













SYSTEMS

SHEET 7/7

SYSTEMS

Bridge The Bridge accupies the upper half of the head (at of the Forward Toryedo Bry) - and carries all stations necessary for Interstellar, Interplanetary, and Atmospheric Flight (as well as Vertical Take-Off and Landing), Engineering and Science functions.

Attack Center The Attack Center occupies the lower half of the head (aft of the Forward Torpedo Bay). The stations therein are tocussed on Tactical Maneuvering (impulse dog-fighting), Weapons Fine Control (disruptine cannon and torpedo launchers), and Detense/Athubash Systems (horce-field generator and clacking device). The Tactical Maneuvering Station is also capable of controlling Wara Fight - abbet without the sophisticated cartographic and navigational aids within the Bridge Heim and Avigation Stations.

Section 3.1 Disrupter Cannon

The primary weapons are specially designed over-sized coaxial disrupter connon, mounted in pods slung below each wingtip. These cannon are extremely over-powered for such a relatively small vessel, drawing heir power requirements directly from the warp core. The disrupter cannon are mounted on motorized, self-synchronous gimbals capable of traversing 15 degrees to port or starboard from dead ahead, as well as elevating or depressing 15 degrees to well. They are montaly operated by the Gamee, but can be stared directly to the Captain's cheir in the Attack Canter.

Section 3.2 Disrupter Guns

A second pair of ancilliary disrupter guns are also housed within each pod. Their reduced energy demand can be fed from the Outboard Fusion Reactors.

Section 3.3 Torpedo Launchers

The torpado leunchers are the secondary weapons system. It should be noted that Klingon torpado thrusters are less powerful than their Startleet counterparts (due to a greater percentage of internal volume being dedicated to warhead size.). This is compassated for by a powerful linear induction cannon integral to the launcher. The forward launcher is mounted on a motorized gymbal, capable of depressing 15 degrees from dead ahead. This allows the launcher to be used with greater effect against ground targets. The aft launcher is more standardized, with no relational aspects. The forward launcher maazine holds 70 torpeoles, while the aft magazine holds 24.

Section 3.4 Defense Shield Force-field Generator

Klingan Detensive Shield technology diverges from Starfleet systems. Starfleet designs feature an external hulf-bonded entitier grid, comprised of non-cryopenic aloy-initised ceramic superconducting cables laid out in a sparse array. The hull is divided into zones, with the grid of each zone fed by a definitient force-fail deneratory with takar

Klingon designs feature one large force-field generator for the entire vessel (larger vessels such as the KTinga-class Battlecruiser have a spare tucked away somewhere else within the hull on stand-by).

The emitter conduit system is one continuous 1.3 meter-diameter non-cryogenic alloy-initised ceramic superconducting pipe tracing throughout the emitre speceframe in an unbroken loop - beginning and ending at the generator. It passes through the spar, head, main huit, wings and disrupter pud structs. For passage from the main huit to the wings, a telescoping articulator sizeve within the things-plate mechanism allows the pipe and other conduits (such as control feets and the power conduit to the main disrupters) unbroken flow. When emergized, the emitter conduit creates both the exterior detaviev torse's fluid bubble' and also the internal structural integrity field.

Section 3.5 Cloaking Device

The cleaking device utilizes the defensive shield force field generator to create a subspace distortion around the enclosed vessel - a distortion powerful enough to hide 11 two visual and other sessors. The cleaking device is an ancillary system adjacen to the defensive shield force field generator. When activated, it modulates the subspace field energy assing through the emitter conduit. At the same time, the site warp care massively increases benergy deferrely the generator. The result is a "bubble" of invisibility, as impinging photons, greatings and techyons are translated into subspace, transited to the surface of the field 180 degrees opposite, and then translated back to its original energy from - still travelling along the same rector - and emitted. While activating or descritating the cleaki, the defensive frace field must tuity reinitiatize - rendering the vessel winereable for a short time measured in seconds).

The clocking device, disrupter cannon and toryedo launchers have extreme energy demands relative to the size of the Bird of Prey. A warp care compact enough to fit within the hull of this small vessel cannot teed the unrecicuus appetted of the clocking device and either weapons system (although it can power both the clock and the warp drive system at low warp speeds). This has led to the maxum: "A Bird of Prev cannot fine when clocked".

