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STAR FLEET COMMAND



STAR DATES: 7206.01-7412.01 INCLUSIVE

ADM. HEIHACHIRO NOGURA
CHIEF OF STAFF

SFDF: 327043

CLASSIFIED

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Thanks to just some who have made the Star Trek universe grow; Gene Roddenberry, Andrew Probert, Harold Michaelson, Lee Cole, Jeff Maynard, Geoffrey Mandel, Doug Drexler, the Magicam crew, Doug Trumball, all of whom have had a hand in shaping the technology of Star Trek into an entire universe of possibility of the future.

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These are not light issues, but rather very crucial to the security of the Federation and it's members. The Military Staff Committee wrestled over these points for six months, I myself being called before them to testify on current and near term fleet status. They have heard the opinions of representatives of member planets, the military and support groups, and engineers and scientists from across the Federation. In their deliberations, they hammered out three major changes in policy.

1) Firstly, the Dreadnaught Series NK-1 will be sent back into the research and development phase to incorporate the new state-of-the-art technology into it's design.

2) Second, the Constitution class will, one by one, be refitted and rejuvenated with all the new technology applicable to them at this time. This action will produce almost entirely new ships, which will be able to function as the integral part of Star Fleet for another

INTERCOMMAND COMMUNICATION

TO: JOINT CHIEFS OF
STAR FLEET COMMAND

FROM: ADM. HIERACHIRO NOGURA
CHIEF OF STAFF, SEC



UNITED FEDERATION OF PLANETS
STAR FLEET DIVISION
SYSTEM - SOL EARTH
SAN FRANCISCO, NO AM

STARDATE: 7206.15

VIA: DATA FILE COURIER

SUBJECT: Federation Security and Star Fleet Strength

Gentlemen:

Effective SD7205.2 a new program of fleet rejuvenation was adopted by the Military Staff Committee. The justification of this act is well represented in this document, as it comes about in light of three current facts:

- (1) Much of the backbone of Star Fleet, the Constitution class starships, are presently approaching their 18 year duration limit,
- (2) Reports that the Klingon Empire recently unleashed it's K'tinga class battlecruiser has brought much concern to the Federation's outlying members,
- (3) New technology is becoming applicable for incorporation into the fleet. However, the time factor involved in the launching of the Dreadnaught class would leave the fleet at half strength for over one solar year.

These are not light issues, but rather very crucial to the security of the Federation and it's members. The Military Staff Committee wrestled over these points for six months, I myself being called before them to testify on current and near term fleet status. They have heard the opinions of representatives of member planets, the military and support groups, and engineers and scientists from across the Federation. In their deliberations, they hammered out three major changes in policy.

i) Firstly, the Dreadnaught Series MK-X will be sent back into the research and development phase to incorporate the new state-of-the-art technology into it's design.

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STAR FLEET TERRAN HEADQUARTERS · SAN FRANCISCO, CALIF.

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INTERCOMMAND COMMUNICATION

22 terran years. This decision came about through analysis of test results from structural integrity testing on six of our present fleet of heavy cruisers done at Starbase 10 during R&R and systems rejuvenation, under orders from the Military Staff Committee.

iii) The level of priority for the Epsilon series listening posts along the disputed Klingon/Federation border will be elevated to top bill, accelerating the completion of all nine outposts by two terran years. This move will bring an unsurpassed monitoring capability to our intelligence system and allow for more advanced warning of a potential Klingon buildup of forces in that area.

This shift of emphasis from the dreadnaught to the heavy cruiser may draw concern from some of you. Let me clarify by saying that I have been assured by the committee's director that the dreadnaught still has strong support among his colleagues. For those of you who consider this ship a kind of pet project, you can rest assured that she still will play a key role in the growth of the fleet in the coming years. In addition to R & D studies, the tactical branch of Star Fleet will continue dreadnaught maneuvering and tactical simulations, and effortswill be made to recieve a funding buildup for a class prototype by the time the last heavy cruiser leaves the orbital dockyard.

Aware that modification of facilities has already begun to accomodate the dreadnaught work crews, the Star Fleet Orbital Dockyards management will, effective this stardate, begin preparation to recieve the first of the heavy cruisers within two months (terra). Construction of the new dreadnaught drydock facilities will be accelerated to allow alterations for accomodating work crews for the heavy cruisers. This work will last no more than eleven months (terra). During this time period the first starship in the yards will disembark. Once the drydock facility # one is complete construction will commence on a second dock to further accelerate the rejuvenation program.

Other details such as the modifications which will be made to the MK-IX series, the schedule/timetable showing order of refurbishment, the refit process, and current intelligence on the Klingon and Romulan empires, is all contained in this document. This material is not to be discussed outside of the ring of command. Our adversaries, the Klingons in particular would find these developments a direct invitation for conquest in their bordering sectors of Federation space.

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CONFIDENTIAL
SPECIAL REPORT

THE KINGDOM AND
ROMANIAN EMPIRES

INTELLIGENCE



A REPORT TO THE CHIEF OF STAFF

CONFIDENTIAL
SPECIAL REPORT

**THE KLINGON AND
ROMULAN EMPIRES**

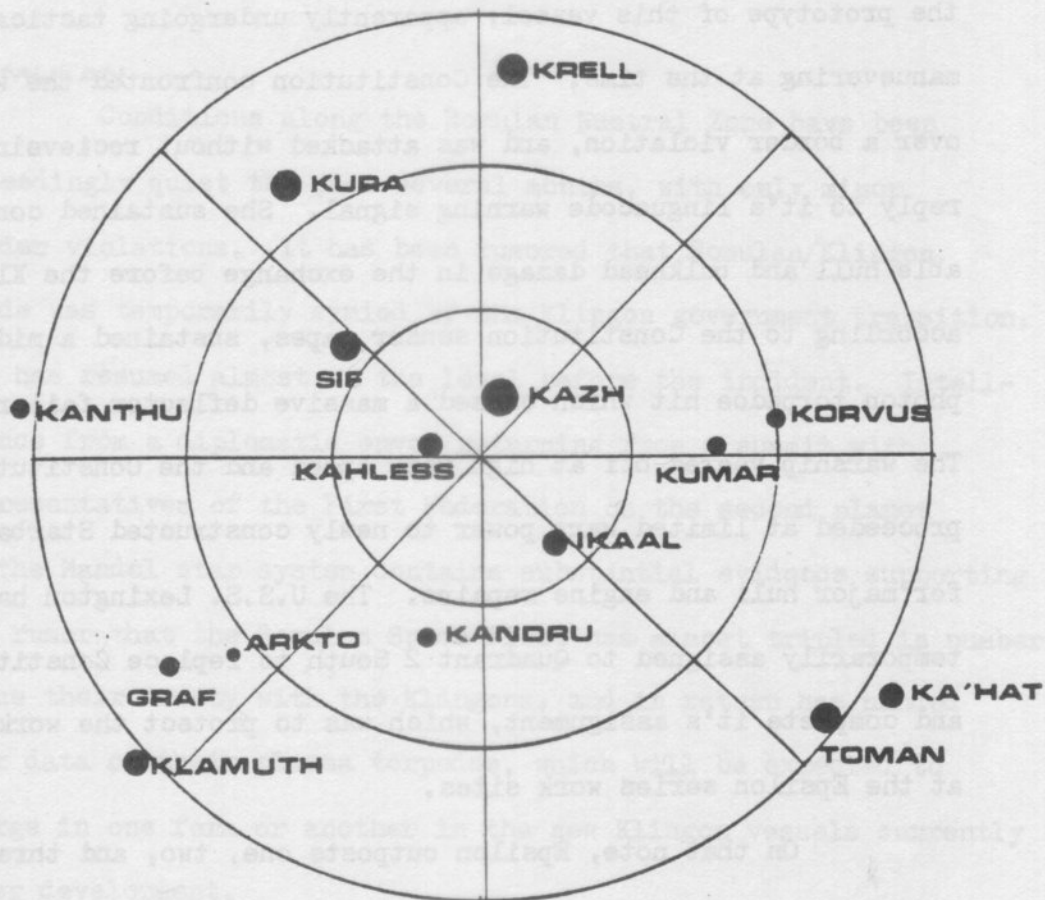
SD 7206.1

KLINGON

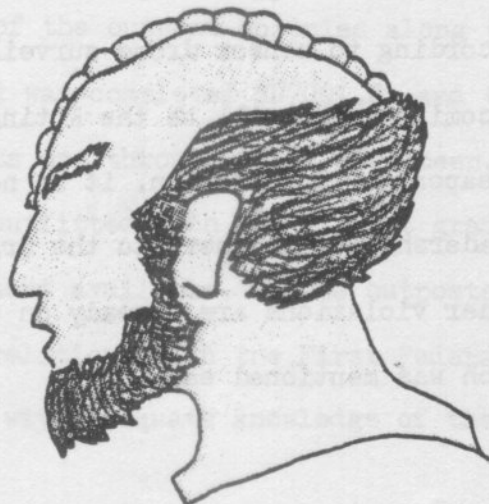
Current sources indicate a new faction of Klingons now control the Klingonese government and man their ships. It is rumored that an old faction, which has again gained control, is based from Kahless, neighbor system to that containing the Klingon homeworld of Kazh. It was this faction which originally organized the systems in the region into what we now know as the Klingon Empire. Most dominant in the Empire's early history, they differ somewhat in appearance from those in recent encounters. These Klingonoids are traditionally more hostile in manner and appearance, sporting a very dominant rib which stretches from the base of the forehead at the top of the nose, over the top of the head to the base of the neck.

Their ascension to power reportedly occurred over a year and a half ago, unseating a more lenient or sympathetic government. Since the takeover, any opposition has reportedly been suppressed or annihilated, and the new leaders have thrust full steam into a program of arms buildup, outfitting their warships with massive weaponry. They have begun development of a new class of battlecruiser, referred to as the K'tinga class. The U.S.S. Constitution was the first Federation starship to encounter

KLINGON EMPIRE INTERNAL ARRANGEMENT



OLD REGIME - KAHLESS



KLINGON EMPIRE
INTERNAL AFFAIRS
CONFIDENTIAL

the prototype of this vessel, apparently undergoing tactical maneuvering at the time. The Constitution confronted the warship over a border violation, and was attacked without receiving a reply to its linguacode warning signal. She sustained considerable hull and bulkhead damage in the exchange before the Klingon, according to the Constitution sensor tapes, sustained a midship photon torpedo hit which caused a massive deflector failure. The warship veered off at high warp speed and the Constitution proceeded at limited warp power to newly constructed Starbase 27 for major hull and engine repairs. The U.S.S. Lexington has been temporarily assigned to Quadrant 2 South to replace Constitution and complete its assignment, which was to protect the work crews at the Epsilon series work sites.

On that note, Epsilon outposts one, two, and three are now complete, and are now either totally outfitted or nearly so. From current knowledge, the new Klingon government has now completed the first stage of testing on its dreadnaught-type carrier ship. Although these ships will apparently be massive, they will not be invincible, according to sensor drone surveillance. The real threat in the coming years will be the K'tinga, with its swiftness and advanced weaponry. In addition, it is not yet apparent if the new Klingon leadership will adhere to the Organian accord of SD3199.5. Border violations are already on the rise, the most serious of which was mentioned earlier.

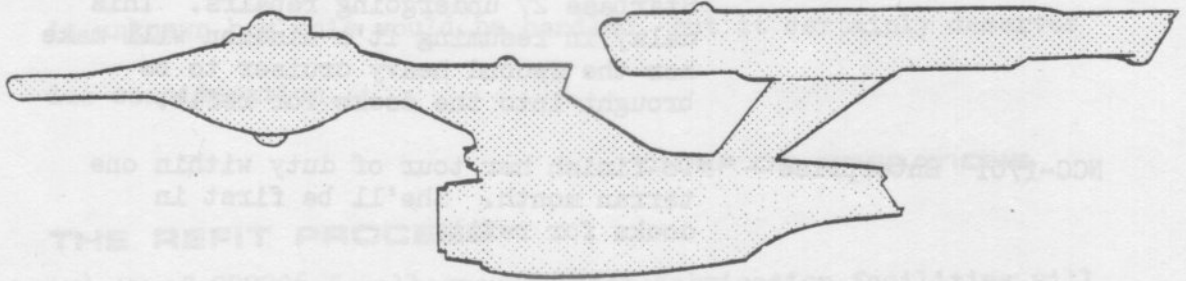
ROMULAN

Conditions along the Romulan Neutral Zone have been exceedingly quiet the past several months, with only minor border violations. It has been rumored that Romulan/Klingon trade was temporarily symied by the Klingon government transition, but has resumed almost to the level before the incident. Intelligence from a diplomatic envoy returning from a summit with representatives of the First Federation on the second planet of the Mandel star system contains substantial evidence supporting the rumor that the Romulan Space Fleet has almost tripled in number since their treaty with the Klingons, and in return has handed over data on their plasma torpedoe, which will be expected to emerge in one form or another in the new Klingon vessels currently under development.

