

THE OFFICIAL STARSHIPS COLLECTION



BIRD-OF-PREY

LENGTH: 139 METERS

NUMBER OF DECKS: 6

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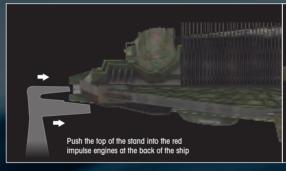
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## KLINGON BIRD-OF-PREY

SPECIFICATION



OPERATED BY: ( KLINGON DEFENSE FORCE

CLASS: B'REL

LENGTH: 139 METRES

DECKS: 6

CREW: 36 (STANDARD)

TOP SPEED: WARP 9
WEAPONRY: 2 PHASE DISRUPTOR CANNONS

1 PHOTON TORPEDO LAUNCHER









The *Bird-of-Prey* was a classic Klingon ship that was perfectly designed for stealth and aggression

hile they all share the same design, the name *Bird-of-Prey* refers to several classes of ship in the Klingon Defense Force,
These range from the smaller *B'rel-*class raiders to the massive *K'vort-*class cruisers which are almost as large as Starfleet's *Galaxy-*class ships. The crew complement varies, with the smallest scouts having a crew of around a dozen, to 36 for the standard raiding ship, and hundreds for the largest cruisers.

Regardless of their size, *Birds-of-Prey* were armed with two powerful disruptor cannons mounted at the tips of the wings as well as a photon torpedo launcher that fired from the nose. A tractor beam

was fitted to the underside of the ship, just forward of the landing ramp and landing gear, which could be deployed when the ship entered a planet's atmosphere and landed on the surface.

#### **SWIFT AND DEADLY**

The *Bird-of-Prey* was fitted with warp and impulse engines and, like Federation vessels, used dilithium crystals to focus the enormous power generated by a matter-antimatter reactor that could propel it to warp speed. Alongside its offensive weapon systems the ship was also fitted with a cloaking device, which used technology that the Klingons



acquired from the Romulans in the late 2260s. When activated the cloaking device rendered the ship invisible not only to the naked eye but also to conventional sensors. Due to a major drawback in the technology, however, cloaked ships were unable to raise shields or operate any of their weapon systems, leaving them at a serious disadvantage if detected. In the latter part of the 23rd-century scientists working for General Chang finally developed a *Bird-of-Prey* that was capable of firing photon torpedoes while cloaked, but improvements in detection technology meant the advantage was short lived.

The commander of a *Bird-of-Prey* is a man of some importance and he is typically drawn from Klingon nobility and educated at the officers' academy. However, it is also possible for a Klingon warrior to rise through the ranks by earning battlefield commissions. Typically a *Bird-of-Prey* would be commanded by a captain but during the Dominion War, General Martok, who would later become Klingon High Chancellor, commanded the Ninth Fleet from his *Bird-of-Prey*, the *Rotarran*.

The *Bird-of-Prey* is controlled from the bridge which is located in the ship's 'head' at the end of the extended neck. The bridge is extremely

▲ A BIRD-OF-PREY that had been captured by Admiral James Kirk visited Earth in the 1980s, where it rescued two humpback whales from an attacking whaling ship and transported them to the 23rd century.



◀ The BIRD-OF-PREY can enter a planet's atmosphere and land on the surface. When it does so the wings sweep into a upward position, allowing the ship to land in the smallest possible area. Landing gear is deployed from the underbelly and a ramp is let down from the rear of the ship allowing the crew to walk down to the surface. The cloak can be activated on the surface making the ship invisible to passers-by.



- The Bird-of-prey uses a cloaking device that renders it invisible to the naked eye and sophisticated sensors. When the cloak is deactivated, the ship shimmers into view.
- It is common for Klingon crewmembers to fight among themselves, either to establish dominance over one another, or if an officer is questioning the course of action chosen by his superior.



functional to the point of spartan, with all available space devoted to consoles dedicated to controlling the ship's weapons, engineering and defensive systems.

