STAR TREK

THE

FOUR YEARS WAR

AND

ROMULAN WAR

TECHNICAL MANUAL





RESEARCHED AND COMPILED
BY STEPHEN FENDER

STAR TREK

THE FOUR YEARS WAR

AND

ROMULAN WAR

TECHNICAL MANUAL







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Federation Historical Documents

The Statutes of Alpha III

The Statutes of Alpha III came about during the pinnacle of a scientific renaissance on that world. Late in the 22nd century, scientists on Alpha III were able to not only discover that many creatures on their world communicated with one another, but that they were also attempting to communicate with the primary bipedal inhabitants of Alpha III. In a monumental breakthrough, these scientists were able to successfully communicate with several mammalian and aquatic races. Following a protracted series of debates and diplomatic sessions, the Statutes of Alpha III were born to protect the rights of all creatures of sentience on that world. This document, in conjunction with The Fundamental Declaration of the Martian Colonies and several others, was later used as the basis for the Articles of the United Federation of Planets.

Whereas recognition of the inherent dignity and of the equal and inalienable rights of all sentient beings is the foundation of freedom, justice and peace in their world,

Whereas disregard and contempt for sentient rights have resulted in barbarous acts which have outraged the conscience of all races, and the advent of a system in which sentient beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people,

Whereas it is essential, if said beings are not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that those beings' rights should be protected by the rule of law,

Whereas it is essential to promote the development of friendly relations between species,

Whereas the respective species of Alpha III have in the Charter reaffirmed their faith in the fundamental rights of all sentient beings, in the dignity and worth of those beings and in the equal rights of various genders of those beings, if applicable, and have determined to promote social progress and better standards of life in larger freedom,

Whereas all species able to make such affirmations have pledged themselves to achieve, in cooperation with one another, the promotion of universal respect for and observance of sentient rights and fundamental freedoms,

Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of their pledge,

Now, therefore, THE GENERAL ASSEMBLY proclaims THEIR UNIVERSAL DECLARATION OF SENTIENT RIGHTS as a common standard of achievement for all beings, to the end that every individual and every organ of society, keeping their Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, to secure their universal and effective recognition and observance, both among species dissimilar to themselves and among the species of their own distinction.

Article 1.

All sentient beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act toward one another in a spirit of brotherhood.

Article 2.

Sentient beings are entitled to all the rights and freedoms set forth in their Declaration, without distinction of any kind, such as species, race, color, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the territory to which a sentient being belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty.

Article 3.

Sentient beings have the right to life, liberty and security of self.

Article 4.

No sentient being shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5.

No sentient being shall be subjected to torture or to cruel, degrading treatment or punishment.

Article 6.

Sentient beings have the right to recognition everywhere as a being of sentience before the law.

Article 7.

All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of their Declaration and against any incitement to such discrimination.

Article 8.

Sentient beings have the right to an effective remedy by competent tribunals for acts violating the fundamental rights granted them by the constitution or by law.

Article 9.

No sentient being shall be subjected to arbitrary arrest, detention or exile.

Article 10.

All sentient beings are entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of their rights and obligations and of any criminal charge against them.

Article 11.

(1) All sentient beings charged with a penal offense have the right to be presumed innocent until proven guilty according to law in a public trial at which they have had all the guarantees necessary for their defense.

(2) No sentient beings shall be held guilty of any penal offense on account of any act or omission which did not constitute a penal offense at the time when it was committed, nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offense was committed.

Article 12.

No sentient beings shall be subjected to arbitrary interference with their privacy, family, home or correspondence, nor to attacks upon their honor and reputation. Sentient beings have the right to the protection of the law against such interference or attacks.

Article 13.

(1) Sentient beings have the right to freedom of movement and residence throughout the entirety of Alpha III.

(2) Sentient beings have the right to leave any established territory, including their own, and to return to their place of birth.

Article 14.

(1) Sentient beings have the right to seek and to enjoy in other lands asylum from persecution.
(2) Their right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or from acts contrary to the purposes and principles of Alpha III.

Article 15.

(1) Sentient beings have the right to a nationality.
(2) No one shall be arbitrarily deprived of their nationality or denied the right to change their nationality.

Article 16.

(1) Sentient beings of full age, without any limitation due to species, race, gender, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.
(2) Marriage shall be entered into only with the free and full consent of the intending spouses.
(3) The family is the natural and fundamental group unit of society and is entitled to protection by society and the statutes of this Declaration.

Article 17.

(1) Sentient beings have the right to own property alone as well as in association with others.
(2) No sentient being shall be arbitrarily deprived of their property.

Article 18.

Sentient beings have the right to freedom of thought, conscience and religion; their right includes freedom to change their religion or belief, and freedom, either alone or in community with others and in public or private, to manifest their religion or belief in teaching, practice, worship and observance.

Article 19.

Sentient beings have the right to freedom of opinion and expression; their right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20.

(1) Sentient beings have the right to freedom of peaceful assembly and association.
(2) No sentient being may be compelled to belong to an association.

Article 21.

(1) Sentient beings have the right to take part in the government of their world, directly or through freely chosen

representatives.
(2) Sentient beings have the right of equal access to public service in their world.
(3) The will of sentient beings shall be the basis of the authority of government; their will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22.

Every sentient being, as a member of the society of Alpha III, has the right to social security and is entitled to realization, through national effort and international cooperation and in accordance with the organization and resources of each region, of the economic, social and cultural rights indispensable for their dignity and the free development of their personality.

Article 23.

(1) Sentient beings have the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment.
(2) Sentient beings, without any discrimination, have the right to equal pay for equal work.
(3) Sentient beings who work have the right to just and favorable remuneration, ensuring for themselves and their family an existence worthy of dignity, and supplemented, if necessary, by other means of social protection.
(4) Sentient beings have the right to form and to join trade unions for the protection of their interests.

Article 24.

Sentient beings have the right to rest and leisure, including reasonable limitation of working hours and periodic observances with pay.

Article 25.

(1) Sentient beings have the right to a standard of living adequate for the health and well-being of themselves and of their family, including food, clothing (if desired), housing (if necessary) and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond their control.
(2) Guardians and progenies are entitled to special care and assistance. All offspring shall enjoy the same social protection.

Article 26.

(1) Sentient beings have the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
(2) Education shall be directed to the full development of the individual personality and to the strengthening of respect for individual rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all species and racial or religious groups, and shall further the activities for the maintenance of peace.
(3) Parentages have a prior right to choose the kind of education that shall be given to their offspring.

Article 27.

(1) Sentient beings have the right to freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

(2) Sentient beings have the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which they are the author.

Article 28.

Sentient beings are entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.

Article 29.

(1) Sentient beings have duties to the community in which alone the free and full development of their personality is possible.

(2) In the exercise of their rights and freedoms, all sentient beings shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.

(3) These rights and freedoms may in no case be exercised contrary to the purposes and principles of Alpha III.

Article 30.

Nothing in this Declaration may be interpreted as implying for any species, state, group or individual any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

Fundamental Declaration of the Martian Colonies

When in the course of human events, it becomes necessary for planets to dissolve the political bands which have connected them with their home planet, Earth, and to assume with the Earth a separate and autonomous status, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to separate.

We contend that the great distances and differing planetary realities among planets and the Earth have given rise to numerous inequities and misunderstandings.

We further contend that the representation afforded planets in any Earth-centered political forum cannot provide sufficient voice for our needs and aspirations.

We, therefore, the representatives of all inhabited regions of the solar system, met here at the Martian colonies, do, in the name and by the authority of the good people of these regions, solemnly publish and declare that these regions are, and of right ought to be, FREE AND AUTONOMOUS.

This declaration implies no malice nor animosity toward the planet Earth. It recognizes the authority of the Earth over interplanetary affairs and pledges full participation in the maintenance and security of the solar system.

However, the FREEDOM AND AUTONOMY of these regions must be considered an individual principle, which hereafter must be honored by all peaceful governments and will be defended by these regions with the full weight of their honor, their fortunes, and their lives.

Signed at these MARTIAN COLONIES,



John Hammerlich
Governor of the Martian Colonies

The Charter of the United Federation of Planets



We, the intelligent life-forms of the United Federation of Planets, determined to save succeeding generations from the scourge of intergalactic war which has brought untold horror and suffering to our planetary social systems, and to reaffirm faith in the fundamental intelligent life-form rights, in the dignity and worth of the intelligent life-form person, to the equal rights of male and female and of planetary social systems large and small, and to establish conditions under which justice and mutual respect for the obligations arising from treaties and other sources of interplanetary law can be maintained, and to promote social progress and better standards of life in larger freedom, and to these ends to practice benevolent tolerance and live together in peace with one another as good neighbors, and to unite our strength to maintain intergalactic peace and security, and to ensure by the acceptance of principles and the institution of methods that armed force shall not be used except in the common defense, and to employ intergalactic machinery for the promotion of the economic and social advancement of all intelligent life-forms, have resolved to combine our efforts to accomplish these aims. Accordingly, the respective social systems, through representatives assembled on the planet Babel, who have exhibited their full powers to be in good and due form, have agreed to the present Charter, and do hereby establish an interplanetary organization to be known as the United Federation of Planets.

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Chapter I: Purposes and Principles

Article 1

The purposes of the United Federation of Planets are:

To maintain interplanetary peace and security within its acknowledged and accepted borders, and to that end: to take effective collective measures for the prevention of threats to the peace, the suppression of acts of aggression, and to bring about by peaceful means, and employing the principles of justice and intergalactic law, adjustment or settlement of interplanetary disputes which might lead to a breach of the peace;

To develop friendly relations among planets based on respect for the principles of equal rights and self-determination of intelligent life-forms, and to other appropriate measures to strengthen universal peace;

To achieve interplanetary cooperation in solving intergalactic problems of economic, social, cultural, or humanitarian character; in promoting and encouraging respect for intelligent life-form rights; and for fundamental freedoms for all without distinction as to culture, sex, life-form, or religious belief; and

To be a center for consilience of the actions of all social systems in the attainment of these common ends.

Article 2

The Federation and its members, in pursuit of the purposes stated, shall act in accordance with the following principles:

The Federation is based on the sovereign equality of all its members.

In order to ensure to all of them equal rights and benefits resulting from membership, all members shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

All members shall settle their interplanetary disputes by peaceful means in such manner that intergalactic peace, security, and justice are not endangered.

In all interplanetary relations, all members shall refrain from the threat or use of force against the territorial integrity or political independence of any planetary social system, or in any manner inconsistent with the purposes of the United Federation.

All members shall give the United Federation every assistance in any action taken in accordance with the present Charter, and shall refrain from assisting any planetary social system against which the Federation is taking preventive or enforcement action.

The United Federation shall ensure that planetary social systems which are not members of the Federation act in accordance with these principles as necessary for the maintenance of intergalactic peace and security.