In a long range look at the Romulan government, the Praetor is believed to be reaching his upper years, therefore a change of power should be expected in five solar years or less.

The last of the outpost colonies along the neutral zone to be reconstructed was completed SD7001.0, and the colonies now number 14. Outposts one through eight have been, or are in the process of being, outfitted with the highest grade of listening and scanning equipment available. These outposts along with continued diplomatic relations with the First Federation, should provide Star Fleet with adequate knowledge of the status of the Romulan Empire.

REFITTING THE



CONSTITUTION CLASS

CONFIDENTIAL
SPECIAL REPORT

FLEET STATUS

As of SD7206.1, the current status of the fleet is as follows:

- NCC-1700 Constitution - Damaged during first armed contact (border raid) with prototype Klingon K'tinga class battlecruiser. Presently in dock at Starbase 27 undergoing repairs. This delay in resuming it's mission will make her the second heavy cruiser to be brought into the docks for refit.
- NCC-1701 Enterprise - To finish her tour of duty within one terran month. She'll be first in docks for refit.
- NCC-1703 Lexington - Will be on alert with Yorktown while first Enterprise and then Constitution are refitted. Lexington will follow the Constitution into the dock, now projected to be SD7606.
- NCC-1704 Yorktown - Will enter dock SD7801.
- Current projections call for Drydock Facility number two to be complete and operational SD7801.
- NCC-1705 Excalibur - Enter dock number two SD7801.
- NCC-1706 Exeter - Enter dock number one SD7906.
- NCC-1707 Hood - Enter dock number two SD7906.
- NCC-1710 Kongo - Enter dock number one SD8104.
- NCC-1711 Potempkin - Enter dock number two SD8104.

The starship Republic (NCC-1371) is suspected not to be structurally adaptable to the modifications planned due to the fact that this ship was originally a prototype structural test article, and later outfitted for active duty. It will continue in it's present capacity

as a training vessel, with the possibility of modifications to her command centers to be compatible with the newly redesigned systems of the rest of the heavy cruiser class.

It is currently recommended that, due to the fact this will leave only nine of the original twelve heavy cruisers, that one and possibly two of our scout/destroyer fleet be brought into the docks to be used as the base for two new heavy cruisers. It is unknown how this would be handled, but it certainly deserves due consideration.

CHIEF OF OPERATIONS

THE REFIT PROCESS

- 1.) As of SD7206.5, all ground based fabrication facilities will commence producing components for heavy cruisers to be refitted, as per specifications set forth in the approved final redesign dated SD7205.2.
- 2.) Warp Nacelle Test Articles 101 and 104 are already in the process of being uprated to flight readiness, a process which should be completed by or before SD7210.1, and will allow additional time for more warp simulation testing to add to the present data. This entire program is being carried out at the Star Fleet Orbital Simulation Yards high above Tokyo. These new nacelles will be ready for mating to the first heavy cruiser into the docks.
- 3.) While construction continues on the drydock facility, the first starship into the yard, rumored to be the Enterprise instead of the Constitution, will upon disembarking undergo

CONFIDENTIAL
SPECIAL REPORT

further structural integrity testing, while fuels and consumables are purged. This testing will give additional insight as to exactly what bulkheads are showing the greatest wear.

- 4.) The following procedure will begin upon the Enterprise's arrival into the drydock facility, now scheduled for SD7304.1:
 - A. Power Down - All main systems shut down, only life support systems left intact.
 - B. Life support on standby throughout the ship's extremities, while internal life support left intact.
 - C. Warp nacelles and pylons will be severed from their bulkheads by explosive bolts at the base of the pylons. These nacelles will be towed to the Star Fleet Orbital Simulation Yards for dismantling, and any usable components will be re-finished, while unusable components will be recycled into the basic raw materials they were made from.
 - D. Outer hull skins pulled, exposing inner decks to work crews for dismantling and refitting.
 - E. Internal bulkheads are strengthened or replaced.
 - F. Upgraded computer system replace current Duotronic primary computer. The new computer, the Duotronic II, was also developed by Dr. Richard Daystrom, who has incorporated features of his failed M-5 computer into this model. We are pleased to have Dr. Daystrom fully functional once again in the mainstream of Star Fleet technology. His

illness was a great loss to us.

G. Newly designed technical and support facilities, living quarters, medical complex and command facilities will be installed and pressurized from midship outward. Design finalization for these centers will occur after the last of the suggested changes are received from key Star Fleet personnel.

H. Installation of power systems, to include impulse units, advanced linear intermix chambers, magnetic vacuum bottles, and control/monitoring facilities on the expanded engineering decks.

I. Initial testing of electrical and computer interfaces. These tests will continue throughout the remainder of the refit process.

J. Exterior structural changes begin with the relocation of the photon torpedoe launch tubes, installation of new phaser banks and addition of external docking ports to the ships design. Work will begin at this time on the support pylons for the warp nacelles.

K. The warp nacelles will be towed to the dockyard when pylon construction reaches midpoint. Mating to the pylons should occur no later than SD7404 in order to keep to the departure schedule.

L. Installation of a new navigational deflector dish, addition of new maneuvering thrusters and reaction control system, and the adhesion of the deflector shield

grid to the outer bulkhead support beams.

- M. Installation of new outer skins and full power and pressure checks. This will include testing of intership forcefields (inertial dampeners, gravitational and anti-radiation forcefields). Any and all repairs or re-installations of minor components will be carried out at this time. This should be taking place about SD7412, to be followed by full scale integration/synchronization tests and warp simulation. The new Enterprise should leave the dockyard SD7502 on it's initial shakedown cruise.

Due to a new manufacturing method, there should be no need for the outer skin coating presently used on most fleet vessels.

- 5.) The addition of Montgomery Scott, Commander, U.S.S. Enterprise, to the engineering staff when the Enterprise docks will be a great asset to this program, as few fleet engineers have his insight into the functional requirements of the heavy cruiser class starships.

CHIEF OF ENGINEERING

APPROVED REVISIONS FOR THE HEAVY CRUISER

I. PROPULSION

II. WEAPONS AND DEFENSE

III. SUPPORT FACILITIES & EQUIPMENT

WARP DRIVE

DILITHIUM ENERGIZED ANTI-MATTER

NACELLES

These units will contain advanced technology which is known only to a few scientific and technical groups under close scrutiny of Star Fleet Command. The group mainly responsible for the application of these recent breakthroughs is the Board of Starship Engineers, under the direction of Montgomery Scott, Commander, U.S.S. Enterprise, via subspace correspondence.

The main feature of the new system is the warp pulsing unit, housing the dilithium crystal converter assembly and the new magnatomic amplification crystal. This new crystal is the largest and purest synthetic crystal ever produced, and its amplification qualities surpass all existing crystals by having the lowest energy loss/% amplification ratio. Its projected life span is 150 terran years. Also new will be the space warp generator, which will have a new, sleek design and improvements to compliment the increased power available.

POWER VANES

This is another feature of the new warp drive. The anti-matter bottles will be located at the front base of the secondary hull where the outer skin panels will be made to blow away for bottle ejection in case of a crisis. Also mounted with these bottles will be a storage capacity for matter which will contain some non-recyclable ship's wastes.

The advanced linear intermix chamber consists of a vertical shaft leading from the anti-matter bottle station, upward to a pivotal point where a deflection throat channels power either directly upward into the deflection crystal of the redesigned impulse engines, or horizontally feeding warp energy to the magnatomic initiator stage of the new nacelles. Energy seals will be strategically located throughout the power vane system to insure a margin of safety to personnel in the event of a hull rupture or internal damage.

SAFETY

It is advised that anti-radiation suits be donned during the initial of operation at warp power levels. Due to the new design and experience from the old, the warp nacelles will be pressurized only while shut-down and cool, with anti-radiation suits donned. Access to them during operation will require the use of standard X(negative)E environmental suits available in locker bays near support pylon bulkheads.

MAIN PROPULSION UNIT

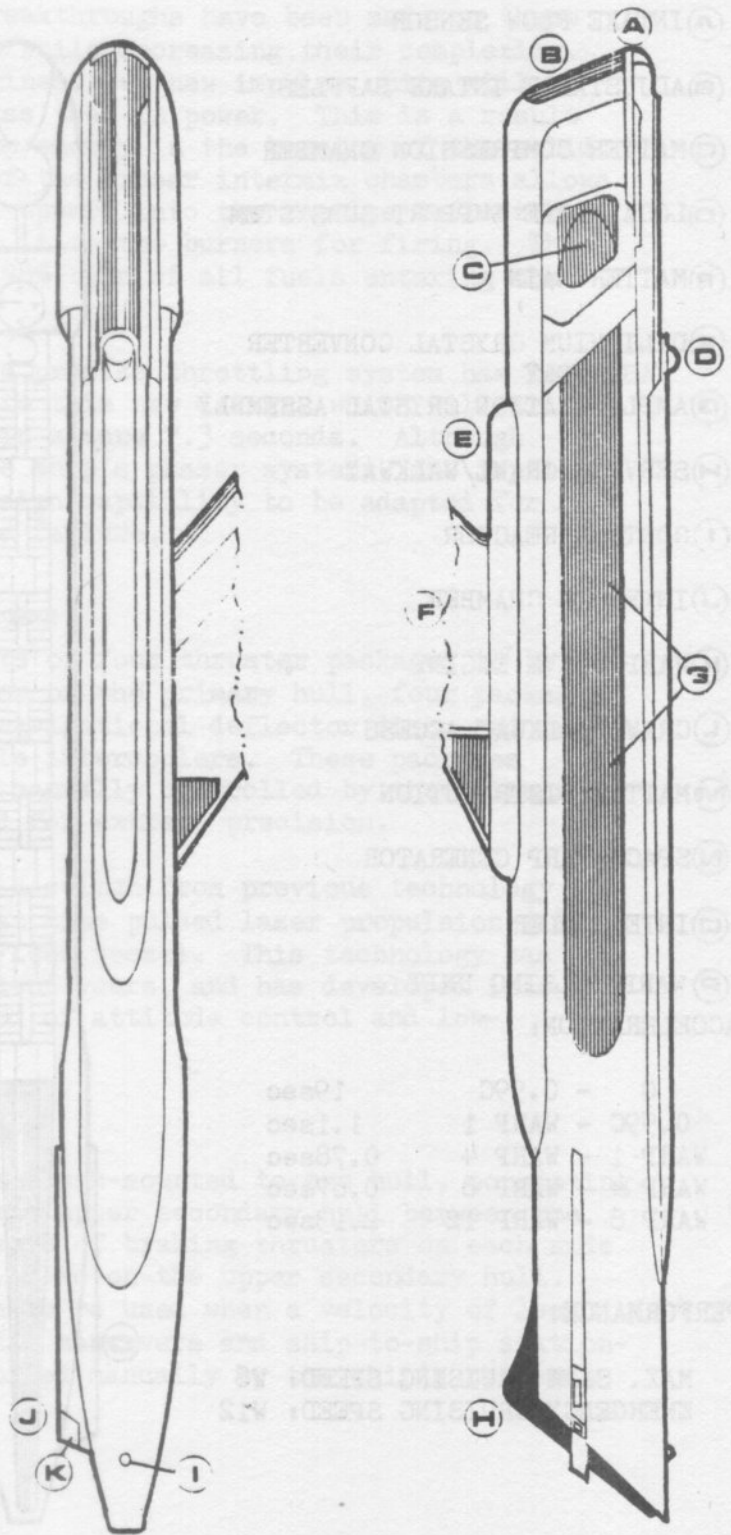
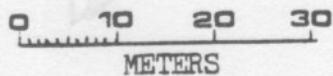
PULSED WARP DRIVE - EXTERNAL

- (A) FLOW SENSOR
- (B) SPACE ENERGY/MATTER ACQUISITION
- (C) MAGNATOMIC FLUX CONSTRICTION
- (D) MAGNATOMIC AMPLIFICATION CRYSTAL
- (E) CONTROL REACTOR
- (F) SUPPORT PYLON
- (G) MAGNATOMIC FLUX CHILLERS
- (H) SPACE WARP GENERATOR
- (I) RUNNING LIGHT
- (J) REACTION CONTROL THRUSTER
- (K) INTERCOVER
- (L) HULL ILLUMINATION BEACONS



SPECIFICATIONS:

LENGTH	154.8m
DRAFT	18.3m
BEAM	12.6m



TOP PLAN

OUTBOARD PROFILE

MAIN PROPULSION UNIT

PULSED WARP DRIVE - INTERNAL

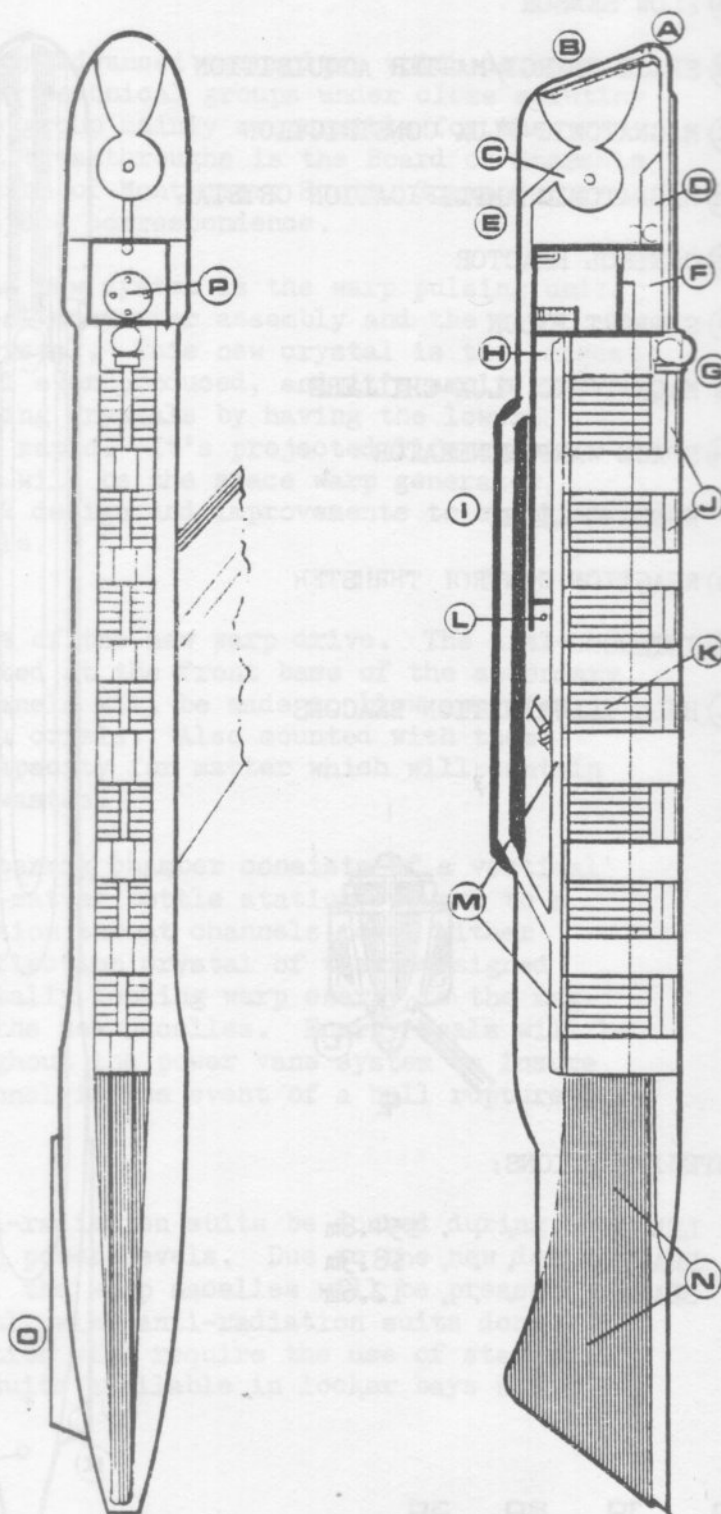
- (A) INTAKE FLOW SENSOR
- (B) ADJUSTABLE INTAKE BAFFLES
- (C) MATTER COMPRESSION CHAMBER
- (D) LOCAL LIFE SUPPORT SUBSYSTEM
- (E) MATTER MAIN
- (F) DILITHIUM CRYSTAL CONVERTER ASSEMBLY
- (G) AMPLIFICATION CRYSTAL ASSEMBLY
- (H) SERVICE CRAWL/WALKWAY
- (I) CONTROL REACTOR
- (J) INTERMIX CHAMBER
- (K) WARP DRIVE ENGINE
- (L) CRAWL/WALKWAY ACCESS
- (M) MATTER DISTRIBUTION
- (N) SPACE WARP GENERATOR
- (O) INTERCOOLER
- (P) WARP PULSING UNIT

ACCELERATION:

0	- 0.99C	19sec
0.99C	- WARP 1	1.1sec
WARP 1	- WARP 4	0.78sec
WARP 4	- WARP 8	0.67sec
WARP 8	- WARP 12	2.13sec

PERFORMANCE:

MAX. SAFE CRUISING SPEED: W8
EMERGENCY CRUISING SPEED: W12



SECONDARY PROPULSION

SYSTEMS

IMPULSE ENGINES

Many mechanical breakthroughs have been made on these units to improve performance while decreasing their complexity. Instead of the current 4 engines, two new impulse units will match them in size and surpass them in power. This is a result of more extensive use of warp energy in the burning of the solid impulse fuel. The addition of the linear intermix chambers allows warp energy to be channelled upward into the impulse deflection crystal, which in turn feeds it to the burners for firing. This process allows a very clean 98% burn of all fuels entering the firing chamber.

In addition, a more precise throttling system has been chosen to be incorporated into this new design, which will allow acceleration from 0 to 0.5C in a mere 7.3 seconds. Although relieved of the burden of the ship's phaser systems, the impulse units will still have the design capability to be adapted for backup in case of warp engine failure.

REACTION CONTROL SYSTEM

This system consists of four thruster packages to be located on the outer perimeter of the primary hull, four packages surrounding the main sensor/navigational deflector dish, and one package on each of the nacelle intercoolers. These packages function as one unit and are manually controlled by the helmsman or can be computer controlled for extreme precision.

This new system is a switch from previous technology being used, as it is the first time pulsed laser propulsion will be incorporated into a Star Fleet vessel. This technology has just been rediscovered in recent years, and has developed into a versatile and precise method of attitude control and low-thrust propulsion.

MANUEVERING THRUSTERS

These units will be flush-mounted to the hull, consisting of four thrusters located on the upper secondary hull between the warp nacelle pylons, and two sets of braking thrusters on each side of the interconnecting dorsal, also on the upper secondary hull. These are particle beam motors to be used when a velocity of less than 0.1C is desired for orbital maneuvers and ship-to-ship station-keeping. They are also controlled manually by the ship's helmsman or via computer.

OFFENSIVE WEAPONS

SYSTEMS

SHIP'S PHASERS

These are the standard units presently used in most armed, large-scale Federation vessels, with a few modifications. The new Constitution class, however, will be equipped with 9 banks of 2 each, instead of the current 3 banks of 2 each. In addition, the phaser systems redesign allows it to draw its power directly from the main engines, greatly increasing their range and potency, thus making this starship class the most powerful fleet in the known galaxy. This new system will be governed by its own bank of fire control computers which will be separate from the ship's computers, but linked to them in a real-time, data-sharing capacity. Manual interaction with this computer system will be accomplished through the new Weapons and Defense station on the ship's bridge, or duplicate stations on the emergency bridge and in the phaser manual monitor stationed in the forward phaser systems control room. Use of the latter two stations may only be achieved by voice-print computer command by the ship's commanding officer.

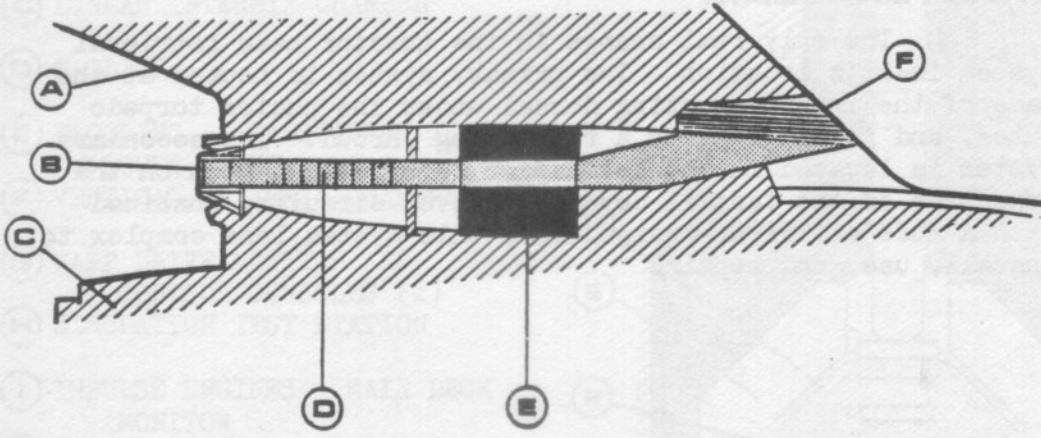
PHOTON TORPEDOES

One of the major design changes of this starship class will be the relocation of the Photon Torpedo Launch System. This has been brought about because of severe problems disposing of the radioactive exhaust produced by the magnophoton forcefield when it comes in contact with the neutronium-lined launch tube. The current location in the upper decks of the primary hull has proved inadequate, and at times, dangerous due to the cancelling effect it has on the deflector grid system just aft of the bridge. During the refit process, the entire system will be removed from the primary hull and relocated in the base of the interconnecting dorsal, with an adequate exhaust system.

Photon torpedo firing will also be controlled via the same fire control computers governing phaser fire. Other modifications will include improved and expanded storage of the photon torpedo fuel (matter and anti-matter), and a new rapid fire capacity which will allow firing of all 20 stored torpedoes in a matter of seconds.

PHOTON TORPEDO LAUNCH SYSTEM

The new deflector guidance system to be incorporated into the Photon torpedo will give the new system, save the ability to draw power from the war engines, with the back-up of liquid power under conditions of lost war capability. In addition, the new system will further improve the system ability to protect the ship. The new system will provide the added protection will be the gas and starboard outer skin of the secondary hull and around the perimeter of the primary hull. These and other modifications have increased the deflection capacity of the entire system by as much as 50% in some areas of the ship.



- | | |
|----------------------------|--------------------------------------|
| (A) INTERCONNECTING DORSAL | (D) LAUNCH TUBE |
| (B) TORPEDO EXIT | (E) TORPEDO FUEL STORAGE AND LOADING |
| (C) SECONDARY HULL | (F) EXHAUST BAFFLES |

0 1 2
METERS

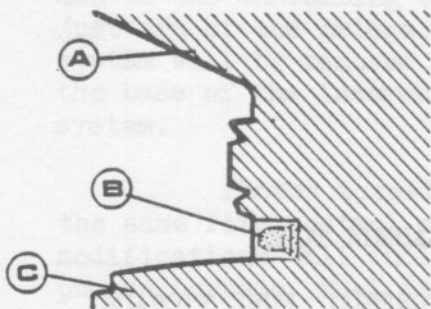
DEFENSIVE SYSTEMS

DEFLECTORS

The new deflector grid system to be incorporated into the Constitution class will, like the new phaser systems, have the ability to draw power from the warp engines, with the back-up of impulse power under conditions of lost warp capacity. In addition, more grid area will further improve the systems ability to protect the ship. The areas receiving the added protection will be the port and starboard outer skins of the secondary hull, and around the perimeter of the primary hull. These and other modifications have increased the deflection capacity of the entire system by as much as 63% in some areas of the ship.

TRACTOR BEAM

The only real change in the tractor beam retrieval system is it's location. The primary system is housed at the base of the interconnecting dorsal under the photon torpedo tubes, and is shielded by a retracting shroud. The secondary system is located in the new hanger deck control room on the underside of the fantail cove. Improved circuitry combined with a more efficient design makes this system less complex to install, use, and repair.