Note: There has been one infamous Bird-of-Prey capable of firing while cloaked: This vessel had been removed from active service and sequestered in a covert drydock for an experimental refit. A second dedicated warp core was installed within the two-level cargo bays. This second warp care's seip purpose was to lead the two weapons systems, leaving the main warp core to supply power to the cloaking device and propulsion systems. This one-of-a-kid vessel - created for one mission - was the according which prove the rule.

Section 4.1 Warp Core

Following Klingon doctrine warp core is mounted horizontally on Deck 2. It is larger and has greater endurance han its Starled-equivalent - due to the multiple high energy demants routinely placed on it. Its primary function is to feed warp plasma to the warp coils for faster-then-light travel. Its secondary function is to feed a small fraction of its plasma to the impulse drive manifolds, while reserving the limit sthere to neargize both the defector shield force field generator and the primary disrupter cannon (leading the cannon via the telescoping articulator sleeve within the hinge-plate mechanism. The trainer's function is in the merize the clained device.

Section 4.2 Outrigger Deuterium Fusion Reactors

To save internal hull volume for other systems, twin deaterium fusion reactors are mounted externally. Each exector sits an a deficited triangular hull module on the upper wing surfaces aft of the hingeplate mechanism assemblies. Their primary function is to power the ventral VTOL Thrusters. As a secondary hunction, they can power the impulse drive at 21% nominal. They can also acergize the secondary hunction, they can power the impulse drive at 21% nominal. They can also acergize the secondary hunction they can power the impulse drive at 21% nominal. They can also acergize the secondary hunction they can power be impulse drive at 21% nominal.

Section 4.3 Batteries

Cold-lusion batteries quite similar lo Federation designs are used for emergency and auxiliary power storage. Due to space constraints, there are no dedicated battery compartments. Batteries are mounted singley or in banks in any compartment with sufficient empty deck space.

Section 5.1 Warp Drive

As with Startleet's Deflant- and Staamrunner-classes, the Bird-of-Prey's warp call assemblies are not housed within externally-monited outrigger necelles, but rather are housed in wint hays within the hull. This has advantages: the vassel is extremely maneuverable (FTL yaw, pitch and roll rates are unmatched) and as well he warp call assemblies are much less winarable to hustle fire (bildes) within the armored hull). Disadvantages include roppir time (in order to replace a call, armor panels must be detached, and the hull plates must be call), and crew safety (the proximity of exposure to secondary rediction/fields emitted by the warp plasma as a side effect). To ameliorate this hazard, the inner buildesids of the ware on call assemblie have are covered with rediction shieldion.

Section 5.2 Impulse Drive

The impulse drive manifolds of a Bird of Prey are powerful for its relatively small tonnage. The reasons are two-told: Combat Maneuverability (the Bird-of-Prey has a 'dog-lighting' performance envelope matching that of some large fightercraft), and atmospheric flight (trans sonic). Normally, the impulse drive manifolds are ted plasma directly via a shart from the warp core - typassing the need for tusion generators. In case of warp core stud-down or unavailability, the manifold can be partially-powered (21% nominal) by the Outrigger Fusion Reactors - at the expense of all other systems.

Section 5.3 Reaction-Control Thrusters

The manazvering thrusters are mounted on the trailing edge of the wings. Each thruster assembly possesses a dorsal and ventral circular variable-thrust manifold - comprised of 8 segments - ted by a single micro-reactor adjacent aft. Each segment fires an ionized particle beam canted 21 degrees of vertical towards the center. The manifold segments can be individually activated and throttled independently in concert. The effect is to 'swivel' the thrust off-center without actually moving the manifolds. This allows the vessel to roll, pitch, yaw, transit up and transit down while only using two assemblies.

In concert with the Impulse Drive, the 'dog-fighting' maneuverability enabled by this thruster system is impressive. Especially noteworthy is the roll capability - paralleled by the banket-turn performance.

Section 5.4 Vertical Take-Off & Landing Thrusters

The VTOL thrusters are mounted on the undersurface of the wings. Each thruster assembly has a manifold with twin variable thrust nozzles. The thrusters are nominally powered by the Outrigger Deuterium Fusion Reactors. However, they can be led from the warp core.

