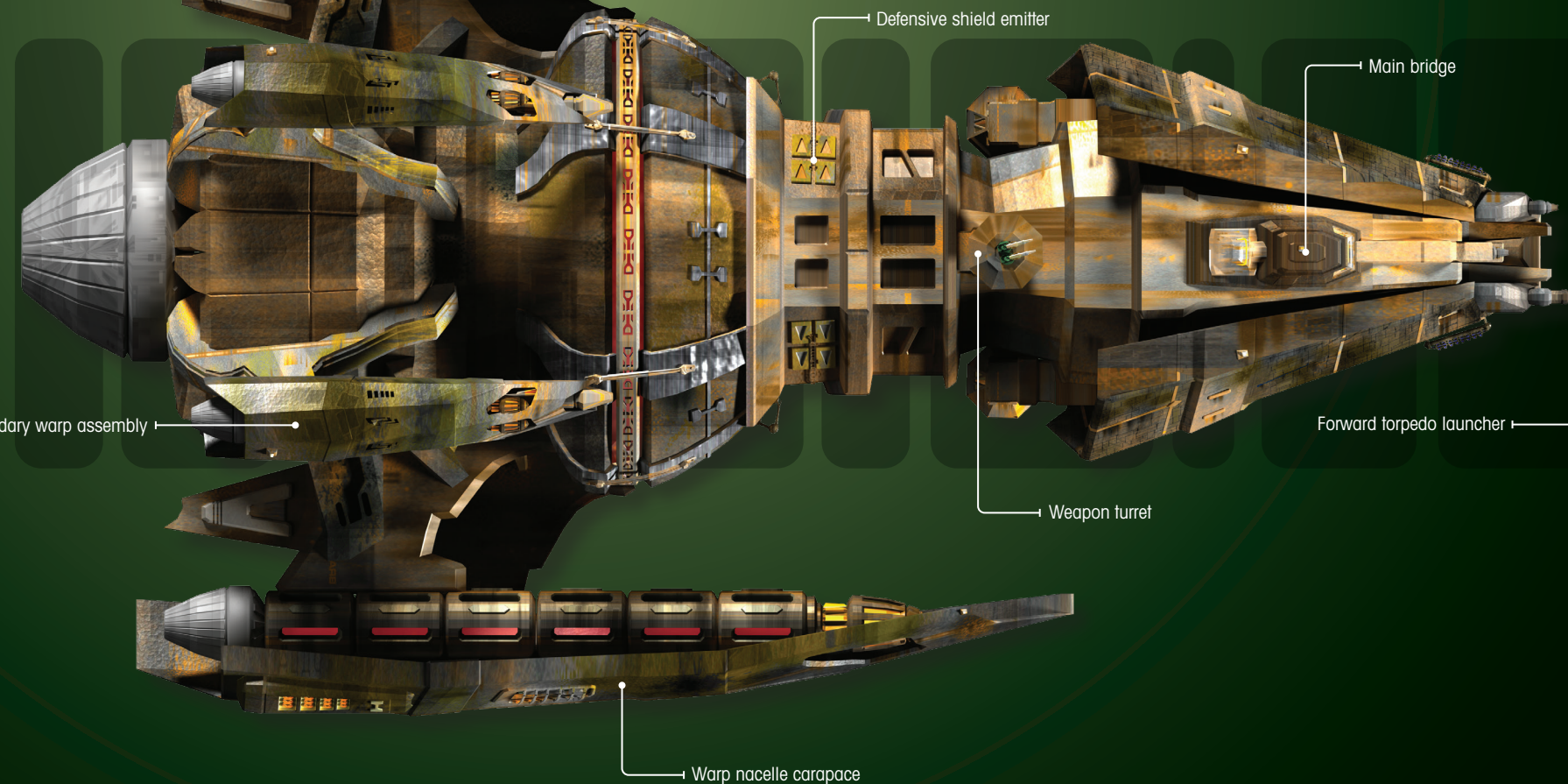
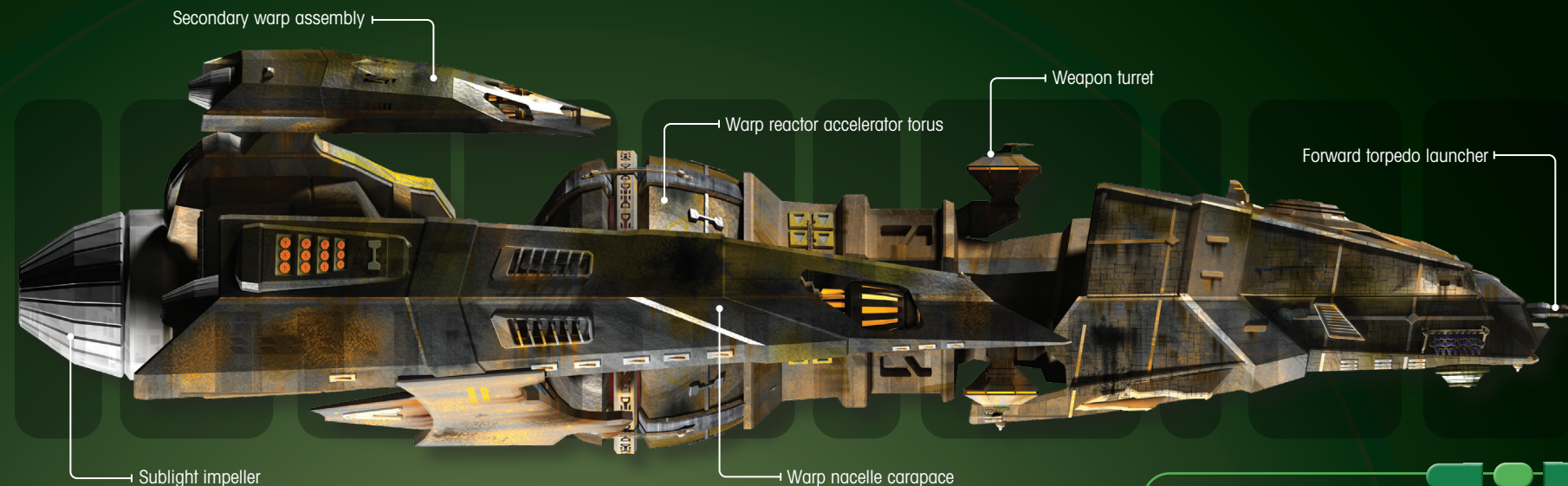
The Hirogen were a ruthless race of hunters whose intimidating appearance only added to their menace. They were much taller than most other humanoids and dressed from head to toe in body armor. Tracking prey had acquired an almost religious significance for them, and they followed certain customs before embarking on a hunt, such as marking their helmets with a colored pigmentation.