A long corridor connects the bridge with the rest of the ship, which consists of crew quarters and several communal areas. With Klingons typically paying little attention to physical comfort, conditions in the living areas are every bit as spartan as on the bridge, with the mess hall serving as the social focus of the ship. Klingon crews prefer live, fresh food, such as live gagh (serpent worms) to replicated food so the ship's crew includes a chef, and the cargo includes livestock that can be freshly slaughtered. A massive table dominates the mess hall with strictly hierarchical seating. The most

honoured positions are at the heads and in the centre of the table. These are occupied by the most senior members of the crew with new additions to the ship often forced to fight in order to win a seat at the table.

#### **READY TO FIGHT**

In fact, fighting is common on Klingon ships. Every officer must constantly be on his guard for attacks from subordinates, who are obliged to challenge him to a duel to the death if they feel he is failing in his duties. Far from being a recipe for anarchy, this is a highly organised system that ensures that the crew maintains its honour and that only the best officers prosper. Strict rules ensure that a challenge can only be made if the officer is demonstrating cowardice,





- ▲ Over the years,
  BIRDS-OF-PREY have
  featured different styles
  of bridge. This version
  was used by
  Commander Kruge in
  the 2280s. By the late
  24th century, ships had
  a very different design.
- ◀ The BIRD-OF-PREY is a heavily armed ship. The single most powerful weapon is the photon torpedo launcher which is fitted to the underside of the nose section.

dereliction of duty or incompetence, and a Klingon may only challenge his direct superior.

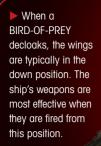
Klingons are famously devoted to their duty, and crew members spend much of their leisure time in training areas, practicing hand-to-hand combat as well as Mok'bara drills, with or without bat'leths. The hall is also used for occasions when the captain needs to assemble the crew, such as briefing a boarding party.

Despite the spartan arrangements it would be a mistake to think that life onboard is grim. A happy Klingon crew often sings while working (favourite songs tend to be from operas recounting the battles fought by semi-legendary warriors), and a good captain always keeps a supply of bloodwine on hand to reward the crew for their victories.



#### **DATA FEED**

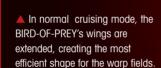
General Martok was already revered as a great warrior when he assumed command of the Klingon Bird-of-Prey, the Rotarran, which became his flagship during the Dominion War. In many ways he was the ideal Klingon soldier, and he inspired his crew to many famous victories. Under his command the Rotarran was involved in retaking the Bajoran station Deep Space Nine from the Dominion, in both battles of Chin'toka and in the final battle for Cardassia.





#### **DATA FEED**

Klingon vessels seen in the 22nd century are clearly predecessors of the later BIRD-OF-PREY and have a very similar though more basic design. These earlier ships didn't feature cloaking devices, but they were armed with wingtip disruptors.