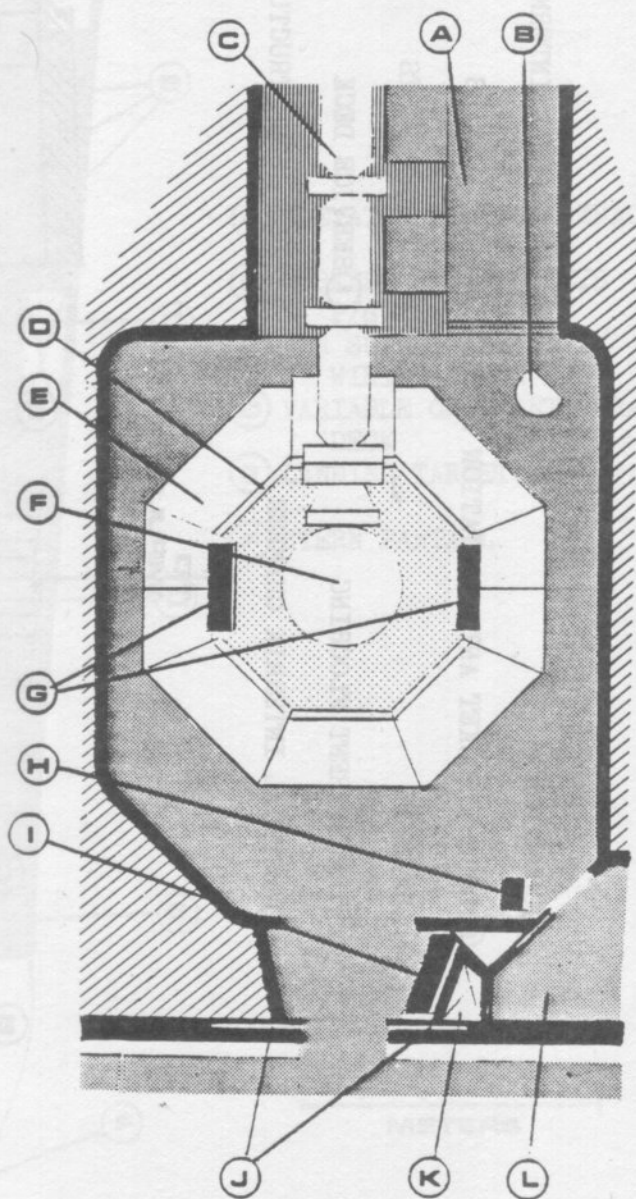


- (A) INTERCONNECTING DORSAL
- (B) TRACTOR BEAM - RETRACTED
- (C) SECONDARY HULL

ENGINEERING - MAIN DECK

SECONDARY HULL

- (A) SERVICE WALKWAY
- (B) ONE-PERSON ELEVATOR
- (C) LINEAR INTERMIX CHAMBER
- (D) RAILING
- (E) FLOORING - TRANSPARENT TO LOWER DECKS
- (F) VERTICAL INTERMIX CHAMBER
- (G) WARP DRIVE MONITOR AND CONTROL CONSOLES (2)
- (H) SIMULATION TEST STATION
- (I) IMPULSE ENGINES - MAIN DECK MONITOR
- (J) DOUBLE POCKET ANTI-RADIATION DOORS
- (K) WIRING TRUNK
- (L) STORE ROOM - FOR REPLACEMENT CIRCUITRY CARTRIDGES, TEST AND REPAIR EQUIPMENT

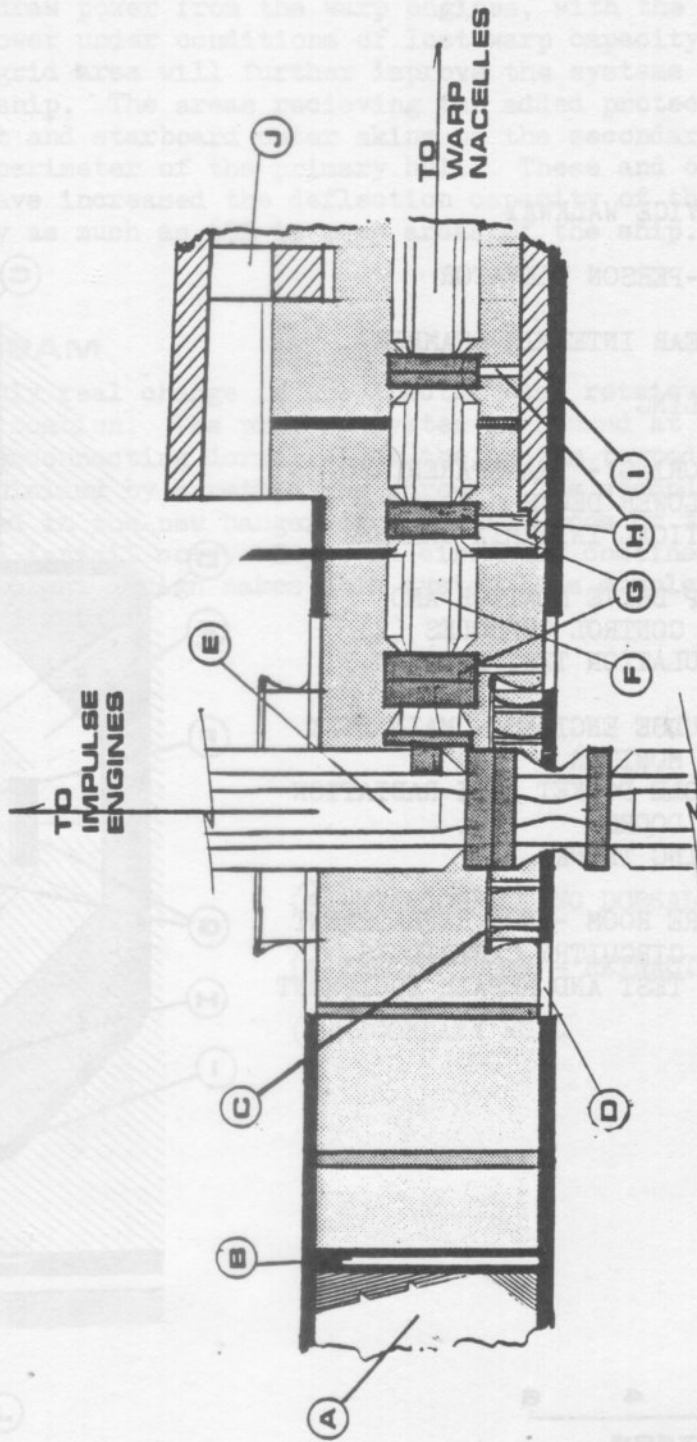


0 2 4 6
METERS

ENGINEERING - MAIN DECK

SECONDARY HULL - ELEVATION

- (A) CORRIDOR
- (B) DOUBLE POCKET ANTI-RADIATION DOORS
- (C) RAILING
- (D) TRANSPARENT FLOORING
- (E) VERTICAL INTERMIX CHAMBER
- (F) HORIZONTAL INTERMIX CHAMBER
- (G) ENERGY SEALS
- (H) SUPPORT POSTS
- (I) SERVICE DECK
- (J) HULL SUPERSTRUCTURE



HANGER DECK

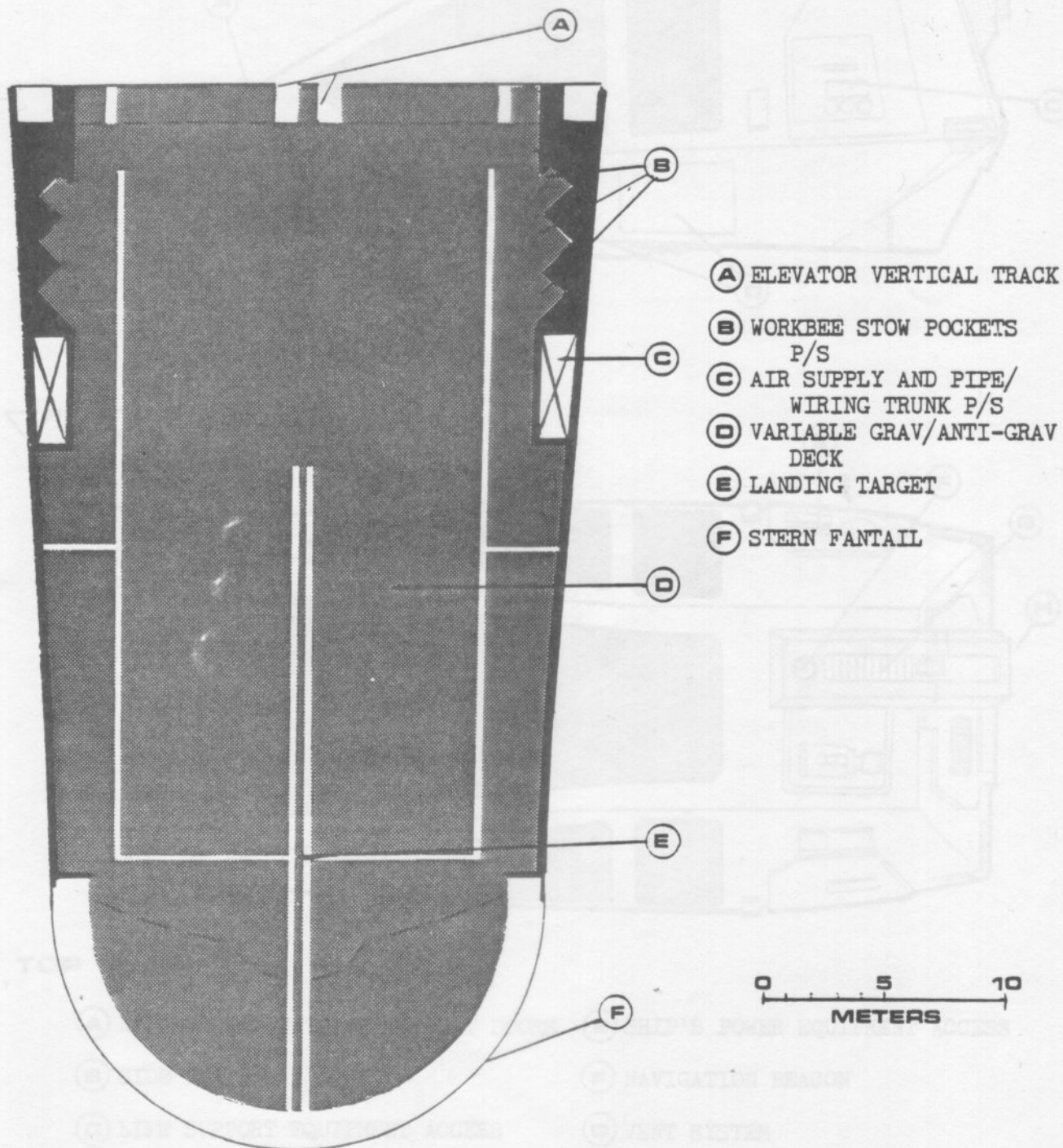
TOP PLAN - APPROVED REDESIGN

SPECIFICATIONS:

L.O.A. - 2.75

V.B.A. - 1.25

H.O.A. - 1.25



0 5 10
METERS

WORKBEE

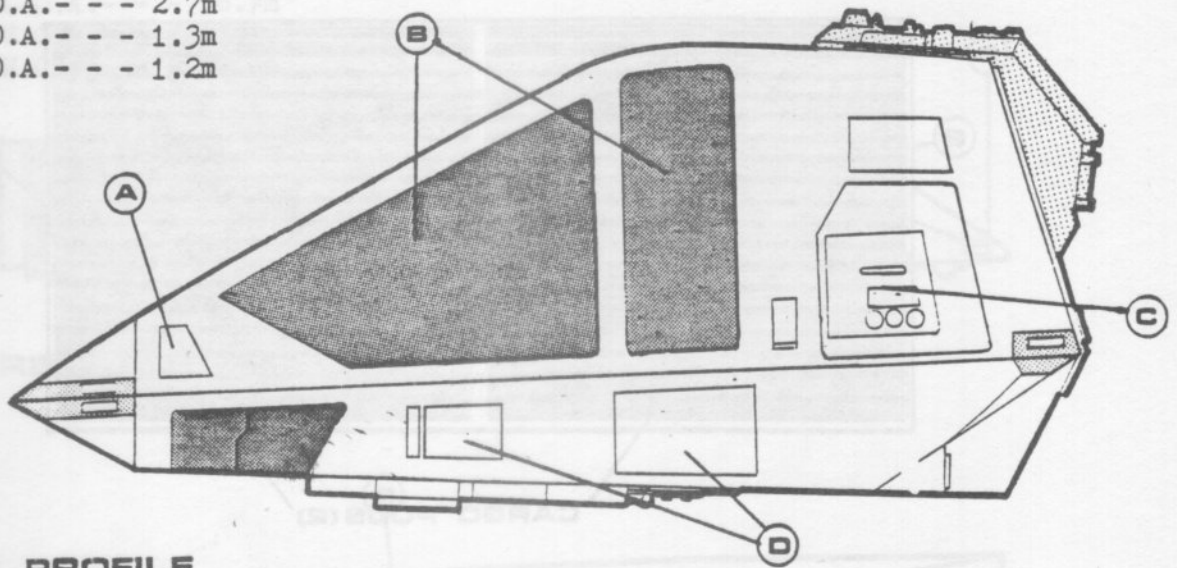
SINGLE-OPERATER UTILITY VEHICLE

SPECIFICATIONS:

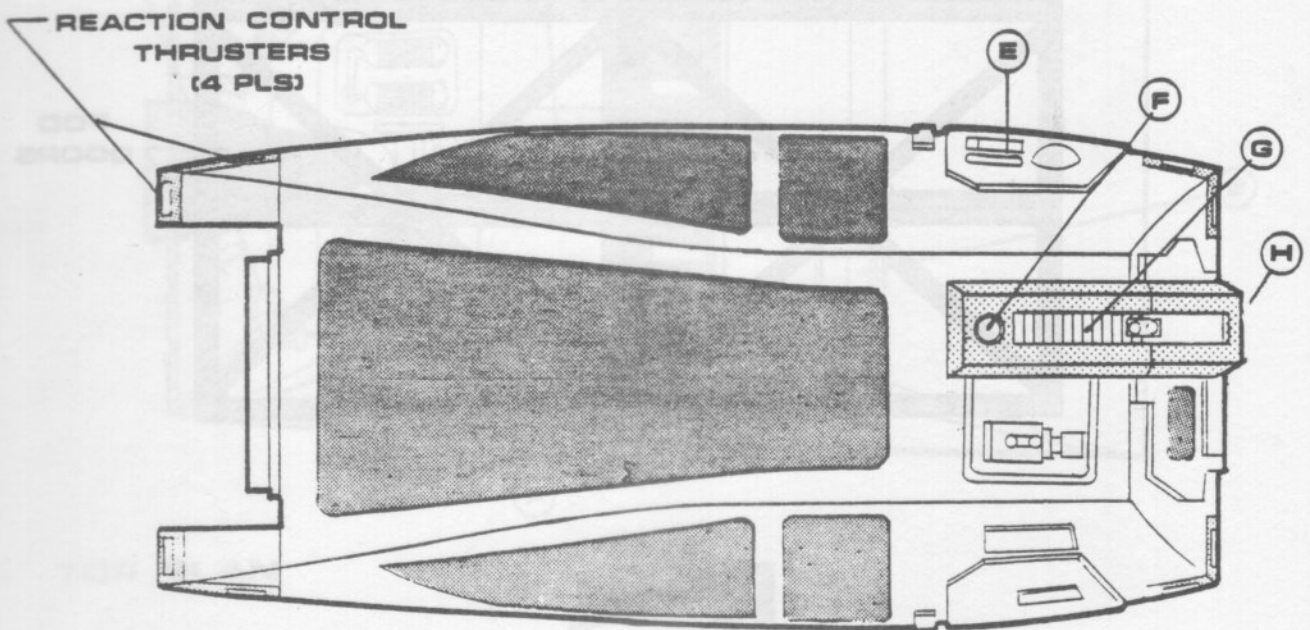
L.O.A. --- 2.7m

W.O.A. --- 1.3m

H.O.A. --- 1.2m



PORT PROFILE

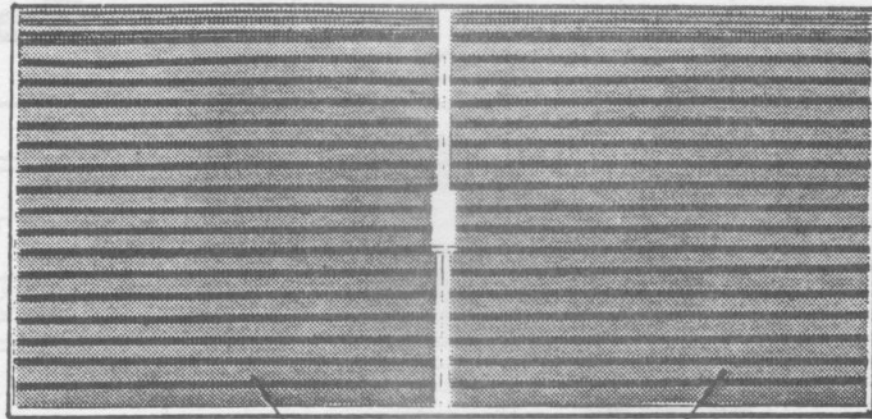


TOP PLAN

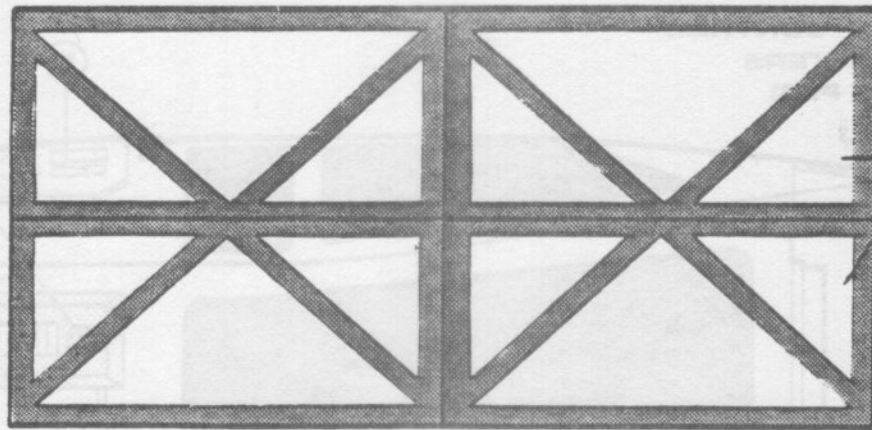
- | | |
|--------------------------------------|-----------------------------------|
| (A) HARD-DOCK ATTACHMENT POINT DOORS | (E) SHIP'S POWER EQUIPMENT ACCESS |
| (B) SIDE PORTS | (F) NAVIGATION BEACON |
| (C) LIFE SUPPORT EQUIPMENT ACCESS | (G) VENT SYSTEM |
| (D) WORK PACKAGE CONTACT POINTS | (H) MAIN GENERATOR |

CARGO CONTAINER

TYPICAL - STANDARD STAR FLEET



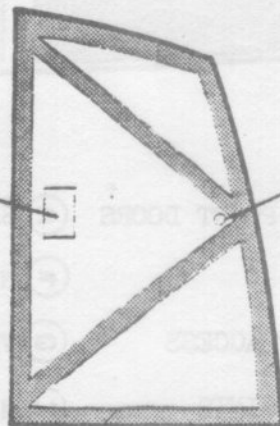
CARGO PODS (2)



POD
DOORS

POD LABEL

ANTI-GRAB
INDICATOR



0 1 2
METERS

LONG RANGE SHUTTLE

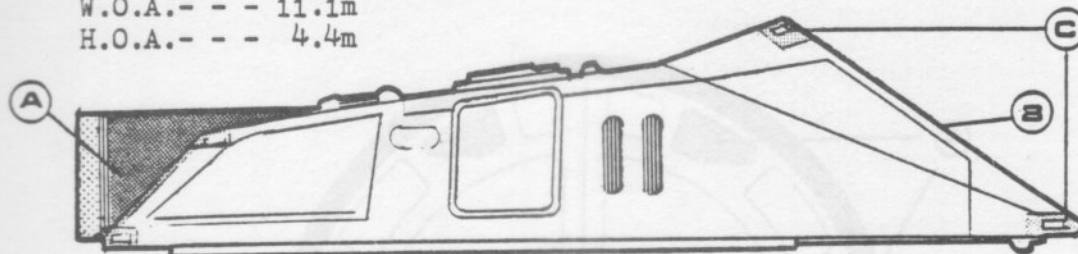
STAR FLEET PERSONNEL TRANSPORT

SPECIFICATIONS:

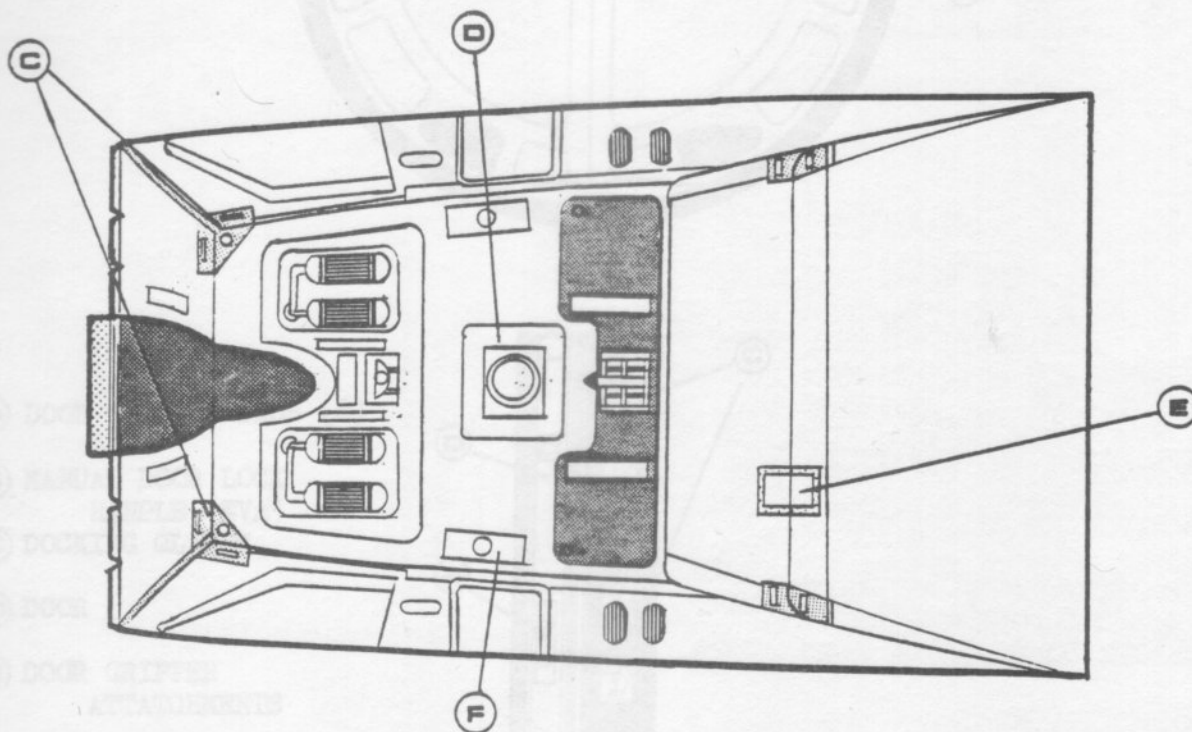
L.O.A. - - - 18.7m

W.O.A. - - - 11.1m

H.O.A. - - - 4.4m



STARBOARD PROFILE



TOP PLAN

(A) DOCKING RING

(E) VISUAL VOCATION BEACON

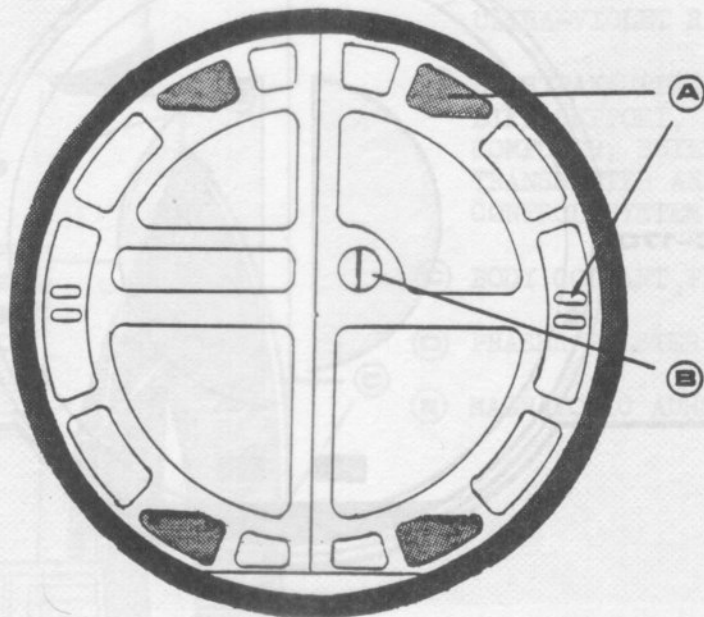
(B) HEAT SHIELD (ATMOSPHERIC REENTRY) (F) PHASER BANKS P/S

(C) REACTION CONTROL THRUSTERS

(D) EMERGENCY UPPER HATCH

DOCKING MECHANISM

STAR FLEET STANDARD - MALE



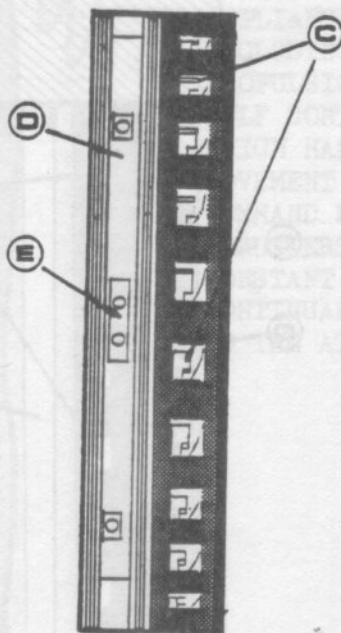
(A) DOOR GRIPPER PADS (6)

(B) MANUAL DOOR LOCK HANDLE (EVA)