WARSHIP BRIDGE

The main control room inside the Hirogen warship was a large, dark chamber made primarily of bare metal. The ship's primary functions were incorporated into a large metallic sphere with deep intersecting grooves cut into it. The warship's speed and direction were controlled by moving a number of rods set into the spherical unit. Data on the effect of incoming fire and the condition of the ship's armor was also relayed through this station. This chamber also featured a number of large nets that were chained to the ceiling, and held the remains of eviscerated prey.



▲ The high-ceilinged, open plan control room featured large spherical consoles with long rods set into them. These controlled all the ship's main functions, including flight control and weapons.



DATA FEED

An entire wall in the control chamber was given over to the display of a variety of weapons. These included a bewildering array of cutting implements that possessed a surgical quality. They were used to slice up and butcher the Hirogen's unfortunate victims, including removing their skeletons, musculature and internal organs.

NO ESCAPE

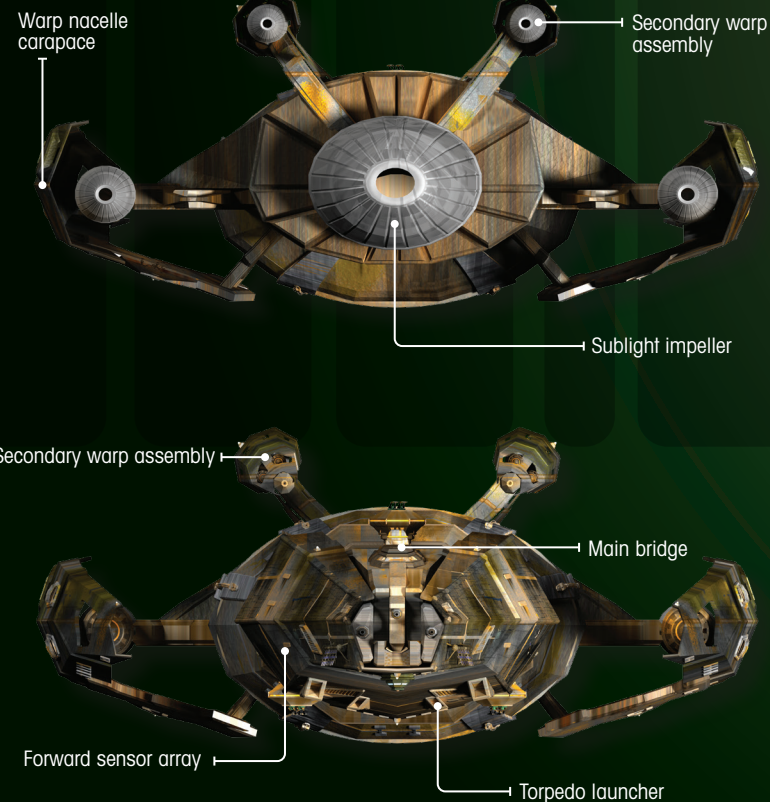
Hirogen warships were equipped with extremely sophisticated sensors that could detect both polarized EM signatures and residual ion emissions. This meant that they could even track vessels that tried to hide their location by using a scattering field to mask their engine signatures.