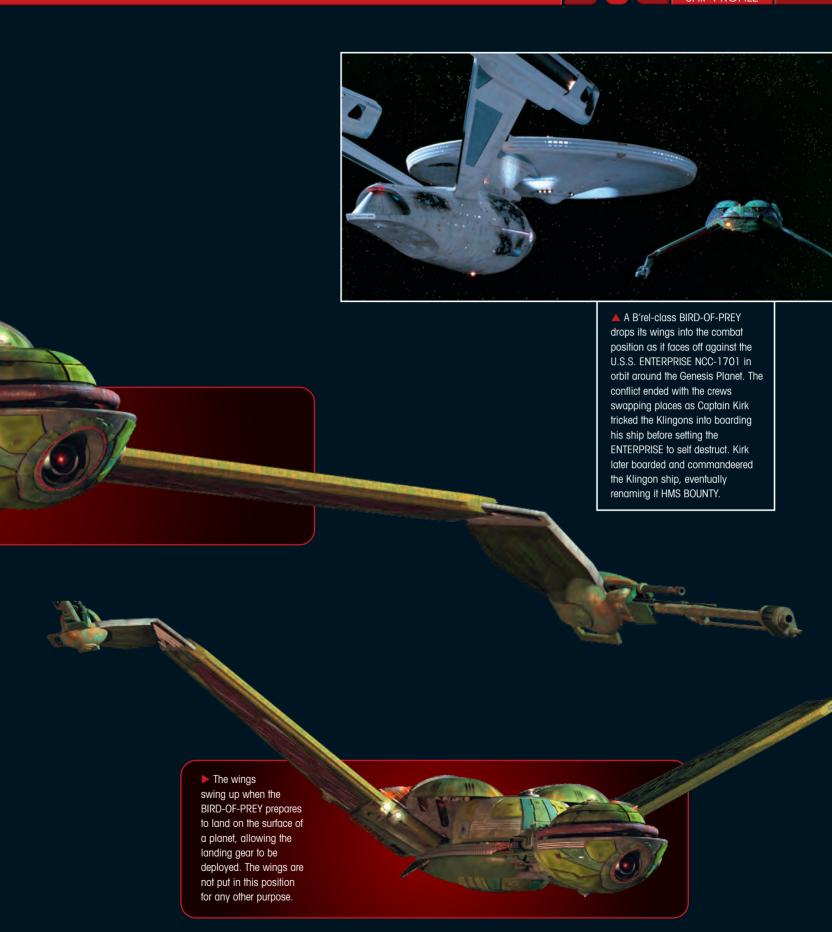


# Wing positions

ne of the most striking features of the *Bird-of-Prey* is its ability to move its wings into different positions each of which gives the ship a different advantage. The wing movements are achieved by using a redundant series of six electromechanical actuators, that are powered by three pairs of medium-power step-down plasma nodes. In flight mode the wings are held parallel to the body of the ship. This maximises the performance of the twin warp fields, which are generated by the superheated plasma that runs through the structure of the wings, where they energize the warp plates. In attack mode the wings are lowered to form

a triangle allowing the crew to concentrate firepower on a single target. In this position, the disruptors can draw on additional, highly-pressurised plasma, from the warp systems, and this significantly increases the destructive yield of the plasma bolts. The disruptors can, of course, still fire regardless of what position the wings are in. Unlike the larger Klingon battlecruisers, the *Bird-of-Prey* has also been designed to enter a planet's atmosphere and to set down on the surface, when it does so the crew exit from a ramp in the underside. While the ship is in the landing position the wings are raised enabling the deployment of the landing gear.

8 BIRD-OF-PREY IN ACTION



#### **CLOAKING DEVICE**

The cloaking device is one of the most important 'weapons' in the *Bird-of-Prey*'s arsenal. It uses an instantaneous teleportation field around the ship making it appear as if it isn't there. The technology was developed by the Romulans but was acquired by the Klingons in 2269, who have fitted it to their ships ever since. On the *Bird-of-Prey*, the emitter runs around the outside of the nose section and is capable of generating a field that covers the entire ship. The technology evolved constantly to counter improving sensor technology. For example, in the 2290s the Federation managed to detect a cloaked *Bird-of-Prey* by tracking its engine emissions.



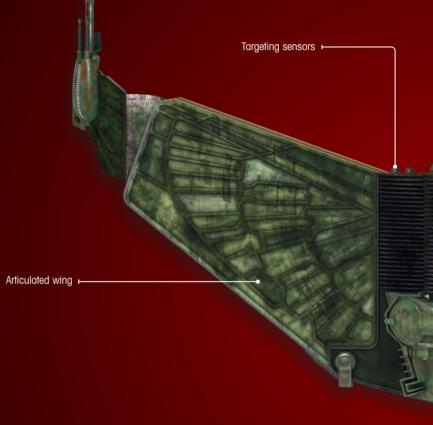


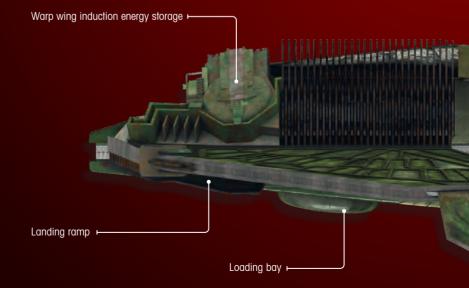
▲ The BIRD-OF-PREY's impulse engines generate a bright orange glow that can be easily seen from the back of the ship.