(C) DOCKING CLAMPS

(D) DOOR

(E) DOOR GRIPPER ATTACHMENTS

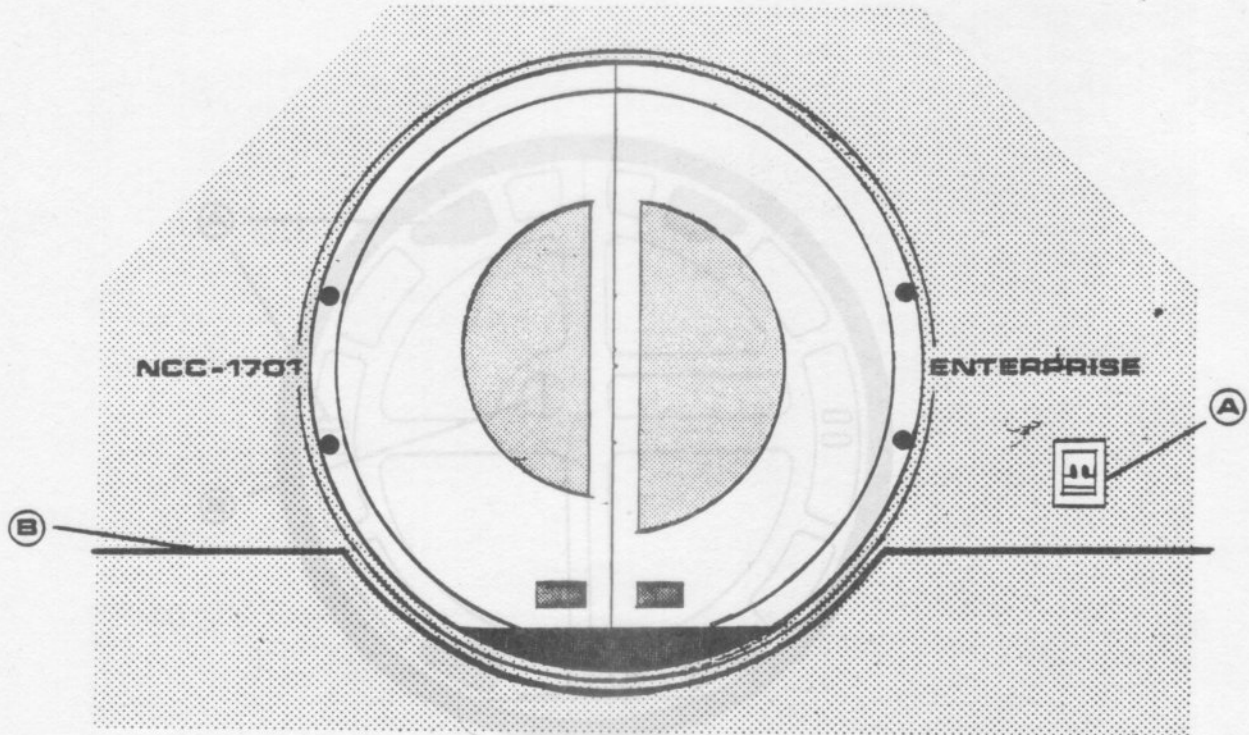


0 1
METERS

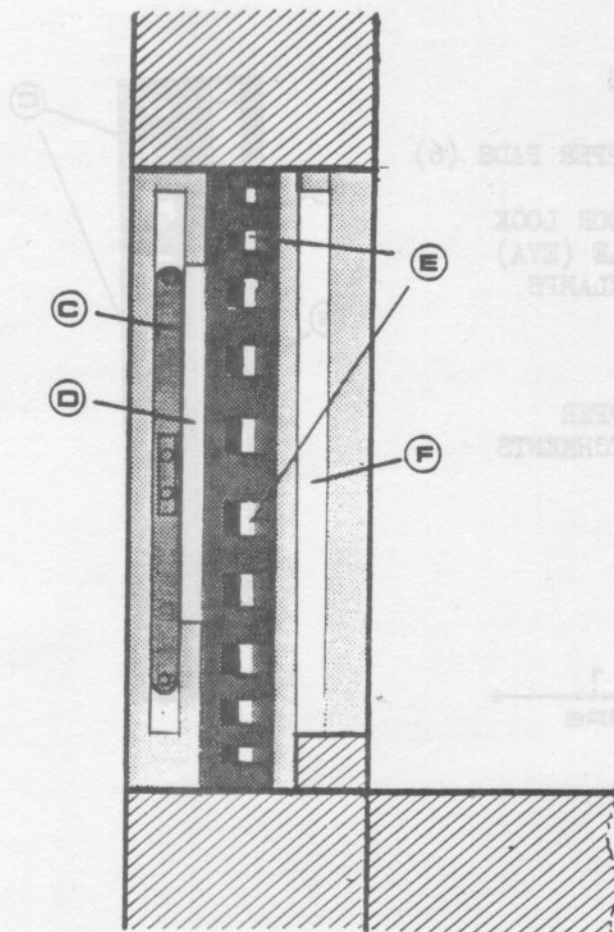
0 1
METERS

DOCKING MECHANISM

STAR FLEET STANDARD - FEMALE



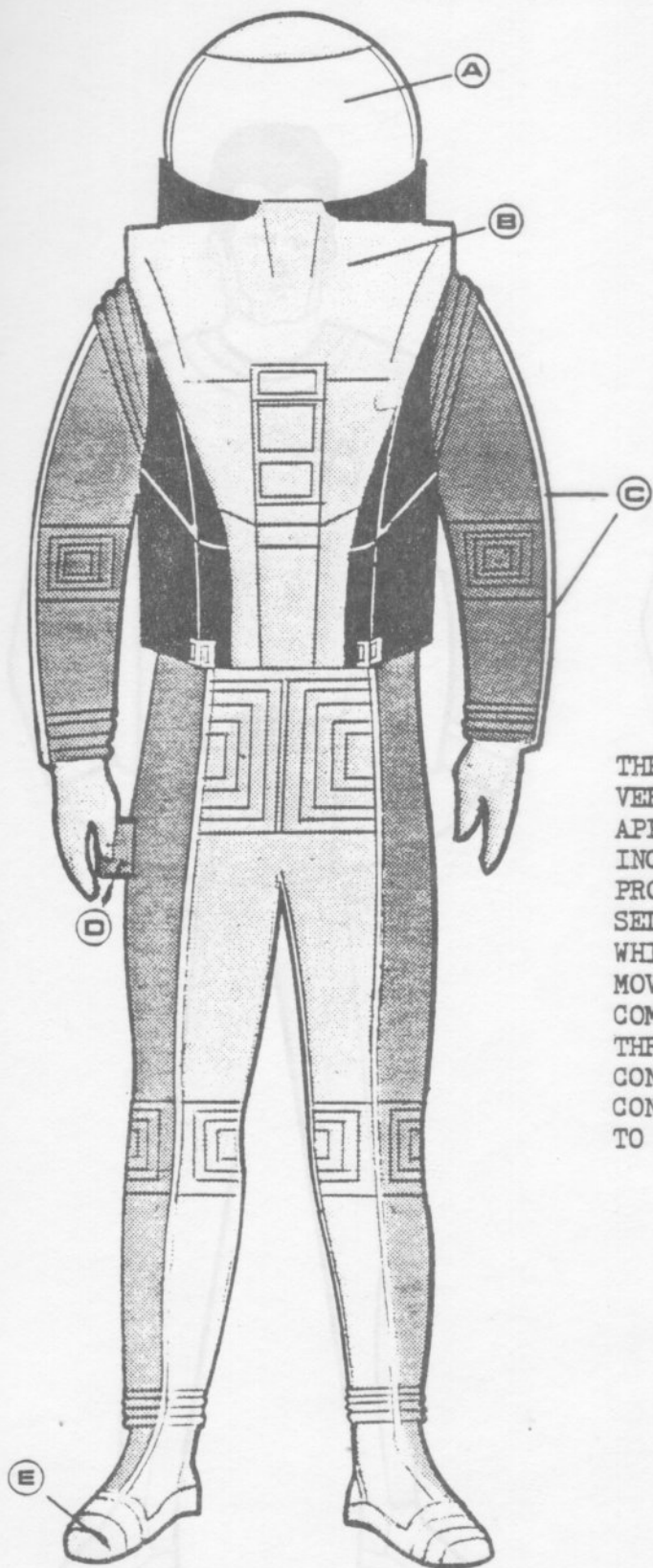
- Ⓐ MANUAL DOOR OPERATION HANDLE
- Ⓑ DEFLECTOR SHIELD GRID
- Ⓒ DOOR GRIPPING MECHANISM MECHANISM
- Ⓓ PORT ILLUMINATION PANEL
- Ⓔ DOCKING BOLTS
- Ⓕ HULL ACCESS HATCH



0 1
METERS

THRUSTER SUIT

EXTRAVEHICULAR DAMAGE CONTROL

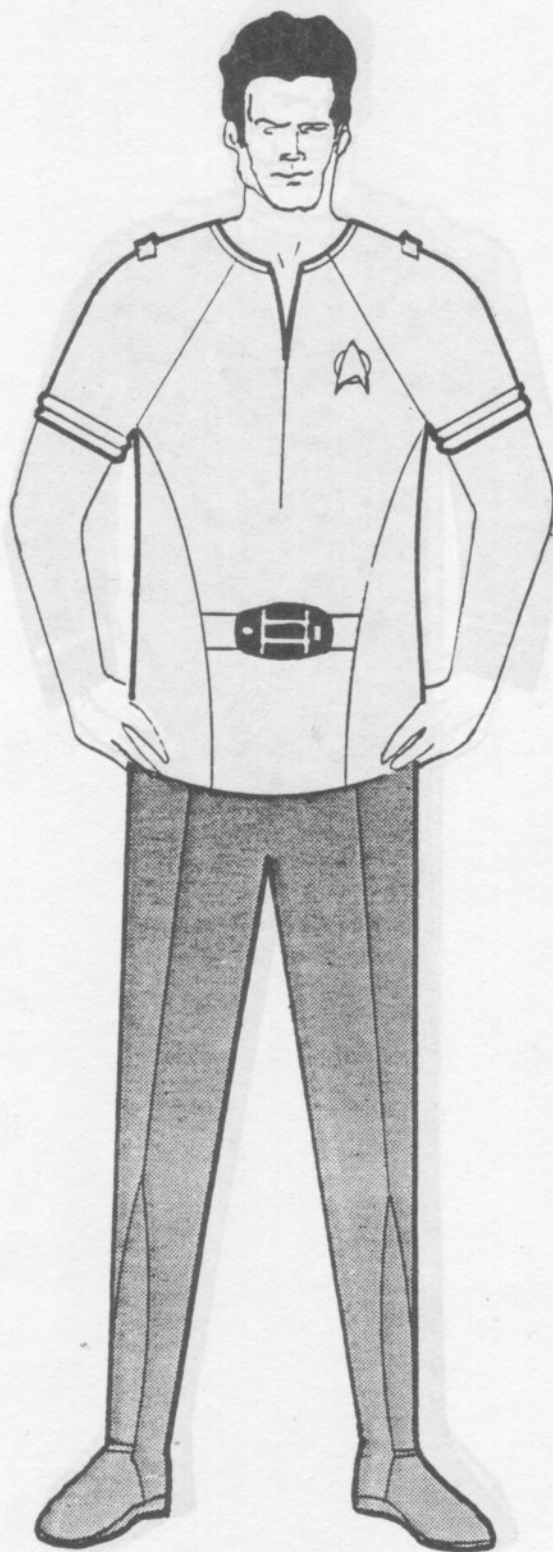
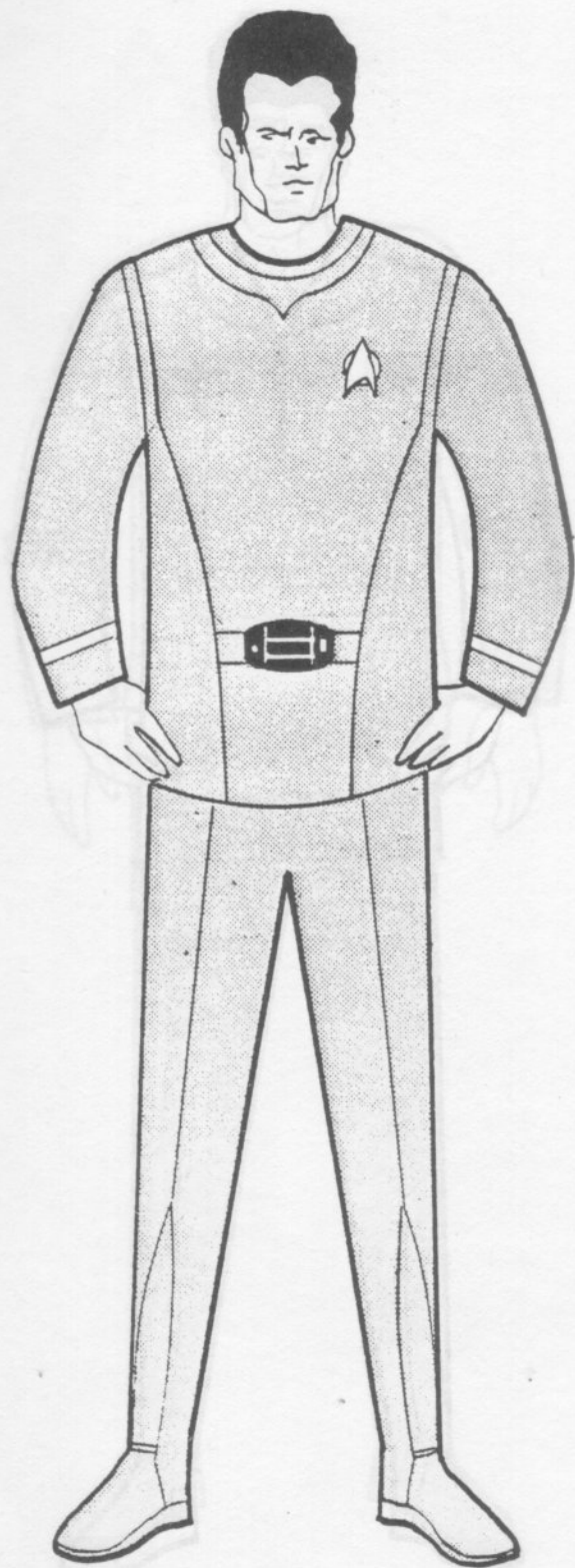


- Ⓐ FACEPLATE-NOT TRANSPARENT TO ULTRA-VIOLET RADIATION
- Ⓑ CHESTPAK/UPPER TORSO-HOUSING LIFE SUPPORT, VOICE COMMAND COMPUTER, BUILT IN PERSCAN TRANSMITTER AND ATTITUDE CONTROL SYSTEM
- Ⓒ BODY COOLANT PIPING
- Ⓓ PHASER HOLSTER
- Ⓔ MAGNATOMIC ADHESION SOLES

THE HARD SHELL UPPER TORSO IS A VERSATILE UNIT INTO WHICH MANY APPLIANCES CAN BE INTEGRATED, INCLUDING BOTH HIGH AND LOW THRUST PROPULSION PACKAGES, AS WELL AS SELF CONTAINED WORK STATIONS FROM WHICH HAND TOOLS MAY DRAW POWER. MOVEMENT IS ACHIEVED BY VOICE COMMAND WITH LOW POWER LASER THRUSTERS. MOVEMENT IS AT A CONSTANT SPEED AND POSITION IS CONTINUALLY MONITORED IN RELATION TO THE ATTITUDE OF THE SHIP.