Nothing within the present Charter shall authorize the Federation to intervene in matters which are essentially the domestic jurisdiction of any planetary social system, or shall require the members to submit such matters to settlement under the present Charter, but this principle shall not prejudice the application of enforcement measures under Chapter VII.

Chapter II: Membership

Article 3

The original members of the United Federation of Planets shall be those planetary social systems which, having participated in the interplanetary Conference on Interplanetary Federation at Babel, or having previously signed the Declaration of the United Federation of Planets of 11 October 2161, sign the present Charter and ratify them in accordance with Article 110.

Article 4

Membership in the United Federation is open to any other peaceful planetary social systems which accept the obligations contained in the present Charter and, in the judgment of the Federation, are capable and willing to carry out these obligations.

The admission of any such planetary social system to membership in the United Federation of Planets is contingent upon the decision of the Supreme Assembly upon recommendation of the Federation Council.

Article 5

The Supreme Assembly may suspend the rights and privileges of membership of any member of the United Federation against which the Federation Council has taken preventive or enforcement action. The Federation Council may restore these rights and privileges of membership at its discretion.

Article 6

Any member of the United Federation which has persistently violated the purposes contained in the present Charter may be expelled from the Federation by the Supreme Assembly upon the recommendation of the Federation Council.

Chapter III: Agencies

Article 7

There are established as the principle agencies of the United Federation of Planets: a Supreme Assembly, a Federation Council, an Economic and Social Council, a Trusteeship Council, an Interplanetary Supreme Court of Justice, a Starfleet Combined Peacekeeping Force, and an Executive.

Such subsidiary agencies as may be deemed necessary from time to time may be established in accordance with the present Charter.

Article 8

The United Federation shall place no restriction on the eligibility of male and female life-forms or any member planetary social system to participate in any capacity under conditions of equality in its principal and subsidiary agencies.

Chapter IV: The Supreme Assembly

Article 9—Composition

The Supreme Assembly shall consist of all the members of the United Federation of Planets. Each member shall be entitled to have not more than five (5) representatives in this body.

Article 10—Functions and Powers

The Supreme Assembly may discuss any questions on any matters within the scope of the present Charter or relating to the powers and functions of any agencies provided for in the present Charter and, except as provided in Article 12, may make recommendations to the members and the Federation Council or both on any such questions or matters.

Article 11

The Supreme Assembly may consider the general principles of cooperation in maintaining interplanetary peace and security, including disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the members or the Federation Council or to both.

The Supreme Assembly may discuss any questions relative to the maintenance of intergalactic peace and security put to it by any member of the Federation Council, or a nonmember planetary social system in accordance with Article 25 Paragraph 2 and, except as provided in Article 12, may make recommendations with regard to any such questions to the members, the Federation Council, the pleading planetary social system, or to all of them. Any such question on which action is necessary shall be referred to the Federation Council by the Supreme Assembly either before or after discussion.

The Supreme Assembly may call situations which are likely to endanger the interplanetary and intergalactic peace and security to the attention of the Federation Council.

The powers of the Supreme Assembly as set forth in this Article shall not limit the scope of Article 10.

Article 12

Where the Federation Council is executing the functions assigned to it under the present Charter with respect to any dispute or situation, the Supreme Assembly shall make no recommendation with regard to that dispute or situation unless so requested by the Federation Council.

The President, with the consent of the Federation Council, shall notify the Supreme Assembly at each session of any matters relating to the maintenance of interplanetary peace and security which are under discussion in the Federation Council, and shall notify the Supreme Assembly, or the members if the Supreme Assembly is not in session, immediately when the Federation Council completes its deliberations on any such matters.

Article 13

The Supreme Assembly shall initiate studies and make recommendations for the purpose of:

Promoting interplanetary cooperation in political fields and encouraging the progressive development of interplanetary law and its codification;

Promoting interplanetary cooperation in the economic, social, cultural, educational, and health fields, and assisting in the realization of intelligent life-form rights and fundamental freedoms for all without distinction as to culture, sex, language, or religion.

The further responsibilities, functions, and powers of the Supreme Assembly with respect to matters mentioned in Paragraph 1(b) above are set forth in Chapters IX and X.

Article 14

Subject to the provisions of Article 12, the Supreme Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among the planets, including situations resulting from violations of the provisions of the present Charter setting forth the purposes and principles of the United Federation of Planets.

Article 15

The Supreme Assembly shall receive and consider regular and special reports from the Federation Council; these reports shall include an account of the measures that the Federation Council has decided upon or taken to maintain interplanetary peace and security.

The Supreme Assembly shall receive and consider reports from the other agencies of the United Federation during agreed-upon regular periods of reporting.

Article 16

The Supreme Assembly shall perform such functions of intergalactic trusteeship as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas which are not designated as strategic.

Article 17

The Supreme Assembly shall consider and approve the budget of the United Federation of Planets.
The expenses of the United Federation of Planets shall be borne by the members as apportioned by the Supreme Assembly.

The Supreme Assembly shall consider and approve any financial and budgetary agreements with the specialized agencies referred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

All budgets of and expenses of the United Federation shall be made and paid in the common interplanetary credit. The common interplanetary credit shall be the official medium of exchange within the United Federation treaty exploration territory.

Article 18—Voting

Each member of the Supreme Assembly shall have one (1) vote.

Decisions of the Supreme Assembly on important decisions shall be made on a two-thirds (2/3) majority vote of the members present and voting. These questions shall include: recommendations with respect to the maintenance of interplanetary peace and security; the election of non-permanent members to the Federation Council; the election of members of the trusteeship council in accordance with Paragraph 1(c) of Article 86; the admission of new members to the Federation; the suspension of the rights and privileges of membership; the expulsion of members; questions relating to the operation of the trusteeship system; and budgetary questions.

Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds (2/3) majority, shall be made by a majority vote of the members present and voting.

Article 19

A member of the United Federation which is in arrears in the payment of its financial obligations to the Federation shall have no vote in the Supreme Assembly if the amount it is in arrears equals or exceeds the amount of the contributions due from it for the preceding two accounting periods. The Supreme Assembly may nevertheless permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

Article 20—Procedure

The Supreme Assembly shall meet in regular periodic sessions and in such special sessions as occasion may require. Special sessions shall be convoked by the President at the request of the Federation Council or of a majority of the members of the United Federation.

Article 21

The Supreme Assembly shall adopt its own rules of procedure. It shall elect its President for each session.

Article 22

The Supreme Assembly may establish such subsidiary agencies as it deems necessary for the performance of its functions.

Chapter V: The Federation Council

Article 23—Composition

The Federation Council shall consist of eleven (11) members of the United Federation. The United Federation of Planets, the Planetary Union of Vulcan, the Andorian Sovereignty, the United Alliance of Tellar, and the Confederation of Altair shall be permanent members of the Federation Council. The Supreme Assembly shall elect six (6) other members of the United Federation to be non-permanent members of the Federation Council, due regard being especially paid, in the first instance, to the contribution of the members to the United Federation for the maintenance of interplanetary peace and security and to the other purposes of the Federation, and also to equitable geogalactic distribution.

The non-permanent members of the Federation Council shall be elected for a term of two (2) session periods. In the first election of non-permanent members, however, three (3) shall be elected for a term of one (1) session period. A retiring member shall not be eligible for immediate reelection.

Article 24—Functions and Powers

In order to assure prompt and effective action by the United Federation of Planets, its members confer on the Federation Council primary responsibility for the maintenance of interplanetary peace and security, and agree that in carrying out its duties under this responsibility the Federation Council acts on their behalf.

In discharging these duties, the Federation Council shall act in accordance with the purposes and principles of the United Federation. The specific powers granted to the Federation Council for the discharge of these duties are laid down in Chapters VI, VII, VIII, and XII.

The Federation Council shall submit regular and, when necessary, special reports to the Supreme Assembly for its consideration.

Article 25

The members of the United Federation agree to accept and carry out the decisions of the Federation Council in accordance with the present Charter.

Article 26

In order to promote the establishment and maintenance of interplanetary peace and security with the least diversion of the Federation's life-forms and economic resources for armaments, the Federation Council shall be responsible for formulating, with the assistance of Starfleet Headquarters staff referred to in Article 47, plans to be submitted to the members of the United Federation for the establishment of a system for the regulation of armaments.

Article 27—Voting

Each member of the Federation Council shall have one (1) vote.

Decisions of the Federation Council on procedural matters shall be made by an affirmative vote of seven (7) members.

Decisions of the Federation Council on all other matters shall be made on an affirmative vote of seven (7) members including the concurring votes of the permanent members, provided that, in decisions under Chapter VI, and under

Paragraph 3 of Article 52, a party to the dispute shall refrain from voting.

Article 28—Procedure

The Federation Council shall be so organized as to be able to function continuously. Each member of the Federation Council shall, for this purpose, be represented at all times at the seat of the Federation.

The Federation Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of its government or by some other specially designated representative.

The Federation Council may hold meetings at such places other than the seat of the Federation as, in its judgment, will facilitate its work.

Article 29

The Federation Council may establish such subsidiary agencies as it deems necessary for the performance of its functions.

Article 30

The Federation Council shall adopt its own rules of procedure, including the method of selecting its governor.

Article 31

Any member of the United Federation which is not a member of the Federation Council may participate, without vote, in the discussion of any question brought before the Federation Council whenever the latter considers that the interests of the member are specifically affected.

Article 32

Any member of the United Federation which is not a member of the Federation Council or any planetary social system which is not a member of the United Federation of Planets, if it is a party to a dispute under consideration by the Federation Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Federation Council shall lay down the conditions as it deems just for the participation of a planetary social system which is not a member of the United Federation of Planets.

Chapter VI: Pacific Settlement of Disputes

Article 33

The parties to any dispute, the continuance of which is likely to endanger the maintenance of interplanetary peace and security, shall, first of all, seek a solution by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

The Federation Council shall, when it deems necessary, call upon the parties to settle their disputes by such means.

Article 34

The Federation Council may investigate any dispute, or any situation that might lead to interplanetary friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of interplanetary peace and security.

Article 35

Any member of the United Federation may bring any dispute, or any situation of the nature referred to in Article 34, to the attention of the Federation Council or the Supreme Assembly.

A planetary social system which is not a member of the United Federation of Planets may bring to the attention of the Federation Council or the Supreme Assembly any dispute to which it is a party if it accepts in advance, for the purposes of disputes, the obligation of pacific settlement provided in the present Charter.

The proceedings of the Supreme Assembly in respect to matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

The Federation Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend procedures or appropriate methods of adjustment.

The Federation Council shall take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

In making recommendations under the Article, the Federation Council should also take into consideration that legal disputes should as a general rule be referred to the Interplanetary Supreme Court of Justice in accordance with the provisions of the statute of the court.

Article 37

Should the parties to a dispute as referred to in Article 33 fail to settle it by means indicated in that Article, they shall refer it to the Federation Council.

If the Federation Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of interplanetary peace and security, it shall decide whether to take action under Article 36 or to recommend such terms as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 through 37, the Federation Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

Chapter VII: Action with Respect to Threats of the Peace, Breaches of the Peace, and Acts of Aggression

Article 39

The Federation Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations to maintain or restore interplanetary peace and security.