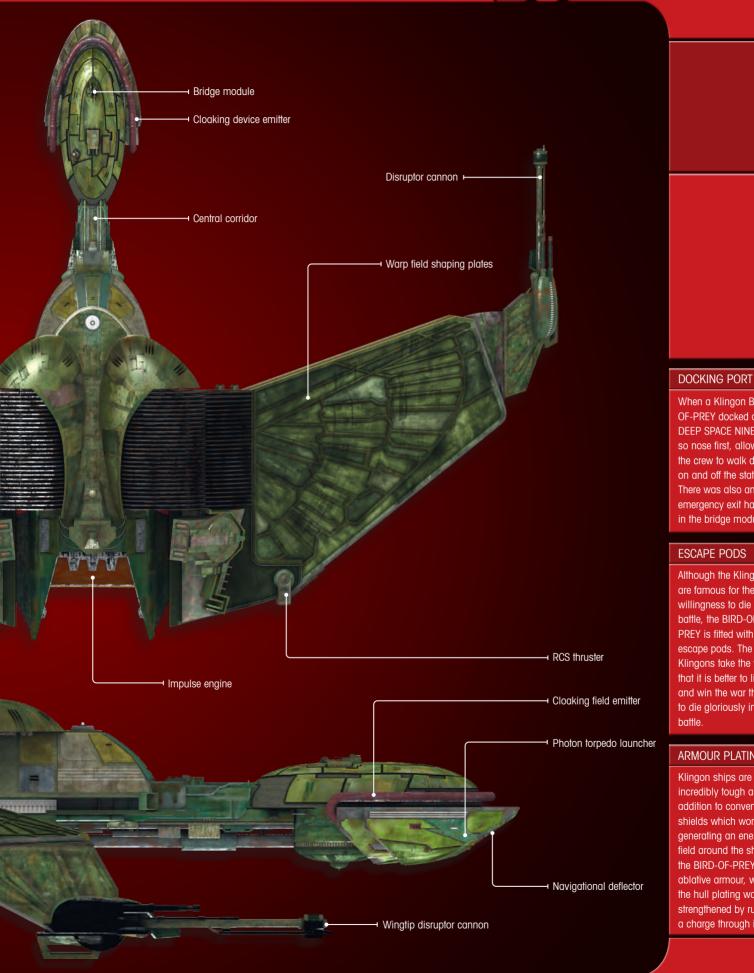


▲ The powerful Klingon disruptors work by firing concentrated bolts of plasma rather than a directed energy beam like a phaser.







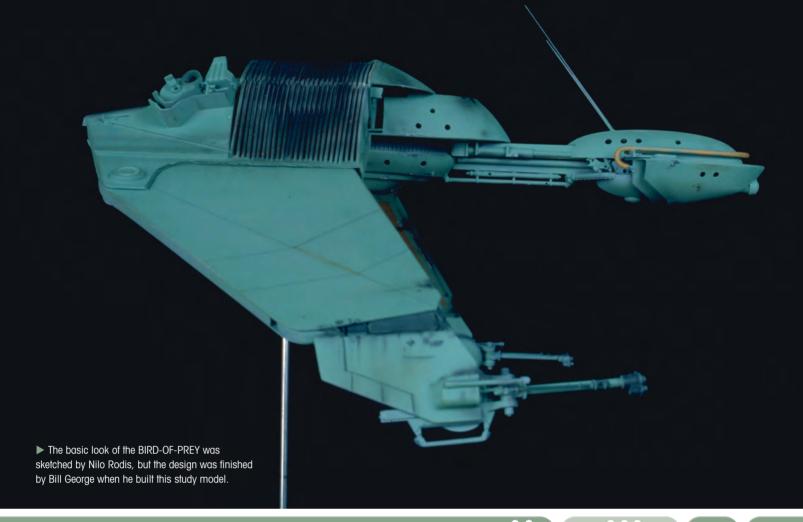


When a Klingon BIRD-OF-PREY docked at DEEP SPACE NINE it did so nose first, allowing the crew to walk directly on and off the station. There was also an emergency exit hatch in the bridge module.

Although the Klingons are famous for their willingness to die in battle, the BIRD-OF-PREY is fitted with escape pods. The Klingons take the view that it is better to live and win the war than to die gloriously in one

#### ARMOUR PLATING

Klingon ships are incredibly tough and, in addition to conventional shields which work by generating an energy field around the ship, the BIRD-OF-PREY had ablative armour, where the hull plating was strengthened by running a charge through it.