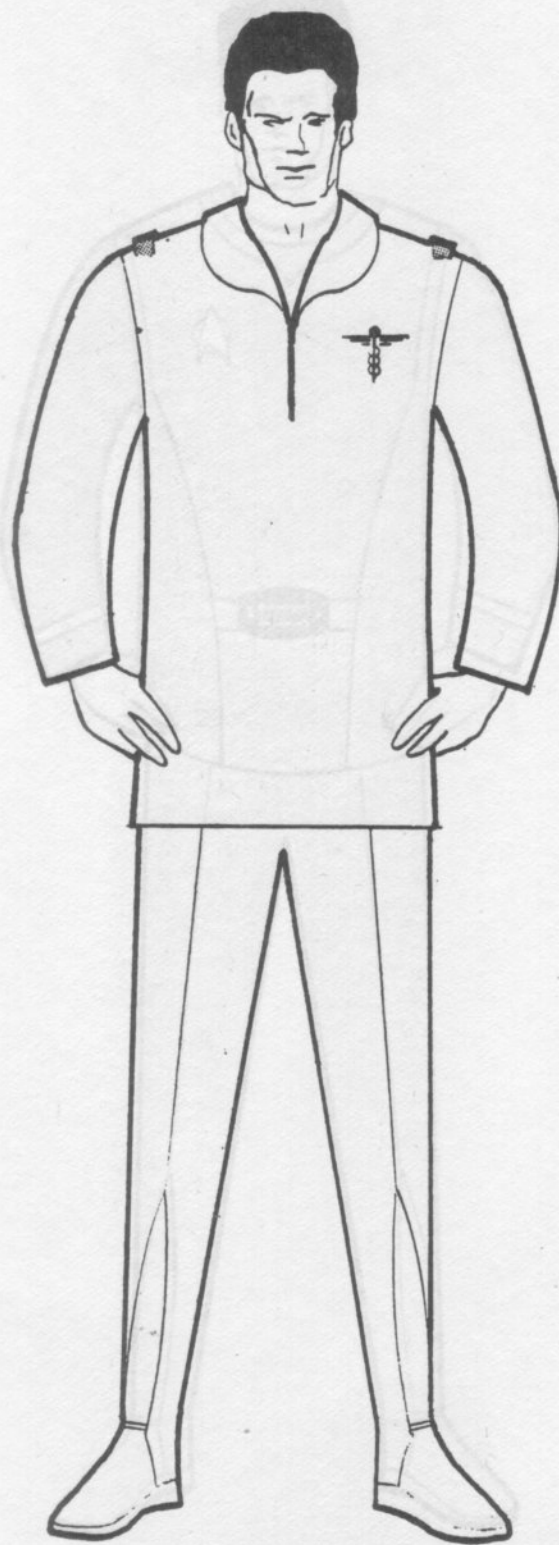
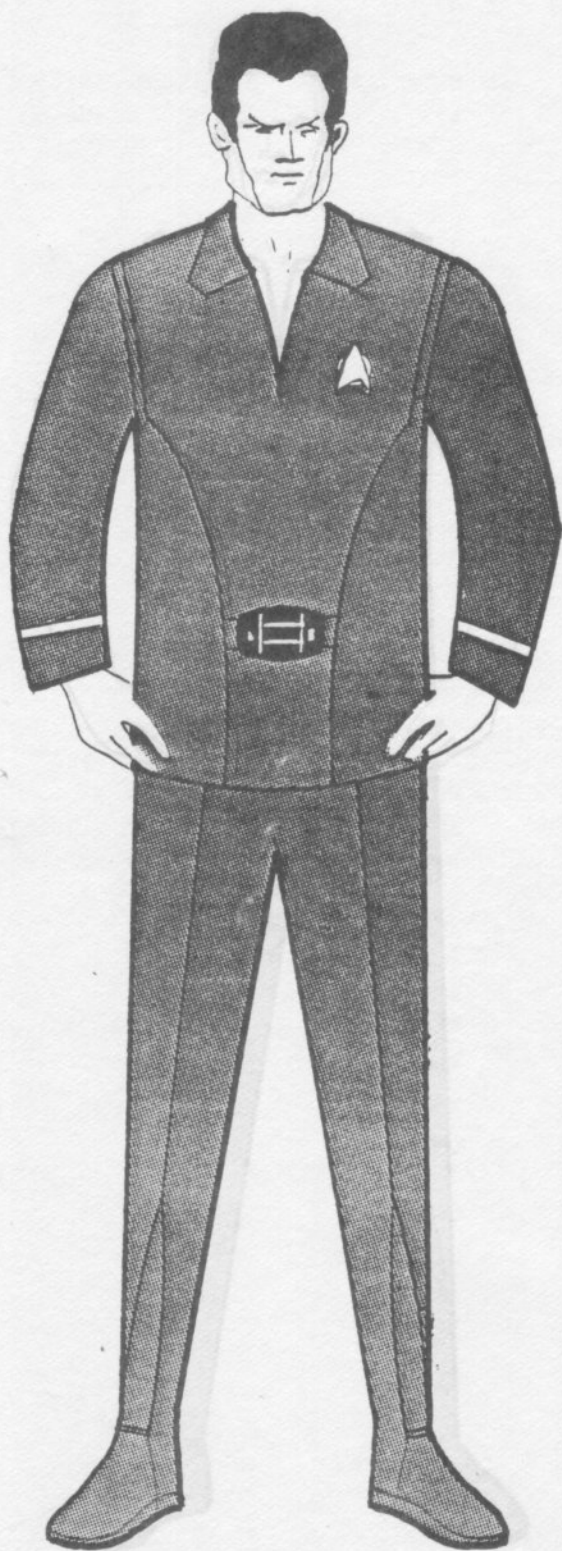
DUTY WARDROBE

CLASS A & B UNIFORMS



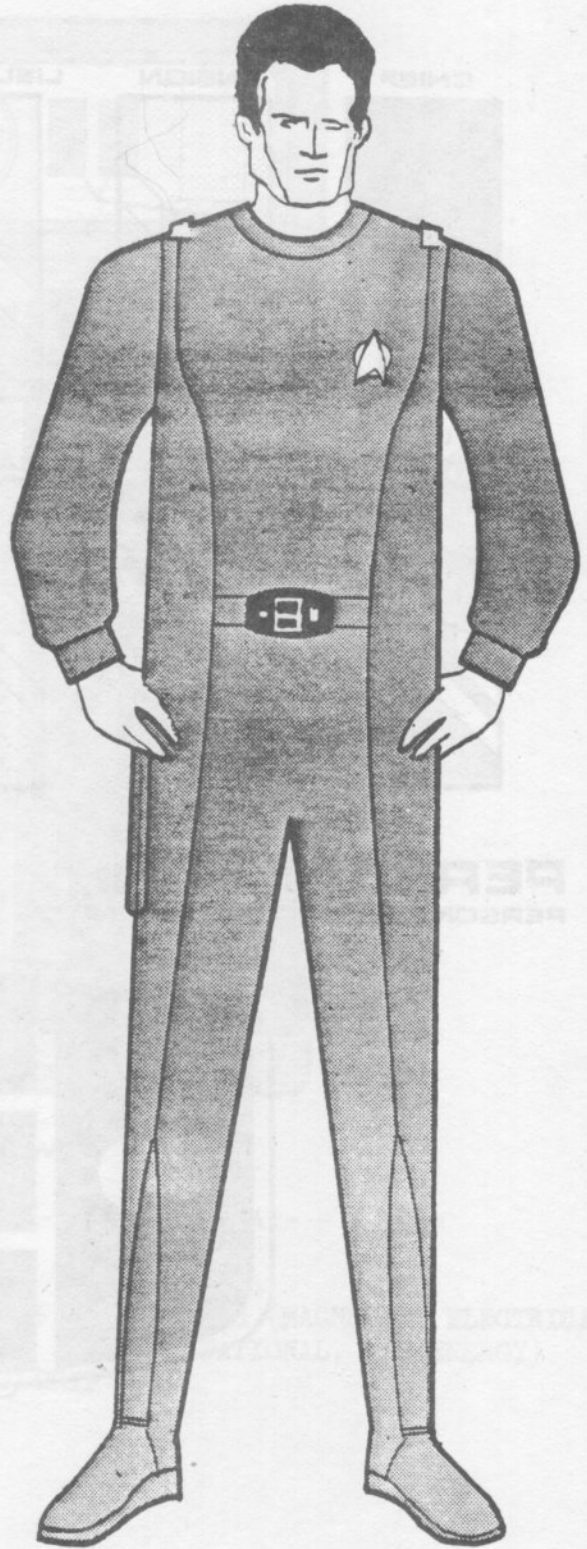
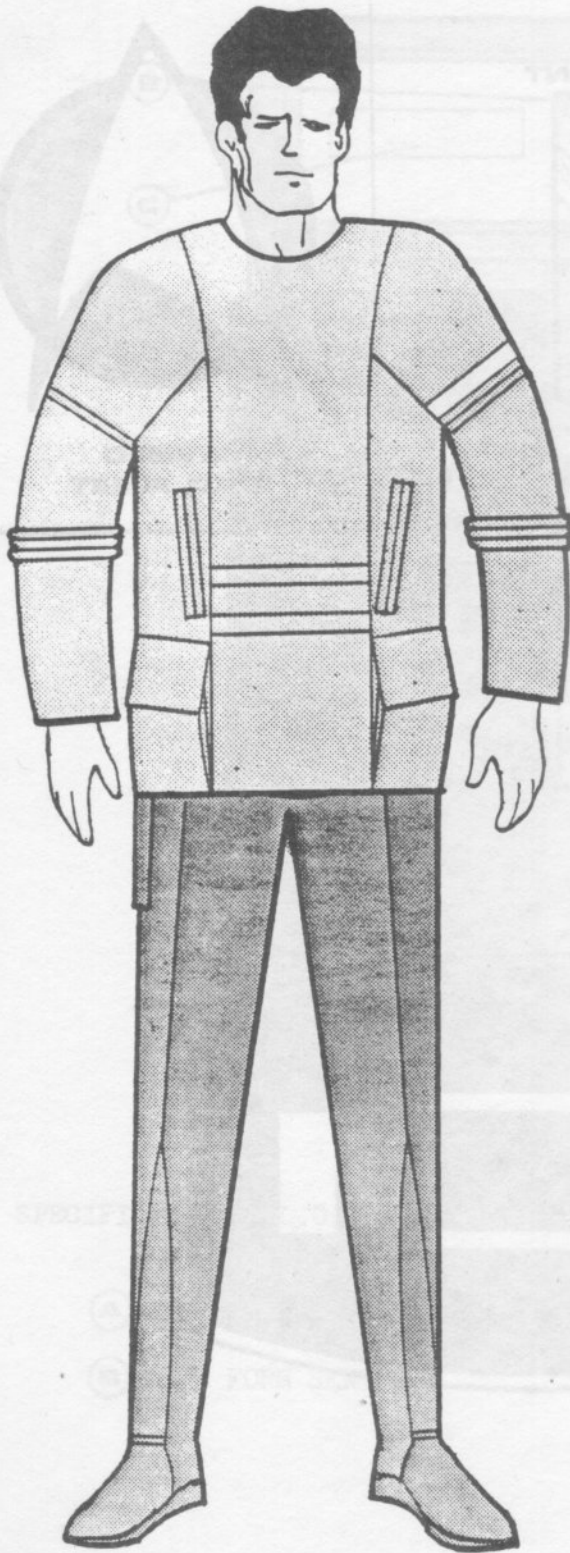
DUTY WARDROBE

MEDICAL CLASS A & SURGEON'S UNIFORMS



DUTY WARDROBE

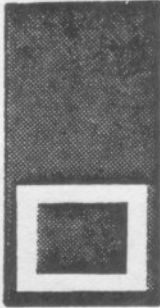
JUMPSUIT AND LANDING PARTY JACKET



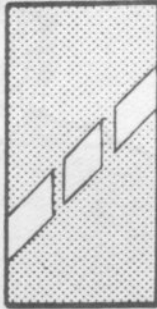
SHOULDER BARS

RANK DESIGNATION - WORK AND LEISURE WEAR

CHIEF



ENSIGN

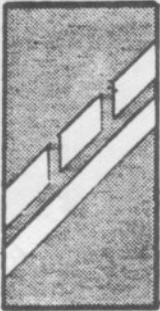


LIEUTENANT



LT.