Article 40

In order to prevent aggravation of the situation, the Federation Council may call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Federation Council shall take into account any failure to comply with such provisional measures.

Article 41

The Federation Council may decide what measures short of the use of armed force are to be employed to give effect to its decisions, and may call upon the members of the United Federation to apply such measures. These may include partial or complete interruption of economic relations, interplanetary communications and space travel, and severance of diplomatic relations.

Article 42

Should the Federation Council consider that measures under Article 41 would be inadequate or have proved to be inadequate, it may take such action by armed force as necessary to maintain or restore interplanetary peace and security. Such action may include demonstrations, blockades, and other operations by Starfleet's combined peacekeeping forces.

Article 43

All members of the United Federation in obligation to the maintenance of interplanetary peace and security agree to make available to Starfleet, on call of the Federation Council, armed forces, assistance, and facilities, including right of passage, necessary for the maintenance of interplanetary peace and security.

Article 44

When the Federation Council has decided to use force it shall, before calling upon a member not represented on it to provide armed forces in fulfillment of obligations assumed under Article 43, invite that member to participate in the decision of the Federation Council relating to the employment of contingents of the member's armed forces.

Article 45

In order to enable the United Federation to take urgent military measures, all members so capable shall assign contingents of their armed forces to Starfleet to be employed as a single peacekeeping force of the United Federation of Planets. All contingents so assigned shall, for the duration of their assignment, hold full faith and loyalty to the United Federation of Planets and the protection of the purposes and principles of the present Charter.

Article 46

Plans for the application of Starfleet armed forces shall be made by the Federation Council with the assistance of the Military Staff Committee of Starfleet Headquarters.

Article 47

There shall be established within Starfleet a Military Staff Committee to advise and assist the Federation Council on all matters relating to the United Federation's military requirements for maintaining interplanetary peace and security.

The Military Staff Committee shall consist of the chiefs of staff of the permanent members of the Federation Council, or their representatives. Any member of the United Federation may be invited to provide representation on the Military Staff Committee where its responsibilities require the participation of that member in its work.

The Military Staff Committee, with the authorization of the Federation Council, shall establish a Starfleet as the armed, peacekeeping forces of the United Federation of Planets. It shall be responsible for the establishment and maintenance of all facilities of Starfleet, including armed ships, starbases, and training facilities.

The Military Staff Committee shall be responsible under the Federation Council for the strategic direction of Starfleet armed forces, and the other armed forces of the members when required for the maintenance on interplanetary peace

and security.

Article 48

The action required to carry out decisions of the Federation Council for the maintenance of interplanetary peace and security shall be taken by Starfleet, using such contingents as are appropriate to the specific action.

Article 49

The members of the United Federation shall join in affording mutual assistance in carrying out the measures decided upon by the Federation Council and in assisting Starfleet in the performance of its duties and obligations.

Article 50

If preventive or enforcement measures against any planet are taken by the Federation Council, any other planet, whether a member of the United Federation or not, which finds itself confronted with special economic problems arising from the carrying out of these measures shall have the right to consult with the Federation Council with regard to the solution of its problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense against armed attacks occurring to members of the United Federation, until the Federation Council has taken measures necessary to maintain interplanetary peace and security, and Starfleet forces can be brought into action. Such actions taken by members of the United Federation in their self-defense shall be immediately reported to the Federation Council.

Chapter VIII: Starfleet

Article 52

There is established a Starfleet as the armed peacekeeping forces of the United Federation of Planets. It shall initially be comprised of contingents assigned to it by members of the United Federation under Article 43 until such time as facilities, recruitment, and training obviates the necessity of drawing upon the armament of any member, except as provided in Article 49.

The operations and actions of Starfleet shall at all times be under the direct cognizance of the Federation Council and the Military Staff Committee, which shall also prepare and approve the budget for Starfleet operations.

Initial expenditure is authorized under the present Charter for the establishment of a Starfleet Headquarters and twenty (20) starbases to be equitably located within the boundary of the United Federation of Planets and outside of any possible conflict with the territorial boundaries of any member of the United Federation. The Federation Council shall review and approve such other expansions of starbases and other facilities as shall seem appropriate from time to time in the maintenance of interplanetary peace and security.

Initial expenditure is also granted under the present Charter for the establishment of a Starfleet Academy for the purpose of training officers and personnel for Starfleet duty. The standards for training such officers and personnel shall be determined by the Military Staff Committee and approved by the Federation Council.

Article 53

Initial expenditure is granted under the present Charter for the design, procurement, and operation of one hundred

fifty (150) cruiser-class starships to provide the nucleus of Starfleet's peacekeeping armed forces. These cruisers shall be capable of extended-duration patrol of intergalactic range, with weaponry appropriate to such class of starships. They shall be provided with firepower superior to that now employed by any member of the United Federation, and appropriate to the tasks expected of them.

Expenditure is also granted under the present Charter for the procurement and construction of such lesser classes of starships as shall be required to support Starfleet operations and the cruiser class of starships. These may be, but are not necessarily limited to, types such as scouts, destroyers, transports, resupply, shuttlecraft, and survey ships.

Article 54

The training of base personnel and ship complements shall include all fields of science and technology as well as the military arts in Starfleet. It is the intent of the present Charter that Starfleet shall be used to conduct missions of scientific exploration and investigation whenever its services are not required in the maintenance of interplanetary peace and security.

Starfleet Headquarters and the Federation Council shall be at all times kept informed of the activities undertaken, or contemplated, for scientific exploration and investigation. Any ship so employed shall be detached from military fleet duty and reassigned as a nonmilitary scientific unit of the United Federation.

Chapter IX: Interplanetary Economic and Social Cooperation

Article 55

With a view to creating conditions of stability and well-being which are necessary for peaceful relations among planetary social systems based on respect for the principles of equal rights and self-determination of all intelligent life-forms, the United Federation of Planets shall promote:

Higher standards of living, full employment, and conditions of economic and social progress and development;

Solution of interplanetary economic, social, health, and related problems; interplanetary cultural and educational cooperation; and

Universal respect for, and observance of, intelligent life-form rights and fundamental freedoms for all without distinction as to culture, sex, language, or religion.

Article 56

All members pledge themselves to take joint and separate action in cooperation with the United Federation for the achievement of the purposes and goals set forth in Article 55.

Article 57

The various specialized agencies, established by interplanetary agreement and having wide interplanetary responsibilities as defined in their basic instruments in economic, social, cultural, educational, health, and related fields, shall be brought into relationship with the United Federation in accordance with Article 63.

Such agencies thus brought into relationship with the United Federation are hereafter referred to as specialized agencies.

Article 58

The United Federation shall make recommendations for the coordination of the policies and activities of the agencies.

Article 59

The United Federation shall, where appropriate, initiate negotiations among its members concerned for the creation of any new specialized agencies required for the accomplishment of the purposes set forth in Article 55.

Article 60

Responsibility for the discharge of the functions of the United Federation as set forth in this Charter shall be vested in the Supreme Assembly and, under the authority of the Supreme Assembly, in the Economic and Social Council which shall have, for this purpose, the powers set forth in Chapter X.

Chapter X: The Economic and Social Council

Article 61—Composition

The Economic and Social Council shall consist of eighteen (18) members of the United Federation as elected by the Supreme Assembly.

Subject to the provisions of Paragraph 3, six (6) members of the Economic and Social Council shall be elected each session for a term of three (3) session periods. A retiring member shall be eligible for immediate reelection.

At the first election, eighteen (18) members of the Economic and Social Council shall be chosen; the term of office of six (6) members so chosen will expire at the end of one (1) session period, and the terms of six (6) other members at the end of two (2) session periods in accordance with arrangements made by the Supreme Assembly.

Each member of the Economic and Social Council shall have one (1) representative.

Article 62—Functions and Powers

The Economic and Social Council may make or initiate studies and reports with respect to interplanetary economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the Supreme Assembly, to the members of the United Federation, and to specialized agencies concerned.

It may make recommendations for the purpose of promoting respect for, and observance of, intelligent life-form rights and fundamental freedoms for all.

It may prepare draft instruments with the rules prescribed by the United Federation.

It may prepare draft instruments for admission to the Supreme Assembly, with respect to matters falling within its competence.

It may call, in accordance with the rules prescribed by the United Federation, interplanetary conferences on matters falling within its competence.

Article 63

The Economic and Social Council may enter into agreements with any of its agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Federation. Such agreements shall be subject to approval by the Supreme Assembly.

It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the Supreme Assembly and to the members of the United Federation.

Article 64

The Economic and Social Council may take appropriate steps to obtain reports from the specialized agencies. It may

make arrangements with the members of the United Federation and with the specialized agencies to obtain reports on the steps taken to give effect to its own recommendations and to recommendations on matters falling within its competence by the Supreme Assembly.

Article 65

The Economic and Social Council may furnish information to the Federation Council and shall assist the Federation Council upon its request.

Article 66

The Economic and Social Council shall perform such functions as fall within its competence in connection with the carrying out of the recommendations of the Supreme Assembly.

It may, with the approval of the Supreme Assembly, perform services at the request of members of the United Federation or as may be assigned to it by the Supreme Assembly.

Article 67—Voting

Each member of the Economic and Social Council shall have one (I) vote.

Decisions of the Economic and Social Council shall be made by a majority of the members present and voting.

Article 68—Procedures

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of intelligent life-form rights, and such other commissions as may be required for the performance of its functions.

Article 69

The Economic and Social Council shall invite any member of the United Federation to participate, without vote, in its deliberations on any matter of particular concern to that member.

Article 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

Article 71

The Economic and Social Council may make suitable arrangements for consultation with nongovernmental and interplanetary organizations which are concerned with matters within its competence. Such arrangements may be made with planetary organizations after consultation with concerned members of the United Federation.

Article 72

The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its director.

The Economic and Social Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

Chapter XI: Declaration Regarding Non-Self-Governing Regions

Article 73

Members of the United Federation which have assumed responsibilities for the administration of regions whose intelligent life-forms have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these regions are paramount, and accept as a sacred trust the obligation to promote to the utmost, within the system of interplanetary peace and security established by the present Charter, the well-being of the inhabitants of these regions, and, to this end:

To ensure, with due respect for the cultures of the intelligent life-forms concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

To develop self-government, to take due account of the political aspirations of the intelligent life-forms, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each region and its intelligent life-forms and their varying stages of advancement;

To further interplanetary peace and security;

To promote constructive measures of development, to encourage research, and to cooperate with one another and, when and where appropriate, with specialized interplanetary bodies with a view to the practical achievement of the social, economic, and scientific purposes set forth in this Article; and

To transmit regularly to the President for information purposes, subject to such limitations as security and statutory considerations may require, statistical and other information of a technical nature relating to economic, social, and educational conditions in the regions for which they are respectively responsible other than those regions to which Chapters XII and XIII apply.