### DESIGNING THE

## BIRD-OF-PREY

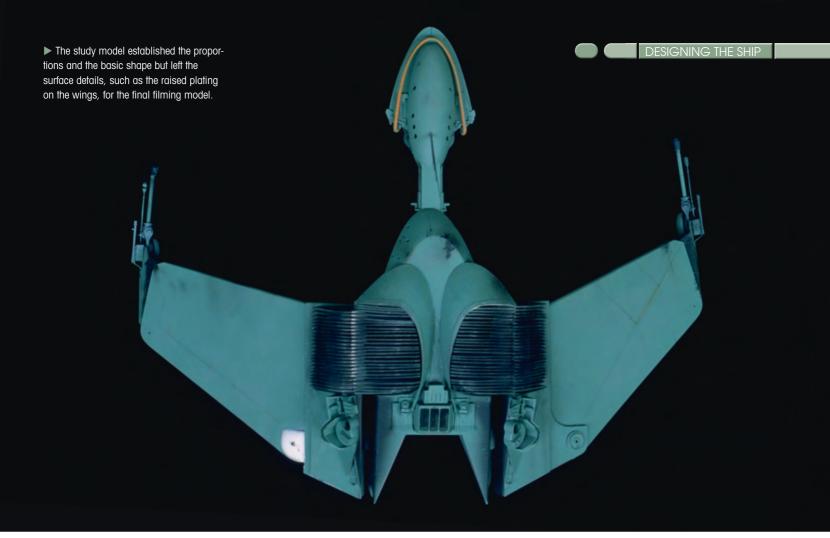
The look of the *Bird-of-Prey* presented a challenge as it was one of the first *STAR TREK* ships that wasn't designed for the original TV series.

ith its huge articulated wings, sleek frame and distinctive painted underbelly, the Klingon Bird-of-Prey is easily one of the most recognisable of all STAR TREK ships. From its debut in STAR TREK III: THE SEARCH FOR SPOCK it has become a mainstay of the Klingon fleet but things could have been very different. The earliest story outlines for the movie featured the Romulans as the enemy. But director Leonard Nimoy decided

that since the Klingons had played a much bigger role in the original series they would be a better choice as the movie's villains.

Even though the Romulans had been dropped, Nimoy and producer Harve Bennett were still keen to use the name *Bird-of-Prey* since they felt it was evocative and gave a strong direction for the design. Even so, coming up with a ship that looked different to anything that had come before while at the

same time being as visually striking as the Enterprise was far from easy. The original Romulan Bird-of-Prey had featured in the original series episode Balance of Terror but its design had been too simple and couldn't be used for a movie, so no one knew what this Klingon Bird-of-Prey should look like. Nimoy was keen for a brand-new design which would look like a bird on the attack – threatening and frightening. He even demonstrated the swooping



▶ Nimoy and the ILM team discuss the design of the BIRD-OF-PREY, while examining Nilo Rodis's concept drawings. Sadly the drawings have disappeared from the ILM and Paramount archives.

motion with his arms to the design team at Industrial Light and Magic!

#### **MOVING TO ATTACK**

At that same meeting the idea came out that the ship's wings should move into different positions — from cruising and then into an attacking position.

Nimoy added that he wanted the ship to have an outstretched neck to add to the impression of a bird swooping down into the water in pursuit of its prey.

Visual effects art director Nilo Rodis, was shown both the Romulan *Bird-of-Prey* and the original Klingon battlecruiser and asked for a design. At



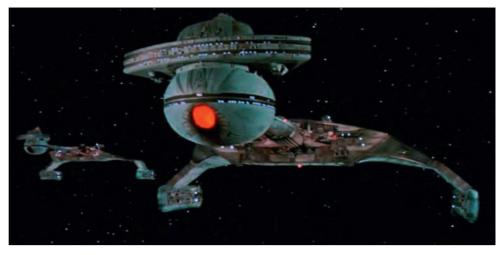
that point he'd never seen an episode of STAR TREK and knew next to nothing about Romulans, Klingons or their ships. He didn't feel particularly inspired by anything in the material until Nimoy handed him a picture of a Klingon warrior in full battle gear. Things then started to fall into place. Seeing the leather, metal and piping that made

up the elaborate Klingon uniforms, Rodis felt it was likely that Klingons would take a similar approach to their ships. To achieve the look he added a textured quality to the exterior of the ship, that not only echoed the decorative uniforms but also gave the impression of metallic feathers lending the ship a somewhat gothic or art deco feel. It

also served to make the ship look as different as possible to the Enterprise whose outer hull was smooth. To further emphasise the differences, Rodis gave the ship a bright green colour, which again contrasted with the blue/grey of the Enterprise.