PRIZED BODY PART

A Hirogen hunter learned from scanning Seven of Nine that she had a long coiled intestine, an organ that he believed would make a prized trophy.

ANCIENT NETWORK

Hirogen warships were spread far and wide throughout the Galaxy. They remained in contact by using a network of relay stations that spanned the Delta Quadrant, and reached as far as the Alpha Quadrant. These stations were more than 100,000 years old and powered by tiny artificial black holes.





► The first Hirogen ship to appear in *STAR TREK: VOYAGER* was the 'Hunter' warship. Sternbach knew it had to look threatening and menacing to reflect the Hirogen's predilection for violence.

DESIGNING THE

HIROGEN WARSHIP

Senior illustrator Rick Sternbach describes the creative process that went into designing the aggressively-styled Hirogen warship.

Plenty of *STAR TREK* aliens made only one appearance and were never seen again, so they only needed a single 'ship of the week.' However, there were other races that made repeated appearances and, by the time computer-generated models were reasonably affordable, they could end up with a whole fleet of ships. On *STAR TREK: VOYAGER* I found myself making several Hirogen ships, a space station, and a holographic

decoy, but I began with the Hirogen 'Hunter' warship that was needed for the fourth season episode 'Hunters.'

Designing ships for new alien races was always a challenge; the goal was to come up with shapes and colors that these aliens could use on several different ships and space stations. The scheme you came up with had to be distinct from any other alien culture we had seen in *STAR TREK* before, and the whole thing had to look cool.

I began work on the Hirogen warship, as I always did, by sketching a group of basic masses that would say something visual about the Hirogen themselves or that were somehow reminiscent of the sets that were being designed for the interior of their ships.

For me, at this point, many different rules came into play simultaneously: I had to make it look like it worked; make it fit the style of the users; make it so the visual effects vendors could

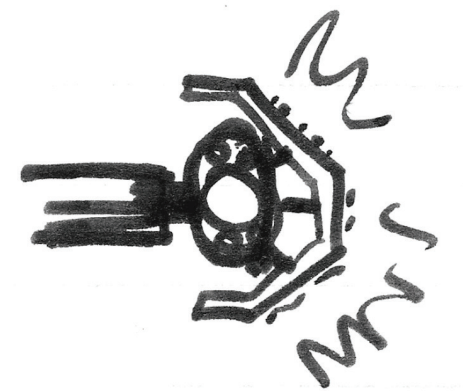
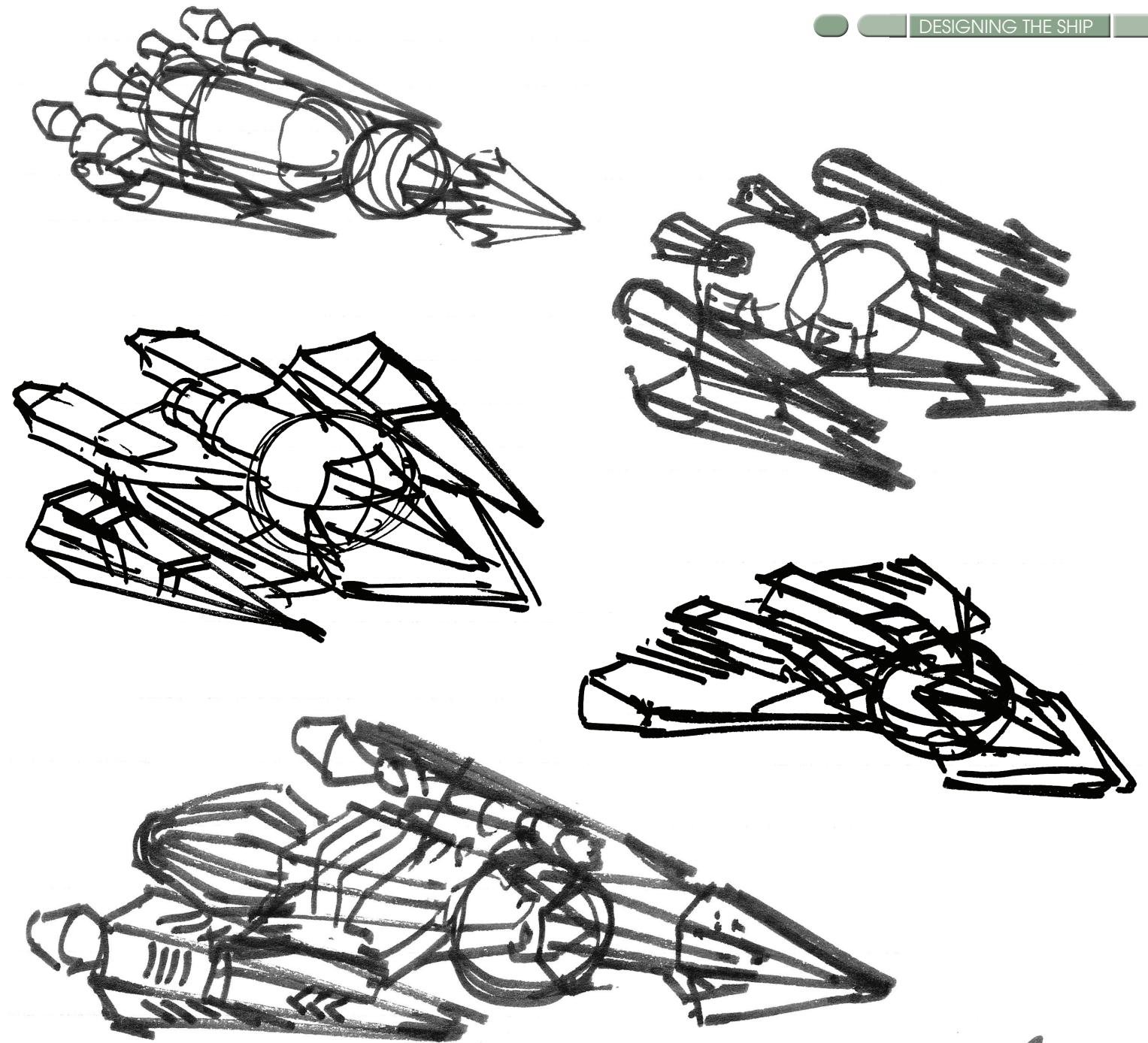
actually build it; make it according to what the script said; and make sure it looked interesting. Changes could – and did – come along the way, but this was a good start.