Article 74

Members of the United Federation also agree that their policy in respect of the regions to which this Charter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good-neighborliness, due account being taken of the interests and well-being of the rest of the Federation territory in social, economic, and commercial matters.

Chapter XII: Interplanetary Trusteeship System

Article 75

The United Federation shall establish under its authority an interplanetary trusteeship system for the administration and supervision of such regions as may be placed thereunder by subsequent individual agreements. These regions are hereinafter referred to as trust regions.

Article 76

The basic objectives of the trusteeship system, in accordance with the purposes and principles of the United Federation as laid down in the present Charter, shall be:

To further interplanetary peace and security;

To promote the political, economic, social, and educational advancements of the inhabitants of the trust regions, and their progressive development toward self-government or independence as may be appropriate to the particular circumstances of each region and its intelligent life-forms concerned, and as may be provided by the terms of the trusteeship

agreement;

To encourage respect for intelligent life-form rights and for fundamental freedoms for all without distinction as to culture, sex, language, or religion, and to encourage recognition of the interdependence of the intelligent life-forms of the galaxy; and

To ensure equal treatment in social, economic, and commercial matters for all members of the United Federation and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the adjustment of foregoing objectives and subject to the provisions of Article 80.

Article 77

The trusteeship system shall apply to such regions in the following categories as may be placed thereunder by means of trusteeship agreements:

Regions now held under mandate;

Regions which may be detached from alien social systems as a result of interplanetary war; and

Regions voluntarily placed under the trusteeship system by social systems responsible for their administration.

It will be a matter for subsequent agreement as to which regions in the foregoing categories will be brought under the trusteeship system and under what terms.

Article 78

The trusteeship system shall not apply to regions which have become members of the United Federation of Planets, the relationship among which shall be based on the respect for the principle of sovereign equality.

Article 79

The terms of trusteeship for each region to be placed under the trusteeship system, including any alteration or amendment, shall be agreed upon by the social systems directly concerned, including the mandatory power in the case of regions held under mandate by a member of the United Federation, and shall be approved as provided for in Articles 83 and 85.

Article 80

Except as may be agreed upon in individual trusteeship agreements made under Articles 77, 79, and 81, placing each region under the trusteeship system, and until such agreements have been concluded, nothing in this Charter shall be construed in or of itself to alter in any manner the rights whatsoever of any social systems or any intelligent life-forms or the terms of existing agreements to which members of the United Federation may respectively be parties.

Paragraph 1 of this Article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of agreements for placing mandated and other regions under the trusteeship system as provided for in Article 77.

Article 81

The trusteeship agreement shall in each case include the terms under which the trust region will be administered and designate the authority which will be exercising the administration of the trust region. Such authority, hereinafter called the administering authority, may be one or more social systems of the United Federation itself.

Article 82

There may be designated, in the trusteeship agreement, a strategic area or areas which may include part or all of the trust region to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

Article 83

All functions of the United Federation relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their subsequent alteration or amendment, shall be exercised by the Federation Council.

The basic principles set forth in Article 76 shall apply to the intelligent life-forms of each strategic area.

The Federation Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the trusteeship council to perform those functions of the United Federation under the trusteeship system relating to political, economic, social, and educational matters in the strategic areas.

Article 84

It shall be the duty of the administering authority to ensure that the trust region shall play its part in the maintenance of interplanetary peace and security. To this end the administering authority may make use of volunteer forces, facilities, and assistance from the trust region in carrying out the obligations toward the Federation Council undertaken in this regard by the administering authority, as well as for the local defense and the maintenance of law and order within the trust region.

Article 85

The functions of the United Federation with regard to trusteeship agreements for all regions not designated as strategic, including the approval of the terms of the trusteeship agreements and their alteration or amendment, shall be exercised by the Supreme Assembly.

Chapter XIII: The Trusteeship Council

Article 86—Composition

The Trusteeship Council shall consist of the following members of the United Federation:

Those members administering trust regions;

Such of those members mentioned by name in Article 23 as are not administering trust regions; and

As many other members elected for three (3) session periods by the Supreme Assembly as may be necessary to ensure that the total number of members of the Trusteeship Council is equally divided between those members of the United Federation which administer trust regions and those which do not.

Each member of the Trusteeship Council shall designate one (1) specially qualified intelligent life-form to represent it therein.

Article 87—Functions and Powers

The Supreme Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

Consider reports submitted by the administering authority;

Accept petitions and examine them in consultation with the administering authority;

Provide for periodic visits to the respective trust regions at times agreed upon with the administering authority;

and take these and other actions in conformity with the terms of the trusteeship agreements.

Article 88

The Trusteeship Council shall formulate a questionnaire on the political, economic, social, and educational advancement of the inhabitants of each trust region, and the administering authority for each trust region within the competence of the Supreme Assembly shall make a periodic report to the Supreme Assembly upon the basis of such questionnaire.

Article 89—Voting

Each member of the Trusteeship Council shall have one (1) vote.

Decisions of the Trusteeship Council shall be made by a majority of the members present and voting.

Article 90—Procedure

The Trusteeship Council shall adopt its own rules of procedure, including the method of selecting its director.

The Trusteeship Council shall meet as required in accordance with its rules which shall include a provision for the convening of meetings on the request of a majority of its members.

Article 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

Chapter XIV: The Interplanetary Supreme Court of Justice

Article 92

The Interplanetary Supreme Court of Justice shall be the principle judicial instrument of the United Federation of Planets. It shall function in accordance with the appended statute, which is based upon the statute of the Tribunals of Alpha III, and forms an integral part of the present Charter.

Article 93

All members of the United Federation are ipso facto parties to the statute of the Interplanetary Supreme Court of Justice.

A social system which is not a member of the United Federation may become a party to the statute of the Interplanetary Supreme Court of Justice on conditions to be determined in each case by the Supreme Assembly upon the recommendation of the Federation Council.

Article 94

Each member of the United Federation undertakes to comply with the decisions of the Interplanetary Supreme Court of Justice in any case to which it is a party.

If any party in a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Federation Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.

Article 95

Nothing in the present Charter shall prevent members of the United Federation of Planets from entrusting the solution of their differences to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

Article 96

The Supreme Assembly or the Federation Council may request the Interplanetary Supreme Court of Justice to give an advisory opinion on any legal question.

Other bodies of the United Federation and the specialized agencies, which may at any time be so authorized by the Supreme Assembly, may also request advisory opinions of the Court on legal questions arising within the scope of their activities.

Chapter XV: The President

Article 97

The Executive shall be comprised of a President and such staff as the United Federation may require. The President shall be appointed by the Supreme Assembly upon the recommendation of the Federation Council, and shall be the chief executive and administrative officer of the United Federation.

Article 98

The President shall act in that capacity in all meetings of the Supreme Assembly, of the Federation Council, of the Economic and Social Council, and of the Trusteeship Council, and shall perform such other functions as are entrusted to the Executive by these bodies. The President shall make a periodic report to the Supreme Assembly on the work of the United Federation of Planets.

Article 99

The President may bring to the attention of the Federation Council any matter which in his opinion may threaten the maintenance of interplanetary peace and security.

Article 100

In the performance of their duties, the President and the staff shall not seek or receive instructions from any government or from any other authority external to the United Federation of Planets. They shall refrain from any action which might reflect on their positions as interplanetary officials responsible only to the United Federation.

Each member of the United Federation undertakes to respect the exclusively interplanetary character of the responsibilities of the President and the staff and shall not seek to influence them in the discharge of their responsibilities.

Article 101

The staffs shall be appointed by the President under regulations established by the Supreme Assembly.

Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other bodies of the United Federation. These staffs shall form a part of the Executive.

The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence, and integrity. Due regard shall be paid to

the importance of recruiting the staff on as wide a geogalactic basis as possible.

Chapter XVI: Miscellaneous Provisions

Article 102

Every treaty and every interplanetary agreement entered into by any member of the United Federation after the present Charter comes into force shall, as soon as possible, be registered with the President and published by him.

No party to any such treaty or interplanetary agreement which has not been registered in accordance with the provisions of Paragraph 1 of this article may invoke that treaty or agreement before any body of the United Federation.

Article 103

In the event of a conflict between the obligations of the members of the United Federation under the present Charter and their obligations under any other interplanetary agreement, their obligations under the present Charter shall prevail.

Article 104

The United Federation shall enjoy in the territory of each of its members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

Article 105

The United Federation shall enjoy in the territory of each of its members such privileges and immunities as are necessary for the fulfillment of its purposes.

Representatives of the members of the United Federation and officials of the organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the organization.

The Supreme Assembly may make recommendations with a view to determining the details of the application of Paragraphs 1 and 2 of this Article or may propose conventions to the members of the United Federation for this purpose.

Chapter XVII: Transitory Security Arrangements

Article 106

Pending the coming into full force of such special agreements referred to in Article 43 as, in the opinion of the Federation Council, enable it to begin the exercise of its responsibilities under Article 42, the parties to the Declaration of the Federation shall consult with one another and the other members of the United Federation with a view to such joint action on behalf of the organization as may be necessary for the purpose of maintaining interplanetary peace and security.

Nothing in the present Charter shall invalidate or preclude action in relation to any social system which has been an adversary of any signatory to the present Charter, taken or authorized as a result of that war by the governments having responsibility for such action.

Chapter XVIII: Amendments

Article 107

Amendments to the present Charter shall come into force for all members of the United Federation when they have been adopted by a two-thirds (2/3) vote of the members of the Supreme Assembly and ratified in accordance with their

respective statutory processes by two-thirds (2/3) of the members of the United Federation, including all the permanent members of the Federation Council.

Article 108

A general conference of the members of the United Federation for the purpose of reviewing the present Charter may be held at a date and place to be fixed by a two-thirds (2/3) vote of the members of the Supreme Assembly and by a vote of any seven (7) members of the Federation Council. Each member of the United Federation shall have one (1) vote in the conference.

Any alterations of the present Charter recommended by a two-thirds (2/3) vote of the conference shall take effect when ratified in accordance with their respective statutory processes by two-thirds (2/3) of the members of the United Federation including all the permanent members of the Federation Council.

If such conference has not been held before the tenth regular session of the Supreme Assembly following the coming into force of the present Charter, the proposal to call such a conference shall be placed on the agenda of that session of the Supreme Assembly, and the conference shall be held if so decided by a majority vote of the members of the Supreme Assembly and by a vote of any seven (7) members of the Federation Council.

Chapter XIX: Ratification and Signature

Article 109

The present Charter shall be ratified by the signatory governments in accordance with their respective statutory processes.

The ratifications shall be deposited with the government of the United Federation of Planets, which shall notify all the signatory governments of each deposit as well as the President of the organization when he has been appointed.

The present Charter shall come into full force upon the deposit of the ratifications by the United Federation of Planets, the Planetary Union of Vulcan, the Andorian Sovereignty, the United Alliance of Tellar, the Confederation of Altair, and by a majority of the other signatory social systems. A protocol of the ratifications deposited shall thereupon be drawn up by the government of the United Nations which shall communicate copies thereof to all the signatory governments.