#### **READY FOR WAR**

Rodis aot to work on a series of design studies incorporating both his and Nimoy's ideas. Being a war-loving species, he decided it was likely that Klingons would ensure that ships built for the purpose of raiding would carry as much weaponry as possible. So instead of just one gun, he placed weapons on either side of the wings and also in the nose. When Bennett explained that like the Romulans, the Klingon ships would also use a cloaking device, Rodis pitched the idea that when the ship decloaked the weapons would be the very first thing that materialised enabling the Klingons to appear with their guns blazing.



▲ The only established Klingon design that Nilo Rodis and Bill George could draw inspiration from was the Klingon battlecruiser, which had been upgraded for STAR TREK: THE MOTION PICTURE.

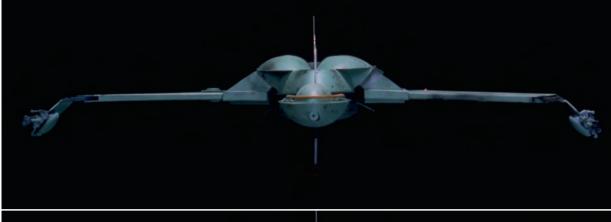
Once Nimoy and the rest of the production team had approved Rodis' sketches, modelmaker Bill George was then tasked with creating a study model. Although Rodis had established the bird-like proportions of head, neck and body, the design was far from complete, and Rodis had left plenty of room for interpretation, wanting George to bring his own particular brand of creativity to the project.

Along with sketches of the Bird-of-Prey, Rodis had also added a quick doodle of a big muscleman flexing his biceps in a downward motion. He explained to George that he wanted the finished ship to look something like a bodybuilder flexing the muscles in his biceps, or a brawny football player getting ready for a play. According to George, this abstract approach had a profound influence on





■ Early versions of STAR TREK III had the Romulans as the villains, not the Klingons, so Bill George painted a wing pattern on the ship's underside as a tip of the hat to the original Romulan BIRD-OF-PREY.



▼ From the very beginning, Leonard Nimoy had told ILM that he wanted the ship to swoop like a bird. This led to the idea of the wings moving into different positions. In normal flight, the wings would be stretched out perpendicular to the ship like this.



the design and he didn't hesitate to incorporate this idea with the basic proportions that he had been given. Running with the football theme, George added a chin guard to the ship's nose as well as massive shoulder pads to the base of the wings where they attached to the ship.

#### MUSCLEBOUND DESIGN

The wings were then placed in an attack position looking very like Rodis' idea of a posing muscleman. But while the 'shoulder pads' fitted in with Rodis' football concept, they made it difficult for the wings to move into the swooping and attack positions. George solved the problem by borrowing the interlocking 'radiator' feature found on old style radio sets. Acting as giant hinges, they enabled the wings to move up from a downward 'posing' position to that of a bird in full flight.

As a final touch, George, a long-time fan of the original series painted a

graphic on the underbelly as a tribute to the original Romulan *Bird-of-Prey*.

George's final model solidified the design, and he and Rodis shared the credit for the eventual design, which George describes as basically being three things in one "a football helmet, muscleman body and suitably threatening wings."

For Rodis what really mattered is that the design was so simple the basic shape could be drawn in only a few seconds and, as a result, it has gone on to become one of the most memorable ships in the STAR TREK universe.

▲ This angle with the wings down shows how the design was influenced by the silhouette of an American football player. The 'radiators' are the shoulder pads, the nose section is shaped like a helmet and even has a chin guard, with the wings echoing the shape of a muscleman flexing his arms.

I was very interested in the idea that it should have this outstretched neck as though you would see a bird flying to attack a creature.



BIRD-OF-PREY

## The first version of the *Klingon Bird-of-Prey* was a motorised practical model that turned out to be worth a small fortune.

fter the study model had been approved by director Leonard Nimoy, Bill George went on to build a detailed practical model that could be used for filming. In contrast to George's original study model, the shooting model was incredibly detailed. The finished model was 15" by 36" and covered with intricate deck plating, which had been inspired by Egyptian jewellery, art deco and the modern look for the Klingons themselves. Unlike any previous STAR TREK model, the Bird-of-Prey moved. Steve Gawley, from Industrial Light and Magic (ILM), put a motor inside so the visual effects team could film the wings moving into different positions.