COSTUME AND SET INSPIRATION

The first few pages of yellow-pad doodles set the tone for the final look. I remember that I was inspired by elements from the costume helmet worn by the Hirogen and parts of their

control room set, particularly a row of large plastic tanks and tall triangular wall columns.

The basic hull of the warship was defined by a mace-like spiked sphere, pointed nacelles and a pointed nose section, followed by a ribbed impulse engine module that capped off the tail. Interior and exterior shapes didn't always need to reinforce each other, but I decided to make the connections here. Triceratops horns came to mind,



► Sternbach always began by sketching out a few simple shapes on a legal pad in order to get a feel for an appropriate design. For the Hirogen warship, he tried to incorporate ideas and shapes that were reminiscent of the warship's interior control room set that had already been built.

mixed with the crushing iron of medieval weapons and a dash of the spires found on the Notre Dame and Salisbury cathedrals.

A bit more doodling to move pieces and parts around, and then it was onto the computer to see how all the masses worked in three dimensions. Given that we had shifted almost entirely to CG, ship designs no longer had to accommodate motion control mounts or electronics hatches. The beauty of a program that rendered even simple polygons was that it allowed you to extrude and replicate shapes, play with positions and proportions, and rotate the design around. This let us see where interesting details could be added or whether certain angles might not look right to the camera; it also let us find some really good angles, too!

PLAYING WITH SHAPES

The nice thing about building shapes with polygons was that you could interpenetrate different solid objects and let the computer handle shading the areas where they joined. The preliminary warship model was a set of some 12 objects that were pushed into each other, something you couldn't easily do with foamcore or plastic. The impulse pods were scaled copies of the warp nacelles, attached to pylons and canted away from center.

The nose section underwent the most changes, as the producers asked for a less pointy version, and we settled on a forward module made from two slightly chopped spires. The space between them would be filled with an assortment of energy weapons.

On a clean 11"x17" sheet, I traced over the basic CG perspective sketch in light blue pencil and drew in the nearly-final details. To do this I studied photos of the Hirogen set, with its

► The central spherical hull was inspired by a medieval mace, while the shape of the casings surrounding the warp and impulse engines was influenced by the spires found on cathedrals.