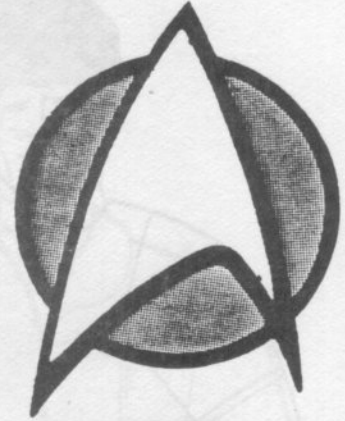
COMMANDER



COMMANDER



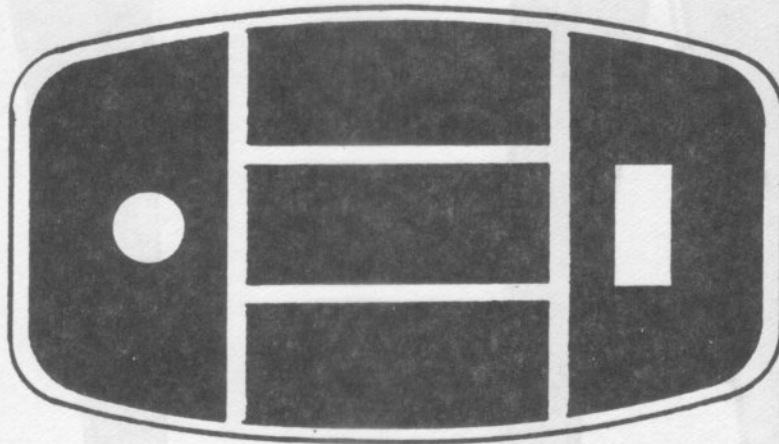
CAPTAIN



REVISED
STAR FLEET

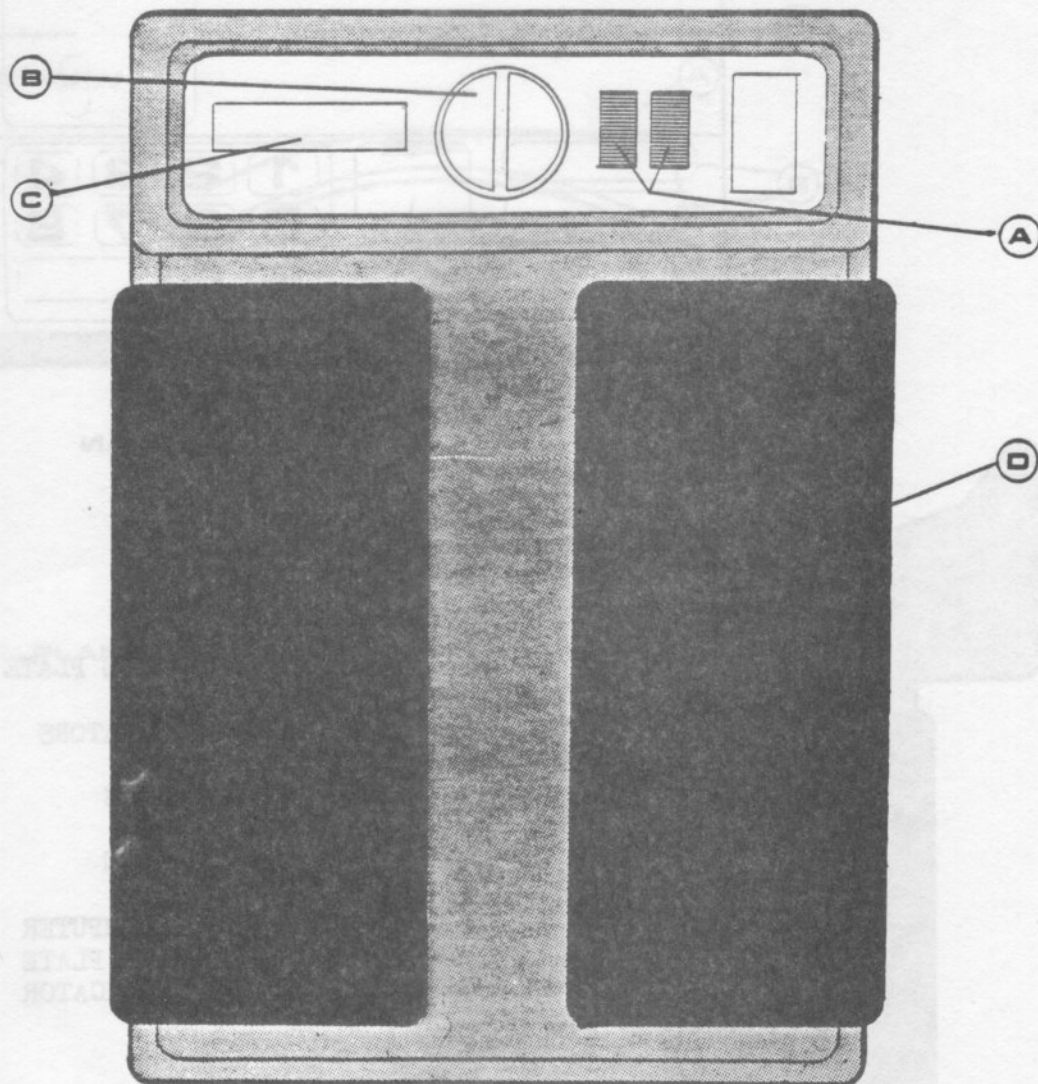
PERSCAN UNIT

PERSONNEL MEDICAL MONITOR



TRICORDER

STAR FLEET STANDARD ISSUE



FRONT VIEW

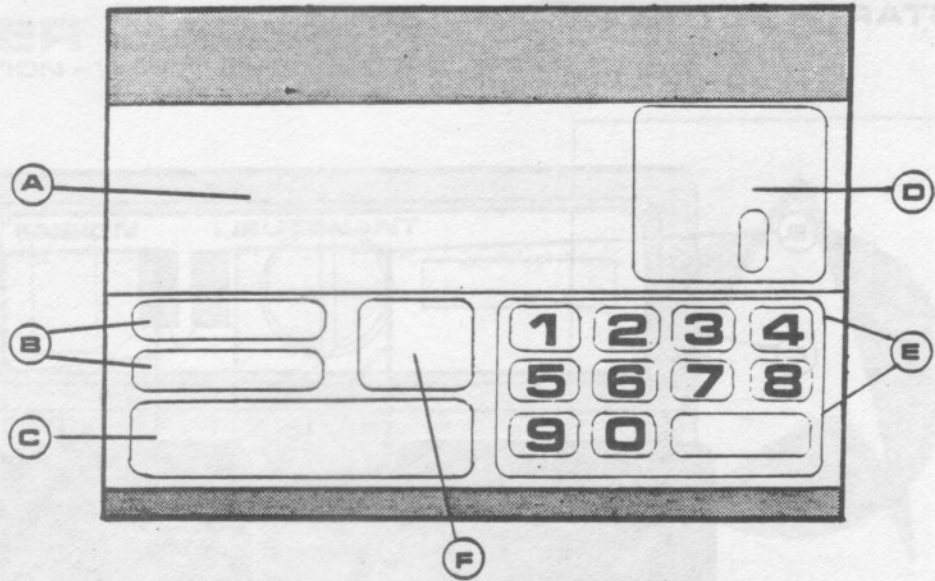
SPECIFICATIONS: L.O.A. - - - 10cm, W.O.A. - - - 6cm, H.O.A. - - - 14cm

(A) ATMOSPHERIC SENSORS

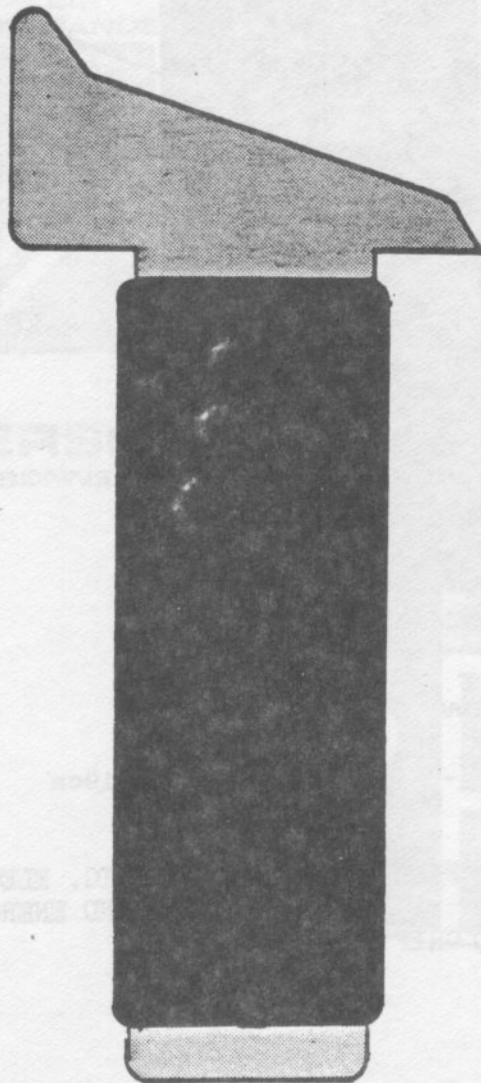
(C) FIELD SENSORS (MAGNETIC, ELECTRICAL,
GRAVITATIONAL, AND ENERGY)

(B) LIFE FORM SENSORS

(D) GRIP



TOP PLAN



SIDE VIEW

- (A) COMPUTER IMAGING PLATE
- (B) LIFE FORM INDICATORS
- (C) FIELD INDICATORS
- (D) LOG ACCESS PLATE
- (E) INPUT/OUTPUT COMPUTER INTERFACE PLATE
- (F) ATMOSPHERIC INDICATOR

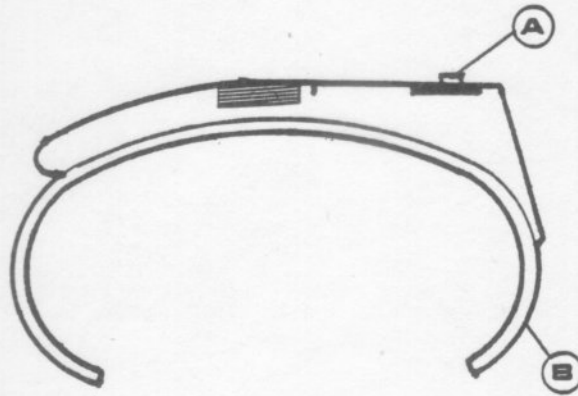
COMMUNICATOR

STAR FLEET STANDARD ISSUE

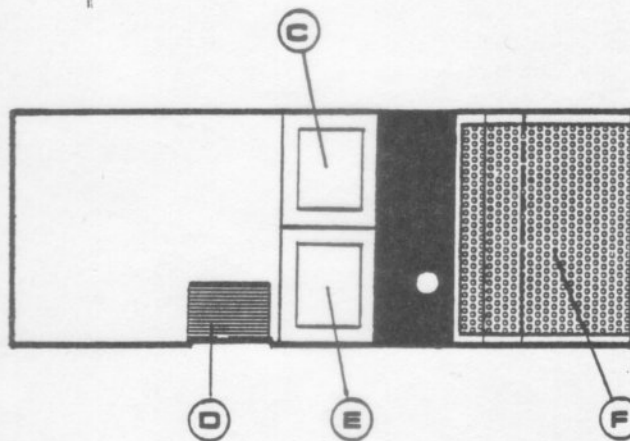
RANGE 15000km

OPERATIONAL LIFETIME 2 YEARS (TERRAN)

SIDE VIEW



TOP PLAN



(A) EMERGENCY ALERT CONTACT

(F) SPEAKER/MICROPHONE

(B) ANTENNA/BRACKET

(C) CREWMAN-TO-SHIP MODE

(D) ACTIVATION SWITCH - SLIDE INWARD

(E) CREWMAN-TO-CREWMAN MODE - VOICE COMMAND
WILL CONNECT THE WEARER WITH DESIRED
PARTY BY SIMPLY STATING HIS/HER NAME.