ILM only built one version of the model for STAR TREK III, although they came close to building more. The Bird-of-Prey makes one of the most dramatic entrances in the history of STAR TREK when it de-cloaks above a tiny smuggling ship and VFX supervisor Ken Ralston originally planned the effect to be much more complicated than the finished result. The idea was that the ship would appear section by section, starting with the skeletal framework, followed by the rooms inside, before the exterior finally appeared. ILM even looked into building a model skeleton of the ship for the shot before abandoning the idea on the grounds that it was taking so long for the ship to

appear that their enemies would easily have enough time to blow them away!

The *Bird-of-Prey* was used in all the remaining original series movies, with the VFX teams building full-scale replicas of some of the landing gear and the exterior of the bridge for *STAR TREK IV*, and a miniature of a section of the wing with a disruptor cannon for *STAR TREK V*.

The model continued to be used on STAR TREK: THE NEXT GENERATION but by now the motors in the wings rarely worked properly so it made only infrequent appearances and the wings were always stuck in the same position. When a fleet of Klingon ships appeared at Deep Space Nine in the episode The Way of the Warrior the VFX team cheated by using dozens of Hallmark Christmas ornaments that could be easily destroyed without damaging the filming model.

Soon after this, the effects team built the computer-generated version of the *Bird-of-Prey*, which has been used ever since. Now that the ship was CG, the wings could once again be moved and the *Bird-of-Prey* was able to swoop across a planet's surface with its guns blazing. The original studio model was eventually sold at auction at Christie's in 2006, where it fetched no less than a quarter of a million dollars, more than 20 times the original estimate.



▲ Bill George works on the original studio model that was created for STAR TREK III: THE SEARCH FOR SPOCK.



 $\blacktriangle$  A computer-generated version of the BIRD-OF-PREY was created for its many appearances on STAR TREK:DEEP SPACE NINE.

### ON SCREEN



#### **TRIVIA**

In the original STAR TREK television series, the BIRD-OF-PREY is a Romulan rather than a Klingon ship. When Leonard Nimoy took the decision to make the switch to the Klingons in STAR TREK III he was reluctant to lose the name for the ship so decided that the Klingon captain Kruge had somehow acquired a Romulan ship, probably by stealing it. However, on the TV series STAR TREK: ENTERPRISE it is established that Klingons had had ships with a similar design for over a hundred years meaning that Kruge cannot have stolen the ship.



referred to as having phasers rather than

### In early episodes of STAR TREK: THE NEXT **GENERATION Klingon ships are sometimes**

FIRST APPEARANCE: STAR TREK III: THE SEARCH FOR SPOCK

TV APPEARANCES:

STAR TREK: THE NEXT GENERATION;

STAR TREK: DEEP SPACE NINE

DESIGNED BY:

Nilo Rodis, Bill George

#### **KEY APPEARANCES**

#### STAR TREK IV: THE VOYAGE HOME

After recovering Spock's body from the Genesis Planet and using a stolen Bird-of-Prev to head to Vulcan in STAR TREK III, Kirk and his crew must return to Earth to face the consequences of disobeying orders. When they arrive the planet is under attack from a mysterious probe and the crew have no choice but to take their Bird-of-Prey into the past where they must recover two humpback whales who can communicate with the probe. Although heavily modified, the Klingon ship is very unfamiliar to them and they barely make it back alive.

#### STAR TREK: THE NEXT GENERATION 'A MATTER OF HONOR'

As part of an officer exchange programme Riker is sent to serve as the first officer on the Klingon Birdof-Prey the IKS Pagh. Although the Federation and the Klingons have been allies for decades, neither group understands much about the other. While he is serving on the Pagh, Riker learns how life operates onboard a Klingon ship and the audience gets its first real introduction to Klingon culture. Fortunately Riker is a quick study since his Klingon commander decides to attack the Enterprise...



the ones used in STAR TREK V and STAR TREK GENERATIONS, have featured a periscope like device that the commanding officer can use to target the weapons. Nothing like this was ever seen in STAR TREK: DEEP SPACE NINE where the BIRD-OF-PREY made by far the greatest number of appearances.

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## STAR TREK