The governments signatory to the present Charter which ratify it after it has come into force will become original members of the United Federation on the date of the deposit of their respective ratifications.

Article 110

The present Charter, of which the various language texts are equally authentic, upon the coming into full force of the United Federation of Planets, shall be transferred by the United Nations to the organization for permanent deposit in its archives. Duly certified copies thereof shall be transmitted by the President to the governments of all the signatory social systems.

In faith whereof the representatives of the governments of the United Federation of Planets have signed the present Charter.

Starfleet Charter

The Starfleet Charter was authorized by the Articles of the Federation, Chapter VIII, and lays out the operating framework for Starfleet. Its full text is as follows:

Preamble
By order of the Council of the United Federation of Planets and in accordance with the Articles of the United Federation of Planets,
In recognition of the need for an interplanetary exploration, peacekeeping, and defense force, with the support of the member worlds and citizens of the Federation.

Article I: Establishment/Purpose

Section 1:
There is hereby established a Starfleet interplanetary military force, to be under the direct cognizance of the Federation Council and President. If there is no current Federation Council, Starfleet will assume that role until one is created.

Section 2:
The combined purpose and directive of Starfleet is as follows:

I. Interstellar exploration and scientific assessment of the space within Federation boundaries, including contact with sufficiently developed intelligent life-forms;
II. Defense of UFP member worlds and citizens from any and all hostile entities;
III. All other duties and tasks which the Federation Council may deem necessary and/or appropriate for Starfleet to perform.

Article II: Structure

Section 1:
There is established a Starfleet Command, composed of the Commanding Officer and Executive Officer of each subfleet and department within Starfleet. Only the Commanding Officer of each fleet or division actually sits and votes in chambers. The Executive Officers are, however, privy to all information, so that he/she/it can easily take over when the Commanding Officer is unavailable; has asked said Executive Officer to take over; if the Commanding Officer is missing for more than one month; or Starfleet Command decides that for the good of the fleet/department, the Executive Officer must take over until the Commanding Officer returns or is replaced by Starfleet Command.

Section 2:
The departments of Starfleet are as follows:

the Office of the Commander In Chief of Starfleet
the Directorate of Exploration
the Joint Chiefs of Staff
the Office of the Chief of Starfleet Operations
the Office of Administration

the Office of Strategic Operations
the Office of External Affairs
the Directorate of Personnel
the Judge Advocate General's Corps
the Paymaster's Corps
the Office of the Inspector General
the Directorate of Flight Operations
Starfleet Tactical
the Office of Starfleet Operations
the Office of Starfleet Logistics
the Office of Starfleet Security
the Office of Starfleet Engineering
the Starfleet Corps of Engineers
the Office of Starfleet Research & Development
the Starfleet Sciences Directorate
the Office of the Surgeon General
the Directorate of Intelligence
the Starfleet Marine Corps
the Directorate of Starfighter Operations
the Starfleet Training Command

Section 3:
Starfleet Command controls all aspects of the military of the United Federation of Planets and is authorized to regulate the inner workings of Starfleet as a whole, through the setting in place and maintenance of general orders and regulations.

Section 4:
The Commanding Officer of each subfleet and department shall have one (1) vote on matters concerning Starfleet Command and Starfleet as a whole.

Section 5:
The Commander in Chief of Starfleet shall have an non-voting advisory seat on the Federation Council and serve as the representative of Starfleet, as well as the principle military and exploratory advisor to the Federation President.

Section 6:
Each subfleet and department of Starfleet shall compose a brief Charter stating its general purpose and internal organization, to be reviewed and approved by the Commander in Chief of Starfleet.

Section 7:
The subfleets comprise the bulk of the Starfleet. These fleets are created as a means of organizing the large number of ships and crews into manageable units. Subfleets do not have the authority to negotiate treaties, cease-fire agreements or make pacts with any foreign group, government, military unit, etc., unless that are acting under direct orders from the head of External Affairs.

Section 8:
No member of Starfleet Command (exclusive of support staff) may hold a rank lower than Captain.

Section 9:
Amendments to this Charter can be added after ratification by majority vote of the members of Starfleet Command.

Section 10:
All members of Starfleet Command are prohibited from commanding more than one single subfleet or department in Starfleet.

Section 11:
All members of Starfleet Command are prohibited from holding positions within any subfleet or department other than the one they command.

Section 12:
No assets or personnel of Starfleet Command may be ordered to subdue or otherwise hinder the population of any of the founding member worlds of the United Federation of Planets.

Section 13:
No commander of a Starfleet vessel or Starfleet-controlled installation, military or otherwise, may grant political asylum to any individual without first being given express permission to do so by a representative of the Federation government.

Section 14:
In times of extreme threat to the safety of the United Federation of Planets, it is understood that Starfleet or a subordinate entity of Starfleet may be granted the authority to execute measures it deems necessary to ensure the continued security of said Federation.

Section 15:
In the event that another alliance attacks Federation worlds with or without provocation, Starfleet will respond only when a unanimous agreement between the Federation Council exists for such action, and only after negotiations have been attempted and have been deemed a failure.

Article III: Selection of Starfleet Command and Other Senior Positions

Section 1: The Commander In Chief of Starfleet:
1. There will be a Commander In Chief of Starfleet, appointed by Starfleet Command and confirmed by a majority vote. This position will be held until such time in which the Commander In Chief of Starfleet resigns the post or is removed by Starfleet Command for justifiable reasons. This can be accomplished by a majority no-confidence vote by Starfleet Command and/or charges being issued against the Commander In Chief by Starfleet Command or the Inspector General. At that time the Deputy Commander In Chief takes over and the Chief of Starfleet Operations then doubles as the Deputy Commander In Chief until the matter is settled.

2. The Commander In Chief of Starfleet will hold overriding command of all subfleets and departments of Starfleet. The

Commander In Chief of Starfleet will preside over Starfleet Command. The Commander In Chief of Starfleet will make the final declaration of Starfleet policy decisions, general orders and regulations, as voted on and approved by voting members of Starfleet Command, with the power to break any voting ties unless the vote of the Commander In Chief helps to bring about a tie after all Starfleet Command members have voted. If at that time there is an abstention, that Starfleet Command member will be given the chance to change that vote. If there still is a tie at that point, then the Vice Commander In Chief will cast the deciding vote. This is the only instance in which an Executive Officer may vote along with a Commanding Officer in Starfleet Command.

3. The Commander In Chief of Starfleet shall have the right to choose his own staff. The Commander In Chief of Starfleet shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol. In addition, the Commander In Chief of Starfleet will have the authority to promote subordinate officers, conduct boards of inquiry and investigations in all matters concerning Starfleet Command and Starfleet as a whole, as well as have the authority to pardon military criminals, and make ceremonial awards. Finally, the Commander In Chief of Starfleet will have the authority to override and/or change the duties and responsibilities of those subordinate to him within reason. However, this can be overridden by a majority vote of Starfleet Command. The Commander In Chief of Starfleet will also appoint a Vice Commander In Chief. This appointment need not be ratified by a majority vote of Starfleet Command.

4. There will be a Vice Commander In Chief of Starfleet, appointed by the Commander In Chief of Starfleet. This position will be held until either the Vice Commander In Chief of Starfleet abdicates the position, or is replaced by the Commander In Chief with someone else upon the presentation of just cause, or is removed by Starfleet Command by the same standard.

5. The Vice Commander In Chief of Starfleet will be responsible to serve as advisor to the Commander In Chief, and for serving as Commander In Chief should the Commander In Chief of Starfleet becomes unavailable due to absence. The Vice Commander In Chief of Starfleet is also the official liaison and spokesperson to the news media representing Starfleet. The person holding this position shall have the right to choose his own staff. The Vice Commander In Chief reserves the right to review and promote any officer under his command at the end of each promotion period, up to one rank below his own. The Vice Commander In Chief of Starfleet shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol.

Section 2: Head of Starfleet Academy

1. There will be a Commandant of Starfleet Academy, appointed by the Commander In Chief of Starfleet. This position will be held until either the Commandant of Starfleet Academy abdicates the position, is replaced by the Commander In Chief with someone else upon the presentation of just cause, or is removed by Starfleet Command by the same standard.

2. The Commandant of Starfleet Academy will be responsible for the function and supervision of the Starfleet Training Command, the organization and deployment of any additional vessels and equipment needed for training, initial placement of such newly trained personnel, and as a resource for Starfleet Command in questions of protocol. He shall have the right to choose his own staff to serve on his starship, and they will also serve as his office staff. The Commandant of Starfleet Academy reserves the right to review and promote any officer under his command at the end of each promotion period, up to one rank below his own. He shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol. The Vice Commandant of Starfleet Academy is also allowed one starship with crew to serve as staff for the Vice Commandant.

Section 3: Director of Starfleet Intelligence:
1. There will be a Director of Starfleet Intelligence, appointed by the Commander In Chief of Starfleet. This position will be held until either the Director of Intelligence abdicates the position, is replaced by the Commander In Chief of Starfleet with someone else upon the presentation of just cause, or is removed by Starfleet Command by the same standard.

2. The Director of Starfleet Intelligence will be responsible for the undertaking of all Starfleet covert and intelligence-gathering operations, as well as organization and deployment of Federation Intelligence Operatives, up to and including the Assault and Rescue and Reconnaissance Units. He shall have the right to choose his own staff. The Director of Starfleet Intelligence reserves the right to review and promote any officer under his command at the end of each promotion period, up to one rank below his own. He shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol.

Section 4: Chief of Starfleet Operations:
1. There will be a Chief of Starfleet Operations, appointed by the Commander In Chief of Starfleet. This position will be held until either the Chief of Starfleet Operations abdicates the position, is replaced by the Commander In Chief with someone else upon the presentation of just cause, or is removed by Starfleet Command by the same standard.

2. The Chief of Starfleet Operations will be responsible for coordinating interfleet military activities, planning offensive and defensive strategies, and the deployment of Starfleet military resources. He shall authorize the use of military force if deemed necessary by himself, the Commander In Chief, or Starfleet Command. However, if the Chief of Starfleet Operations makes the decision to use military force over the objections of Starfleet Command and/or the Commander In Chief, he will accept the responsibility and the possible repercussions. The Chief of Starfleet Operations will serve as the Executive Commander of the fleets, serving as an intermediary and subordinate to the Commander In Chief. He shall have the right to choose his own staff. The Chief of Starfleet Operations reserves the right to review and promote any officer under his command at the end of each promotion period, up to a maximum of his own rank. He shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol.

Section 4A: Commanding Officer of a Subfleet
1. There will be a commanding officer for each subfleet, appointed by the Chief of Starfleet Operations. This position will be held until either the commanding officer abdicates the position, is replaced by the Commander In Chief or Chief of Starfleet Operations with someone else upon the presentation of just cause, or is removed by Starfleet Command by the same standard.