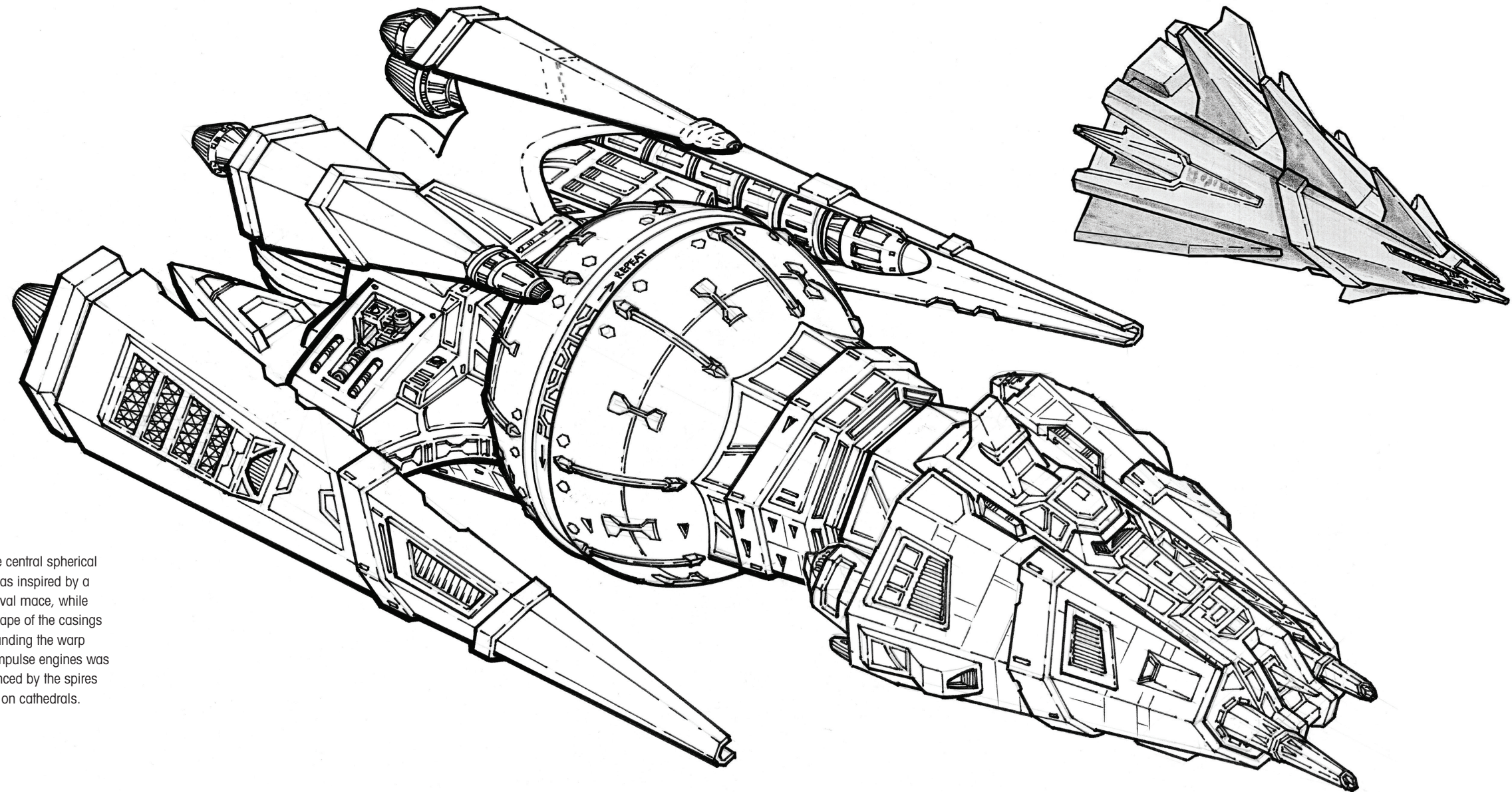
netting, columns, weapons collections and specimen tanks, for ideas. People often asked how I knew what shapes to draw and where, and I usually explained that it was a process involving memories of almost everything I've seen or experienced, with some very specific stored visuals in the areas of art history, industrial and space vehicle design, aeronautics, biology and physics.

Many details were an exercise in the aesthetic breakup of a larger blank space, with a pinch of engineering logic thrown in (the best science fiction hardware designers

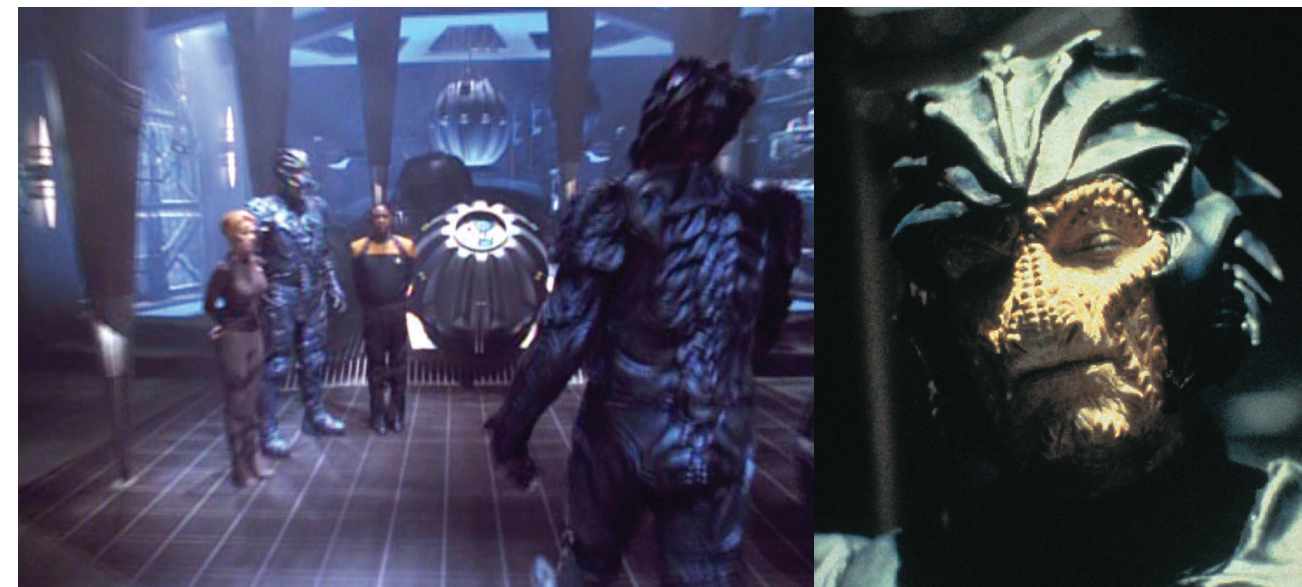
I know do understand how the real stuff works). And the 'Hunter' warship surfaces followed that same process.