Section 6.1 Crew Facilities - Quarters

Crew quarters are extremely standardized on all Klingon vessels, with no difference between ranks except for the Captain. Enlisted quarters are spartan, and consist of 3 compartments: main (sleeping area), head (billet, sink and shower), and locker/armory. There is no provision for fining. The Captain's quarters consist of 3 compartments: main (dining room/ office), sleeping area, head (billet, sink and shower), and locker/armory. In keeping with Klingon tradition, Captain's quarters have secure access (calded ladferwan).

Section 6.2 Crew Facilities - Recreation

The recreation center of every Klingon vessel is its 'Hall'. This large compartment serves as Mess, Treining Facility/Symmasium, Tavern, Court of Justice (a unique point of view), Symmasium, Tample and Ceremonial Room. To starboard is the Krichen - equipped to prepare meals either from fresh supplies or book raaks. Adiacent is the larder.

Section 6.3 Life Support

Life support facilities aboard Kingon vessels is somewhat primitive and centralized - but due to their simplicity are extremely durable and easy to maintain/repair. Atmospharic recycling uses a bruteforce appreach: hesh air is pumped thoughout the vessel via a branching network of pleaums and ducks. Return air makes its way to the recycler via corvidros and vents. This may seem somewhat risky from a Starfleet point-of-view, but is accepted since it frees up volume needed for other items deemed qualy essential cAs a back-up, every large compartment or group of smaller compariments possesses its own dedicated auxiliary air & paired. Ancillary luxuries such as scents and sounds are neither required nor desired.

Section 6.4 Science Facilities

The Science / Medical Lab is extremely limited, little more than a data analysis and retreival system connected to the vessel's Information gathering Systems.

Section 6.5 Life Support

Due to the size of the vassel and crew complement, there are several main Life Support systems, which contain the vassel's atmosphere conditioning systems (Air referest/recycle, temperature, /umidity/ionization control), plus controls for grevitational and inertial damping generaturs. Additionally, most decks have or share a smaller emergency life support room, which will handle that teck(s) neets should the main system po down.

Section 7.1 Cargo Bays

The B'rel class Bird⁴ot-Prey has two amidships bays - port and starboard of the central corridor on Dock 5 - with an upper bay extending into teck 4. Each has a dock hatch which gives access to the ventral hull doors, allowing loading from a planetary surface. As well, each has a ceiling hatch, which gives access to the dorsal hull doors via a tunnel-airlock, allowing loading from an overhead creare. The port key clusteins created spare parts, tools and diagnostic equipment, and doubles as the ship's Damage Control Center.

These bays serve several mission-specific tasks.

Patrol: Both hays serve their nominal purpose, holding food and other consumable stores as well as generalized cargo to allow for extended range and time-on-station.

Deep-Strike: Both bays hold modular deuterium tanks and antimatter containment pods - plus anciliary equivment to connect same to the vessel's waro core.

Assault: The port bay holds food, consumable stores, and heavy weapons, while the starboard is outfitted as a barracks for an infantry platoon.

Rescue & Medical: The port bay holds food, consumable stores, and heavy weapons, while the starboard is outfitted as a field hospital.

Prisoner Transfer: The port bay holds food, consumable stores, and heavy weapons, while the starboard is outfitted as a brig.

DECK DIRECTORY

Main Hull

- Deck 05
 - Warp Coil Bay Main Level 3-Personnel Transporter Room
 - Cargo Hold Main Level
 - Main Engineering Low-Bay
 - Dilithium Sequencer Impulse Plasma Distributor
 - Lower Impulse Manifold Bay
 - Main Gangway & Airlock Bay
 - Vertical Access Crawlway
 - Elevator Shaft

Deck O6

- 1 Waste Processing Bay 1 Defense Shield Force-field
- Generator Bay
- 1 Cloaking Device Chamber
- 1 Main Gangway & Airlock Sub-Bay

Outrigger Hull & Wing Assembly

Port & Starboard

Upper Level 1 Fusion Reactor Mount Bay - Upper Bav

Wing Level

- Navigational Deflector Bay
- Hinge Plate Motor Bay Telescoping Conduit Articulation Bay
- Landing Leg Retraction Alcove Upper Bay
- Battery Bay
- Subspace/Radio Transceiver Bay
- Transporter Transceiver / Buffer Bay
- Maneuvering RCS Thruster Bay

1 I Lower Level

3

- 1 Landing Leg Retraction Alcove Lower Bay 1 VTOL Thruster Bay
 - Scale 0 1 2 3 4 5 10