2. The Commanding Officer will be responsible for coordinating interdivision activities (if any), planning offensive and defensive strategies, and the deployment of that subfleet's military resources. He shall authorize the use of military force if deemed necessary by the Chief of Starfleet Operations, the Commander In Chief, or Starfleet Command. The Commanding Officer will serve as the Executive Commander of the subfleet, serving as the Director of Starfleet Operations for his patrol district. He shall have the right to choose his own staff. The Commanding Officer reserves the right to review and promote any officer under his command at the end of each promotion period, up to one rank below his own. He shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol. He shall serve as a civilian governor to all worlds within his patrol district if there is none already in place.

Section 5: Department Chiefs:

1. There will be a head of every Starfleet department appointed by the Commander In Chief of Starfleet. These positions will be held until either the department chief abdicates the position, is replaced by the Commander In Chief with someone else upon the presentation of just cause, or is removed by Starfleet Command by the same standard.

2. The department chief will be responsible for the operations in his respective department of Starfleet. He shall have the right to choose his own staff. The head of each department reserves the right to review and promote any officer under his command at the end of each promotion period, up to one rank below his own. He shall have the authority to discipline any officer under his direct command for a non-criminal breach of protocol.

Article IV: General Procedure

Section 1:

The rank system of Starfleet shall be as follows (in increasing order):

Enlisted Grades

- Crewman Recruit
- Crewman Apprentice
- Crewman
- Petty Officer Third class
- Petty Officer Second class
- Petty Officer First class
- Chief Petty Officer
- Senior Chief Petty Officer
- Master Chief Petty Officer
- Command Master Chief Petty Officer
- Master Chief Petty Officer of Starfleet

Warrant Officer Ranks

- Warrant Officer
- Chief Warrant Officer
- Senior Warrant Officer
- Master Warrant Officer

Officer Ranks

- Ensign
- Lieutenant (Junior Grade)
- Lieutenant
- Lieutenant Commander
- Commander
- Captain
- Fleet Captain

Flag Officer Ranks

- Commodore
- Rear Admiral

Vice Admiral
Admiral
Fleet Admiral

Section 2: Chain of Command

Starfleet Command and Subfleet Commanding Officers

May give orders to any subordinate Starfleet officer regardless of department or subfleet, but may be asked to give just cause if those orders are later found to be in question.
May not give orders to any department or subfleet's Commanding Officer unless that order deals directly with the department under his own command, or if the order is to desist from performing an act that goes against Starfleet general orders.

Starfleet Command and Fleet Executive Officer

May give orders to any subordinate Starfleet officer regardless of department or subfleet. This may include officers of higher rank who do not serve on Starfleet Command.
May not give orders to any department or subfleet's Executive Officer unless that order deals directly with the department under his own command or if the order is to desist from performing an act that goes against Starfleet general orders.

Officers Outside of Starfleet Command

May give orders to any subordinate Starfleet officer regardless of department or subfleet.
May not give orders to any officer of the same rank or higher unless that order deals directly with the rules and regulations of his own department and is given in order to carry out the purpose of that department or subfleet, or if the order is to desist from performing an act that goes against Starfleet general orders.

Promotions Policy

Promotion Review Periods for officers between the ranks of Ensign and Lieutenant Commander will last for two months. Promotion review periods of officers to be promoted to the ranks of Commander and above are limited to four months, with completion of Starfleet Command School.
Temporary field promotions are permitted outside of the normal promotion review time, during a state of Starfleet Command-declared war only, unless so authorized by the subfleet or department commander, or the Commander In Chief. Commanding Officers who wish to issue a field promotion may do so after submitting the promotion review paperwork through the chain of command to the Inspector General. The field promotion will immediately take effect and be listed as "brevet" until such time as the war is officially declared over. After hostilities have ceased, the Inspector General's Corps will evaluate all field promotions for permanent change to have the "brevet" removed. With the exception of the temporary field promotions, all promotion reviews outside of the normal review cycle must be submitted to the Inspector General for approval.



Starfleet General Orders

General Order 1 ("Prime Directive")

As the right of each sentient species to live in accordance with its normal cultural evolution is considered sacred, no Starfleet personnel, Federation citizen and/or representative may interfere with the normal and healthy development of alien life and culture. Such interference includes introducing superior knowledge, strength, or technology to a world whose society is incapable of handling such advantages wisely. Starfleet personnel may not violate this Prime Directive, even to save their lives and/or their ship/installation, unless they are acting to right an earlier violation or an accidental contamination of said culture. This directive takes precedence over any and all other considerations, and carries with it the highest moral obligation.

General Order 2

No Starfleet personnel shall unnecessarily use force, either collectively or individually, against members of the United Federation of Planets, their duly authorized representatives, spokespersons, or designated leaders, or members of any sentient non-member race, for any reason whatsoever.

General Order 3

The sovereignty of each Federation member being respected in all things, Starfleet personnel shall observe any and all statutes, laws, ordinances, and rules of governance currently in effect within the jurisdiction of a member planet. Violators of such ordinances will be subject to such punishments or corrections as shall be determined by local governmental bodies.

General Order 4

If contact is made with hitherto-undiscovered intelligent life-forms, under no circumstance shall Starfleet personnel, either by word or deed, inform said life-forms that worlds other than their own or intelligent life-forms other than their own exist outside the confines of their own space, or answer questions by said life-forms pertaining to the existence of other species outside said space.

General Order 5

In cases of extreme emergency, Federation special representatives are authorized to assume emergency powers to deal with a condition or circumstance that is deemed hazardous to the welfare of Federation citizenry. Within the scope of these emergency powers, duly authorized civilian personnel may assume temporary command of Starfleet vessels, installations, and/or personnel to deal with the emergency. Starfleet personnel must submit to their authority for the duration of the crisis.

General Order 6

The request for emergency assistance from Federation citizenry or non-aligned persons demands unconditional priority from Starfleet personnel. Such personnel shall immediately respond to said request, postponing all other activities. This responsibility extends to current governments at odds, actively or passively, with the Federation.

General Order 7

No Starfleet vessel shall visit the planet Talos IV under any circumstances, emergency or otherwise. This order supersedes General Order 6. Any transgression of this general order shall be punishable by death. (2254)

General Order 8

Upon sighting a warship within Federation space and identifying it as belonging to a foreign power, the commander of the Starfleet vessel/installation shall determine the reason(s) for that craft's presence in the vicinity. If there is conclusive evidence that the vessel has hostile intentions, the Federation vessel may take appropriate action to safeguard the lives and property of Federation members or other non-aligned persons under current Federation protection. In such cases, the commander may use discretion in deciding whether or not to use force to disable the hostile vessel. However, care should be taken to avoid unnecessary loss of sentient life. (2254)

General Order 9

A commander of a Starfleet vessel or installation, military or auxiliary, may grant political asylum to any individual without first being given express permission to do so by a representative of the Federation government. However, said decision may and can be overturned by a superior officer or representative of the Federation government pending a review of circumstances. (2258)

General Order 10

If there exists eyewitness testimony by senior officers or similar verifiable evidence that an individual, military or civilian, has violated the Prime Directive, said individual may be relieved of duty by a duly sworn representative of the Federation government and placed under immediate arrest. The governmental representative shall then take such action as he deems necessary to minimize the results of the violation. (2256)

General Order 11

Starfleet officers with command-level rank or higher are granted full authority to negotiate conditions of agreement and/or treaties with legal representatives of non-Federation planets. In such circumstances, the acting officer carries de facto powers of a Federation Special Ambassador. Any and all agreements arranged in this manner are subject to approval

by the Chief of Starfleet Operations, the Secretary of Starfleet, and the Federation Council. (2260)

General Order 12
When approaching a vessel with which communication has not been established, all Starfleet vessels are to maintain maximum safety precautions, regardless of the origin of said vessel, be it a foreign power, an hitherto-unknown ship, or a Starfleet vessel. (2260)

General Order 13
Except when orders state to the contrary or in accordance with General Order 6, Starfleet personnel will respect the territorial integrity of independent planetary systems and governments within and without the confines of the Federation's borders, and will not violate territorial space belonging to such worlds. (2262)

General Order 14
Starfleet personnel may intervene in local planetary affairs to restore general order and to secure the lives and property of Federation citizens only upon receiving a direct order to do so from a civilian official with the effective title of governor or higher. (2262)

General Order 15
No officer of command or flag rank shall travel into a potentially hazardous area without suitable armed escort. (2269)

General Order 16
Starfleet personnel may extend technological, medical, or other scientific assistance to members of foreign powers or previously unrecognized sentient species only if such assistance in no way compromises the Prime Directive or the security of the Federation or Starfleet. (2269)

**NOTE: Starfleet Publications Division recognizes that, as of 2276, numerous other General Orders have been ratified. The editors acknowledge this, but in light of the subject matter, we have omitted all text not essential to the historical research of said subject matter.*

The Earth-Romulan War: Treaty of Peace

(As originally written by Abraham Dannon, Senator and Ambassador, United Federation of Planets)

Preamble

The undersigned, the President of the Council of the United Federation of Planets and the Praetor of the Continuing Committee of the Romulan Star Empire, in the interest of ending the recent conflict, with its great toll of bloodshed on both sides, and with the objective of establishing conditions that will encourage peaceful relations between the Human and Romulan peoples, do individually, collectively, and mutually agree to accept and to be bound and governed by the conditions and terms of armistice set forth in the following Articles and Paragraphs, which said conditions and terms are intended to fully conclude the hostilities between the United Federation of Planets and the Romulan Star Empire.

Article I: Military Demarcation and the Neutral Zone

A Neutral Zone shall be established as a buffer zone to prevent the occurrence of incidents which might lead to a resumption of hostilities. This Neutral Zone shall be defined by two boundaries one (1) light-year apart along the galactic longitudinal plane, and further defined as indicated on the attached map, along with precise accompanying coordinates. This Neutral Zone shall be plainly marked by the militaries of the opposing sides.

Neither side shall execute any hostile act within, from, against, or across the Neutral Zone. No vessels identifiable with the governments of the opposing sides, whether military or civilian, may cross the demarcation lines which define the Neutral Zone, nor may any unmanned probes, whether military or civilian, be deployed in the Zone.

Any breach of the Neutral Zone may be considered a hostile action and a breach of this Treaty. In such event, an immediate state of war shall be declared to exist, except where such intrusion can be undeniably proven to be the accidental result of conditions beyond the control of the vessel in question and did, in fact, occur without hostile intent.

Article II: Concrete Arrangements for the Armistice

The Military Commanders of the opposing sides shall order and enforce a complete cessation of all hostilities by all armed forces under their control, including all units and personnel of any surface, orbital, and interstellar forces, effective twelve (12) hours after this Treaty is signed.