CG MODEL

Foundation Imaging was given the inked line art, along with orthographic views of the CG sketch model, and proceeded to build the model that would be used in the final show. A few elements changed in the process, such as the sphere flattening a bit and the addition of gun turrets, but the overall result fitted the bill. Foundation then gave it the finishing touch of dark, imposing metallic colors and textures.



◀ Sternbach originally sketched out an extremely aggressive forward module for the warship. The producers wanted a less 'pointy' front end, so it was replaced with shapes that echoed the engine casings, while an assortment of weapon barrels projected from the nose.



◀ Some of the shapes and surface detail on the warship were evocative of the design of the helmet worn by the Hirogen, while the triangular wall columns and the globe-shaped console on the interior set also provided inspiration for the overall aesthetic of the design.



▲ The Hirogen *Venatic*-class starship was designed by Rick Sternbach for the seventh season episode 'Flesh and Blood.' It took its stylistic cues from the earlier Hirogen warship, and included many of the same features, but was made much larger.

DESIGNING HIROGEN II

TECHNOLOGY

Rick Sternbach explains how he designed more Hirogen ships, plus a space facility and a probe for *STAR TREK: VOYAGER*'s final season.

The original Hirogen warship was used from 1997 to the fall of 2000, when the episode 'Flesh and Blood' called for the creation of a new, larger Hirogen vessel, a training base, a decoy probe and a renegade holoship, all of which had to use established stylistic elements. It was back to the doodle pad.

The new Hirogen ship would become known as the *Venatic* class, and the producers decided that it should be much larger than the standard warship. As the script called for the *U.S.S. Voyager* NCC-74656 to shadow it by following close behind in a sensor 'blind spot,' specific design decisions had to be made. The earlier warship

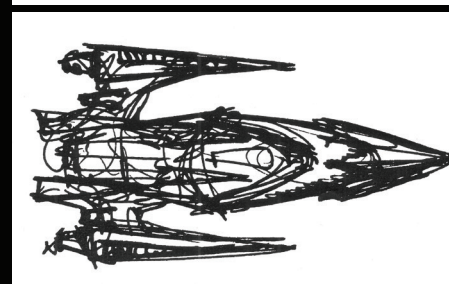
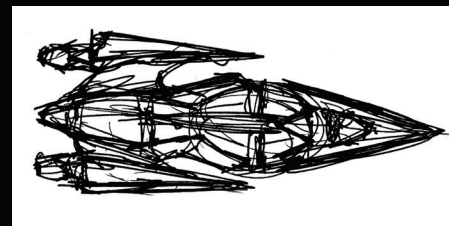
formed the basic look, but some parts were doubled in number as well as in size. Four of the now-signature nacelles were stretched and attached to a longer backbone. The central impulse engine also got more complicated with the addition of multiple sub-nozzles. Weapon platforms extended from top and bottom.

A complex series of rings and tunnels set in the rear engines were modeled and animated by Foundation Imaging so that they became ponderous rotating wheels, no doubt parts of the Hirogen main propulsion system.

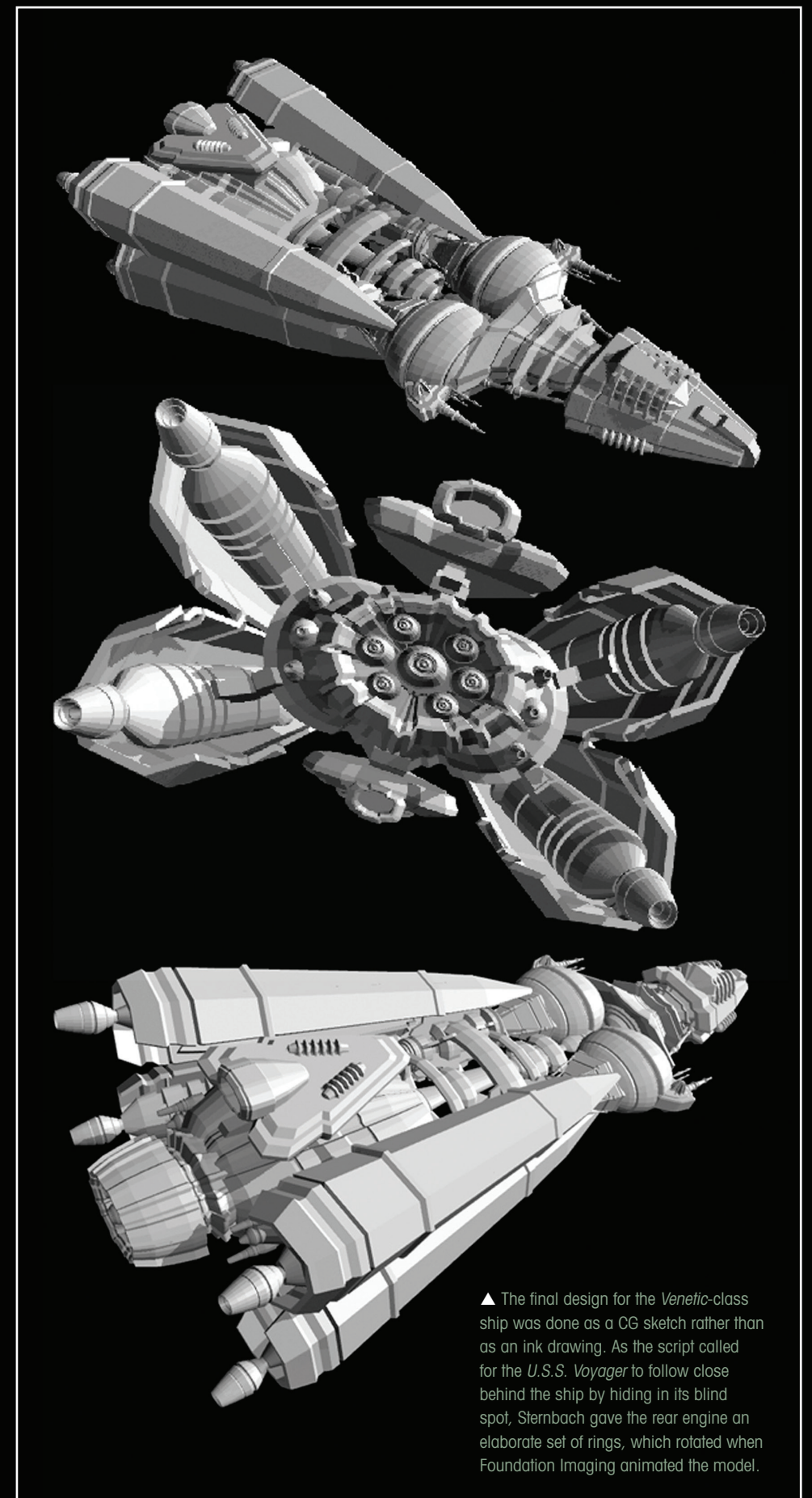
Other details were added in the CG sketch stage, including some very high-voltage plasma disruptors. This time around I did not produce a final ink sketch; instead various views of the *Venatic*-class CG sketch were emailed to Foundation, with the suggestion that they embellish the new ship the way they had done with the warship, and add Hirogen colors and textures.

Training facility

The Hirogen training base began like most ships, as a series of quick pen strokes to play with volumes and Hirogen-style parts. What immediately clicked for me was the concept of a cluster of holographic chambers that had a round floor plan, and all were tied together with structural beams and linked with ribbed transfer tunnels. The spire-like shape of the carapace covering the nacelles that had been designed for the Hirogen warship was adapted for a series of dorsal and



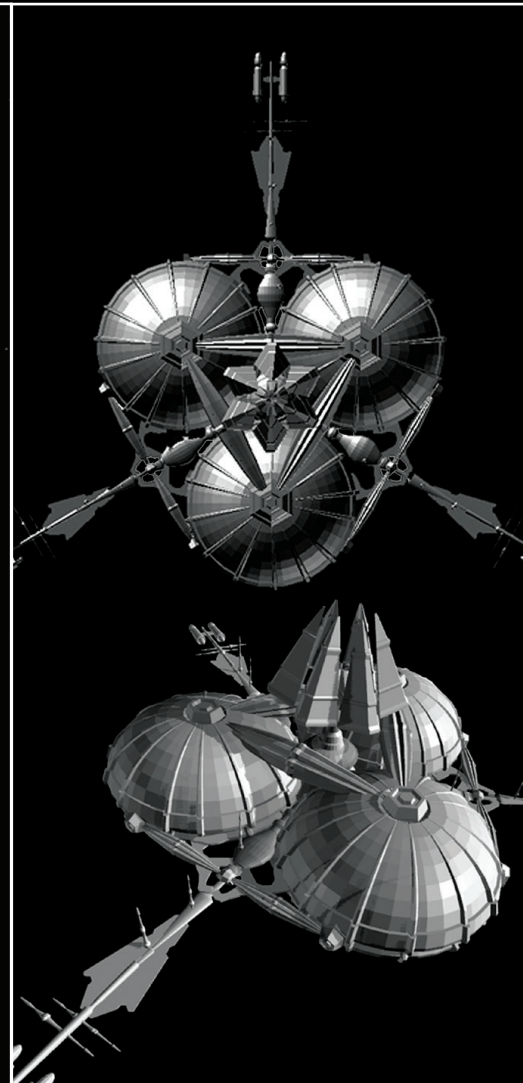
▲ As with the earlier warship, Sternbach began by sketching out a few basic designs for the larger *Venatic*-class vessel. He included similar shapes to make it clear the two ships were related.