In order to ensure the stability of the military armistice, the Commanders of the opposing sides shall:

1. Within seventy-two (72) hours after this Treaty becomes effective, begin the withdrawal of all military forces, supplies, and equipment from the Neutral Zone. All active minefields, automated monitoring stations, and other outposts known to exist within the Neutral Zone after the beginning of the withdrawal of military forces therefrom shall be reported by the Commander of the side whose forces emplaced such installations. Eventually, within thirty (30) days after the termination of the seventy-two (72)-hour period, all such installations shall be permanently removed from the Neutral Zone as directed by and under the supervision of the appropriate Commander. At the termination of the seventy-two (72) -hour

period, except for unarmed vessels which are to effect the removal of the stations and outposts remaining within the Neutral Zone, no vessels of either side shall be permitted to enter the Neutral Zone.
2. Within ninety (90) days after this Treaty becomes effective, withdraw all their military and civilian vessels, supplies, and equipment from the Neutral Zone and any region of space to be occupied by the opposing side. If such military and civilian vessels are not withdrawn within the stated time limit, and there is no mutually agreed and valid reason for the delay, the other side shall have the right to take any action which it deems necessary for the maintenance of security and order.
3. Cease the introduction into the adjacent sectors of reinforcing combat spacecraft, armored transports, weapons, and ammunition; provided, however, that combat spacecraft, armored transports, weapons, and ammunition which are destroyed, damaged, worn out, or used up during the period of the armistice may be replaced on the basis of piece for piece of the same effectiveness and the same type.
2. Ensure that personnel of their respective commands who violate any of the provisions of this Treaty are adequately punished.

This Treaty shall apply to all opposing surface, orbital, and interstellar forces under the military control of either side, which shall respect the Neutral Zone and the area under the military control of the opposing side.

Responsibility for compliance with and enforcement of the terms and provisions of this Treaty is that of the signatories hereto and their successors. The leaders of the opposing sides shall establish within their respective governments all measures and procedures necessary to ensure complete compliance with all the provisions hereof.

Article III: Miscellaneous

Amendments and additions to this Treaty must be mutually agreed to by the leaders of both sides.
The Articles and Paragraphs of this Treaty shall remain in effect until expressly superseded either by mutually acceptable amendments and additions or by provisions in another appropriate agreement.
All of the provisions of this Treaty shall become effective at 2200 hours on 1 February 2160.

Done by voice communication on subspace radio, at 1000 hours on the first day of February, 2160, in English and Romulan, both texts being equally authentic.

I, Orris, having read the terms of this treaty verbatim over the agreed-upon subspace communication channel, and being identifiable by voiceprint of this transmission, do hereby certify that I am Praetor of the Romulan Star Empire, with full powers to execute this treaty on behalf of the Empire.

I, Rissa Lyn, having read the terms of this treaty verbatim over the agreed-upon subspace communication channel, and being identifiable by voiceprint of this transmission, do hereby certify that I am President of the United Federation of Planets, with full powers to execute this treaty on behalf of the Federation Council and the Federation Senate.

Resolution 74

Adopted by the Federation Council at its 52nd meeting, on 29 July 2160

The Federation Council, recalling its earlier resolutions 18 (2160) and 32 (2161) regarding the preservation of peace and prosperity for all social systems,

Recalling in particular the high cost of the recent war between the United Federation of Planets and the Romulan Star Empire,

Bearing in mind its primary responsibility under the Articles of Federation for the maintenance of interplanetary peace and security, and underlining the importance of taking measures aimed at conflict prevention and resolution,

Reaffirming its commitment to the purposes of the Articles of Federation as set out in Article 1, and to the principles of the Articles as set out in Article 2, including its commitment to the principles of the political independence, sovereign equality, and territorial integrity of all states, and to respect for the sovereignty of all states,

Underlining the need for all parties concerned to comply with the rules and principles of interstellar law,

Declares accordingly that the United Federation of Planets hereby assumes the rights and obligations of the Treaty of Peace between the United Federation of Planets and the Romulan Star Empire, including:

A. Deterring renewed hostilities, maintaining and where necessary enforcing the measures imposed by Article 1 of the Treaty of Peace;

B. Providing security and maintaining law and order throughout the Qualor Sector;

C. Conducting border monitoring duties as required;

1. Reaffirms the existence of the Neutral Zone as established by Article 1 of the Treaty of Peace, and further reaffirms the Council's commitment to maintain the integrity of the Zone from all intrusions;

2. Reiterates its support for the sovereignty and territorial integrity of the Romulan Star Empire within its recognized boundaries;

3. Decides to establish, in accordance with rule 28 of the Council's provisional rules of procedure, a Committee of the Federation Council consisting of all the members of the Council, to undertake the following tasks and to report on its work to the Council along with its observations and recommendations:

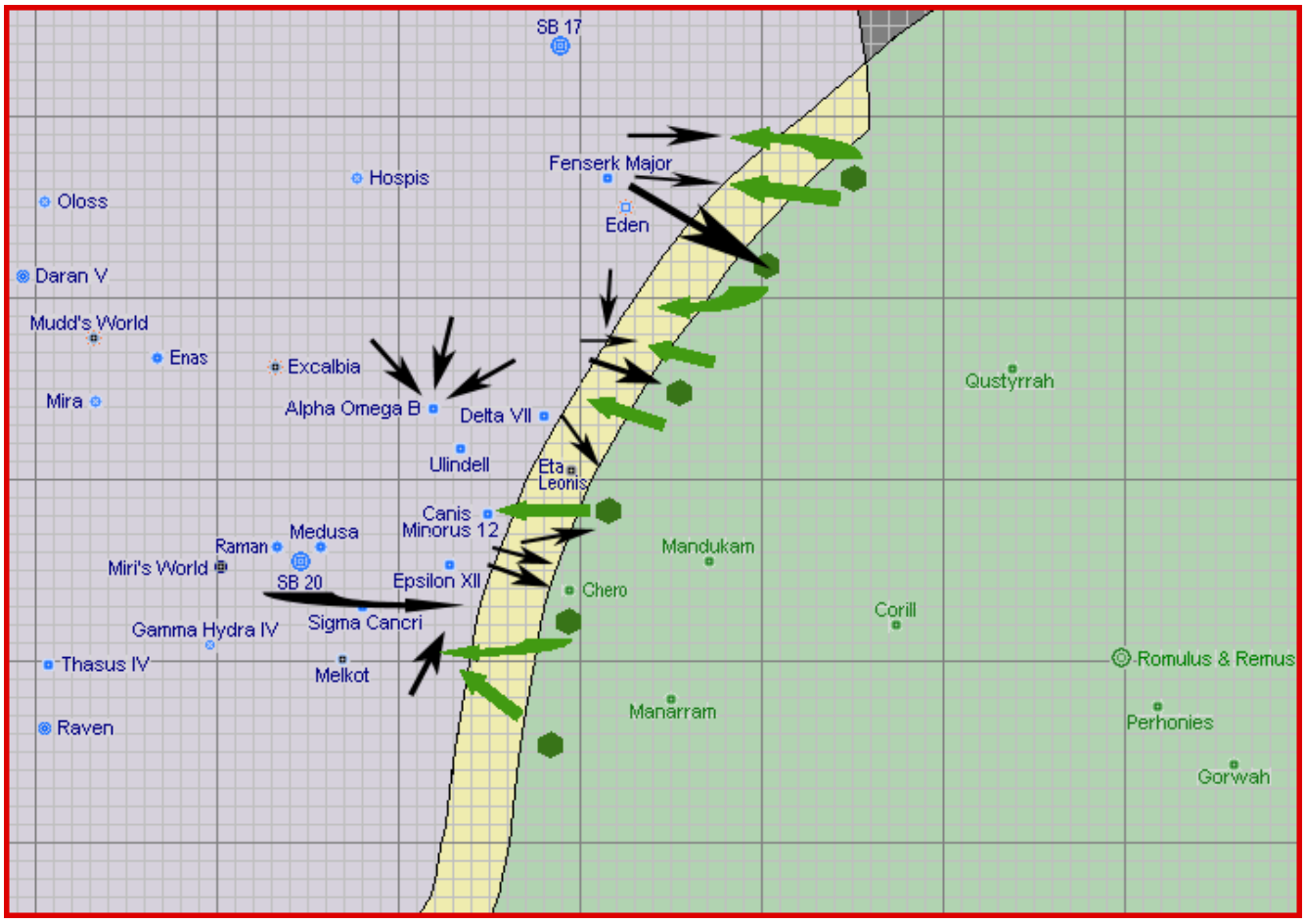
A. to seek from all members further information regarding the action taken by them with a view to implementing effectively the measures imposed by Article 1 of the Treaty of Peace, and thereafter to request from them whatever further information it may consider necessary;

B. to consider information brought to its attention concerning violations of the measures imposed by Article 1 of the Treaty of Peace, and to recommend appropriate measures in response thereto;

C. to make periodic reports to the Federation Council regarding alleged violations of the measures imposed by Article 1 of the Treaty of Peace, identifying where possible persons, vessels, or entities are reported to be engaged in such violations;

4. Reaffirms its relevant resolutions on the Romulan Star Empire, and in particular resolution 18 (2160);

5. Reaffirms the importance of holding, at the appropriate time, an interstellar conference on peace, security and stability in the Qualor Sector between the governments of the United Federation of Planets and the Romulan Star Empire, with the participation of all the governments of the region and all others concerned;
6. Decides to remain seized of the matter.



Map of Federation and Romulan space showing the locations of all major battles during the Romulan War. Federation and Romulan encounters have been superimposed over the current established borders between the two governments (as of 2276). At the onset of the war, neither side had a definitive border they could claim, although a great number of Federation political historians would disagree on that point.



PEACE TREATY OF AXANAR

BETWEEN THE KLINGON EMPIRE

AND

THE UNITED FEDERATION OF PLANETS



The terms and conditions having been negotiated and mutually agreed to be understood, the Klingon Empire and the United Federation of Planets mutually pledge to each other their solemn word to immediately cease hostilities between the two parties, effective as of this stardate, 4306.13. All prisoners of war, held by either party or their allies, will immediately be returned to their host government.

Between the adjacent territorial boundaries of the two parties there is established a Neutral Zone, 750 parsecs in width in the galactic longitudinal plane, and extending to the outer boundary of the galaxy in the vertical plane.

All persons and facilities of any manner whatsoever identifiable with either party shall immediately be removed from this zone. Effective this stardate, 4306.20, no persons or facilities of any manner whatsoever identifiable with either party shall thereafter intrude into this zone. The Klingon Empire and the United Federation of Planets mutually pledge to faithfully maintain the neutrality of this zone thereafter.

Any intrusion by any person or facility whatsoever identifiable with either party directly into this Neutral Zone shall be considered to be a hostile action and breach of this treaty. In such an event, an immediate state of war shall be declared to exist between the Klingon Empire and the United Federation of Planets, except only where stipulations V through IX apply.

Such intrusions by persons or facilities whatsoever identifiable with either party can be undeniably demonstrated to be the accidental result of conditions beyond the control of that person or that facility and did, in fact, occur without hostile intent.