▲ The final design for the *Venatic*-class ship was done as a CG sketch rather than as an ink drawing. As the script called for the *U.S.S. Voyager* to follow close behind the ship by hiding in its blind spot, Sternbach gave the rear engine an elaborate set of rings, which rotated when Foundation Imaging animated the model.



▲ The design for the Hirogen's holographic training facility was worked out as a CG sketch first before a fully detailed and colored version was created at Foundation Imaging.



ventral power generators, as well as providing propulsion to move the station around.

Communications antennae, airlocks and sensor booms sprouted from the equator. Various combinations of chambers and connectors and antennae were whittled down to a single design with three holo-arenas, and transmitted to Foundation. Again, Hirogen colors and textures, along with any running lights and glowing energy sources, would be added to the final CG model.

Final Hirogen designs

The last two things that needed to be designed and built were the renegade holoship and the decoy probe. The holoship used the basic nacelle shape

given to the other Hirogen vessels, but this time the bridge section was more rounded, to distinguish it from the others. A variation on the warship pylons became slight 'wings' with open cut-outs. Rounded structural beams tied the fore and aft sections together, and small vents and pressure spheres dotted the skin; these were all intended to cast interesting shadows and kick off highlights. That helped give a sense of scale.

Sensors, communication antennae, lifeboats and plasma disruptors went in all the right spots. As before, various views were rendered for the producer's approval and for Foundation to build in the computer.

The decoy probe was a simple three-lobed object, small and to the

point, with a few bits of raised detail like warp generators, nose fins, and impulse nozzles. Once again, CG sketching made the work go quickly, this time without the need for any pen drawings.

Future inspiration

That doesn't always happen, of course, especially with larger, more important vessels. Some of those took weeks to develop. Freehand strokes often produced strange and fun results that could be refined into usable bits of hardware later; I tried to hang onto these little scraps, just in case. You never knew if those Hirogen doodles would be just the spark to set me off in a totally new direction of shipbuilding for another species.



◀ Foundation Imaging worked from Sternbach's CG sketches of the Hirogen holoship to create the final version, which featured considerably more surface detail. Stylistically, it was obvious that the ship was of Hirogen design, but it featured a much more rounded nose.

◀ The holographic decoy was the last piece of technology that Sternbach designed for the Hirogen. It featured the now familiar Hirogen design motif of spire-shaped carapaces, while various raised surface details including nose fins were added to make it visually interesting.

ON SCREEN



TRIVIA

Actor Tony Todd guest starred as the Alpha Hirogen in the *STAR TREK: VOYAGER* episode 'Prey.' Todd is best known to *STAR TREK* audiences for playing Worf's brother Kurn in both *STAR TREK: THE NEXT GENERATION* and *STAR TREK: DEEP SPACE NINE*. Todd said that playing the Hirogen was a "great experience," but the costume and makeup made it a trial of endurance. Todd confessed, "Of all the prosthetic work I've done, it was the most uncomfortable. Not only was it a four-hour makeup process for the face, it was an hour-and-a-half costume application as well."



The Hirogen were originally inspired by American football players, hence their considerable size. Originally, only actors who were around 6ft 7in were cast, and then they were given platforms in their boots to give them even greater height.



STAR TREK costume designer Robert Blackman considered the Hirogen outfits the most complete head-to-toe look he created while working on the show. Initially, the costumes were made from silicone, but this made them extremely heavy. For later appearances foam was used, as this was much lighter and nearly as flexible.

- FIRST APPEARANCE: 'HUNTERS' (VOY)
- TV APPEARANCE: STAR TREK: VOYAGER
- DESIGNED BY: Rick Sternbach

KEY APPEARANCES

STAR TREK: VOYAGER 'Hunters'

After a message from Starfleet becomes lodged in a Hirogen relay station, the crew of the *U.S.S. Voyager* NCC-74656 head off to try to download it. Unfortunately, the ship is unable to get near the station because its quantum singularity power source is emitting powerful gravimetric forces. Instead, Seven of Nine and Tuvok are sent off in a shuttle, but on their way there, they are intercepted by a Hirogen warship and taken captive. Captain Janeway must find a way to free her crewmates and retrieve the message without them all falling victim to the Hirogen.

STAR TREK: VOYAGER 'Prey'

When *Voyager* detects a Hirogen warship, Captain Janeway decides to make contact in the hope that they can settle their differences. When their hails go unanswered, an away team beams over to the warship, where they find one Hirogen decapitated and one severely injured. They take the wounded Hirogen back to *Voyager* to be treated, little realizing that they have also picked up a stowaway – a member of Species 8472. It too is wounded and just wants to return home, but when Janeway tries to help it, she comes into conflict with not only the Hirogen, but also Seven of Nine.

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