To this end, and for purposes of mutual maintenance of this treaty of peace and this Neutral Zone, the Klingon Empire and the United Federation of Planets do agree to keep open and maintain surveillance of subspace communications channel L.

Further, it is understood by both the Klingon Empire and the United Federation of Planets that both parties have well-established trade agreements with mutual, neutral worlds. In some cases, these worlds are one and the same. It is agreed that in the interests of both the Klingon Empire and the United Federation of Planets that these agreements will remain in place, insofar as they do not conflict with stipulation V.

In such instances that they do not conflict with stipulation V, and when persons or facilities whatsoever identifiable with either party come into contact with one another, full courtesies will be afforded to each party when acceptable distances between the two cannot be reached.

In such instances that they do conflict with stipulation V, arrangements will be made at the diplomatic level, in accordance with policies set forth by both the Klingon High Council and the Federation Assembly.

I, Fleet Admiral K'hober, supreme commander of the combined Klingon forces, acting with the full authority of the Klingon High Council, do hereby affirm that I have the full authority to execute the statutes of this treaty for the Klingon Empire.

I, Ambassador Jennifer Elise Norpin, having read the terms of this treaty, do hereby declare that I ratify this settlement with the full authority to execute the statutes of this treaty for the United Federation of Planets.

Fleet Admiral K'hober
Klingon Empire

Jennifer E. Norpin

Jennifer Elise Norpin, Ambassador
United Federation of Planets

Technology

(2140–2260)



Developing the Matter/ Antimatter Drive

LIMITATIONS OF FUSION-POWERED WARP SHIPS

In 2156, the United Earth (UE) and her allies, Tellar and Andor, went to war with the Romulan Star Empire. Although tensions had been building for several years and support for a war was widespread on Earth and her colonies, Earth's armed forces were poorly prepared when hostilities actually broke out. At that time, the ships of the United Earth Space Probe Agency (UESPA) were mostly poorly armed survey vessels, converted merchantmen of various sizes and configurations, and small attack craft that were incapable of independent interstellar operations. Although converted interstellar cargo ships could carry, by virtue of their great size, substantial firepower, they had never been intended for offensive operations. The most capable ships of the UESPA were probably those of the fusion-powered *Torsk* class; however, they too were of limited range and only four ships had entered service by 2152.

At the start of the war, all belligerent powers used warp-capable ships powered by fusion reactors. Although rarely used for this purpose today, fusion reactors were the sole means of power for the first century of warp flight on Earth. Fusion-powered warp reactors had decided disadvantages when compared with modern matter/antimatter (M/AM) systems. Probably the most serious disadvantage, in tactical terms, was their relatively low efficiency. To form and maintain a warp field, fusion reactors consumed deuterium at extremely high rates, which placed two limitations on a ship's capabilities. First, a large percentage (70% or more) of the ship's mass was fuel, which limited nonfuel payload such as weapons, sensors, and shuttlecraft. Second, the high rate of consumption severely limited range. The first limitation of payload could be partly addressed by scaling up the ship. Since a fixed percentage of a ship's mass must be fuel and its associated drive system to operate at a given warp speed for a given duration, the nonfuel payload could be increased by increasing the total size of the ship. The second limitation of range was addressed by frequently refueling at starbases, convoying the ship with tankers, or rendezvousing with tankers en route. Another disadvantage of fusion reactors was their low peak power output, which limited the maximum speed that could be achieved to about warp 2.5, or 15.6 c.

Because of these limitations of range, speed, and payload, fusion-powered ships were unsuited for offensive interstellar operations. For an attack to succeed, it had to be made either when and where the enemy was least prepared or with an overwhelming superiority of force. However, the limitations of range meant that attacks across more than 10 light-years (ly) of interstellar space could not be accomplished without repeated refueling, which required that ships drop out of warp and risk detection and interception. If possible attack corridors shorter than 10 ly were continuously well defended, all attacks could probably

be discouraged or repelled. Furthermore, the maximum speed of warp 2.5 meant that a journey of 10 ly would take at least 234 days, during which time detection and interception became increasingly likely. If a ship were to carry enough armaments for a powerful attack on enemy ships or ground targets, the fixed percentage of available payload meant that the ship would probably be extremely large and poorly maneuverable at both warp and impulse speeds. Fighter carriers, of course, were impractical within these payload limitations.

When Earth forces were finally given the opportunity to go on the offensive after a Romulan invasion fleet was destroyed at the Battle of Hell's Gate, the strategies available were severely limited by the poor quality of UE warships. Despite broad popular support for attacks against Romulan planets, the UE and her allies simply did not have ships of sufficient capability and in sufficient number to successfully undertake offensive operations. Instead, ship-to-ship combat most often took the form of long-range missile duels. Opposing ships would cautiously venture out from their bases until long-range sensor contact was made. The ships would then usually close within extreme missile range, fire a volley of missiles, then attempt to evade their opponent's missiles. As a result, many engagements ended without significant damage to either ship. For the UE to undertake offensive operations, a power source enabling more-dynamic warp flight was obviously needed.



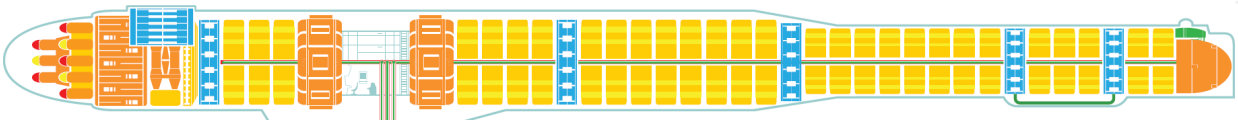
USS *Torsk*, namesake of the light cruiser class, above the planet Delta VII, 2152.

THE FIRST MATTER/ANTIMATTER REACTORS

Although antimatter had become a popular plot device in fictional works of the 20th century and had been produced in minute quantities by the turn of the 21st century, practical M/AM reactors were long considered no more than a dream. However, in 2139, researchers at the Vulcan Academy of Sciences and the UE Institute for High-Energy Physics at Tsukuba, Japan, jointly developed the Richardson-Tachikawa process for the mass production of antimatter. With this process, researchers could finally obtain antimatter in sufficient quantities to begin construction of two prototype M/AM reactors—Colossus on Mars, and Titanus on Luna—which both came online within two weeks of one another in 2147. Titanus, a much smaller design, was deemed a partial failure when, on the afternoon of July 16, 2148, the entire assembly (and nearly half the research facility) vanished during a full-power test. Though the accident was quickly blanketed with a veil of secrecy, the two-kilometer crater left in the wake of the disappearance was visible from Earth for nearly three years until the investigation was complete and it was decided to "bury" the remains of the outpost.

Although Colossus was successful, it weighed an estimated 250,000 tons and sprawled over some five hectares of Martian desert. Obviously, considerable refinement was necessary before a M/AM reactor could power a ship's warp drive. However, by 2152 a reactor (SSWR-IA) had been constructed with a weight of 30,000 tons and a volume of 4,000 cubic meters, just small and light enough to be mounted in a starship. On September 4, 2154, the M/AM technology demonstrator UESPA *Little Nell* was towed from Utopia Planitia UESPA Yards to the Jupiter flight range, where it made Earth's first M/AM-powered warp flight.

With the start of the war in February 2156, the UE War Council decided to make production of M/AM-powered warships a priority. As a result, fifty trillion new solar dollars per year were dedicated to M/AM reactor development. This investment equaled, as a percentage of gross domestic product, that of the old United States of America for development of the first fission munitions in the mid-20th century. The flight test program was proceeding smoothly when on her tenth flight on April 23, 2156, *Little Nell* was destroyed by a catastrophic warp core explosion, likely due to spalling or delamination of the inner surface of

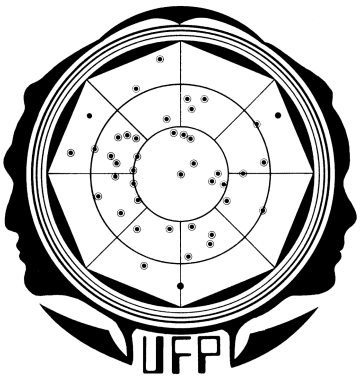


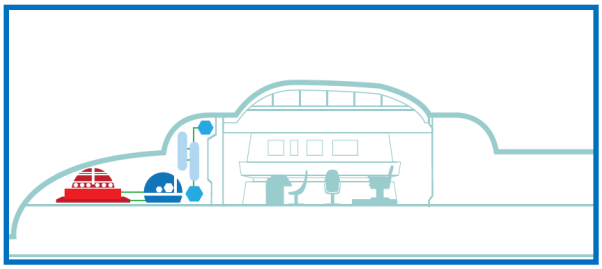
Daedalus-class PA-4 warp nacelle. This was the most efficient configuration designed during the Romulan War, and would see continued service with little upgrades for a further twenty years.

the M/AM reaction chamber. However, within six months a second prototype, *Little Nell II*, was launched. Ironically, the destruction of *Little Nell* may have actually accelerated development, as the new SSWR-IIA reactor installed in *Little Nell II* incorporated numerous improvements ahead of the original development schedule as well as being lighter (25,000 tons) and smaller (2,800 cubic meters). After an accelerated testing program, the improved SSWR-IIA reactor was formally certified by the UESPA Propulsion Board for installation in naval vessels in March 2157. The first ships to use the new reactor were *Krechet*–class cruisers.

THE ADMIRALTY IS UNWILLING TO INTRODUCE M/AM-POWERED SHIPS AND UNDERTAKE OFFENSIVE OPERATIONS

In the aftermath of a failed Romulan invasion of October 2157, a call went up throughout UE space for immediate retribution. Citizens of Earth and her colonies now believed that merely defending UE space against the Romulans was no longer sufficient; instead, they felt that Romulan worlds must be directly attacked. However, in 2157 the UESPA (the UESPA acronym was still considered interchangeable with "Starfleet" until the 2260s) was not yet able to mount offensive operations. As the outcome of the Romulans' attempted invasion so clearly showed, fusion-powered ships were simply too large, too slow, and had payloads and unrefueled ranges too small to successfully attack across distances of more than a few light-years. In fact, the Romulan invasion fleet had been discovered when two UESPA M/AM-powered cruisers followed Romulan tankers attempting to rendezvous for refueling. These limitations were recognized by the UESPA admiralty, who tried to explain to an increasingly outraged public that destruction of the Romulan homeworld was not a war aim of the budding United Federation of Planets. The admiralty had long believed that the mission of the UESPA was to defend allied space, and had prepared its fleets accordingly. Unless the Romulans were to somehow obtain more powerful warp drives (an extremely unlikely possibility, given their frustrated attempts to harness quantum singularities rather than antimatter), the UESPA's existing fusion-powered ships supplemented by M/AM-powered ships in limited roles were likely sufficient for defensive actions. However, if Starfleet was now ordered to go on the offensive, the necessary changes in equipment, tactics, training, and crew deployment would be extremely costly, yet were not guaranteed to achieve the desired effects.

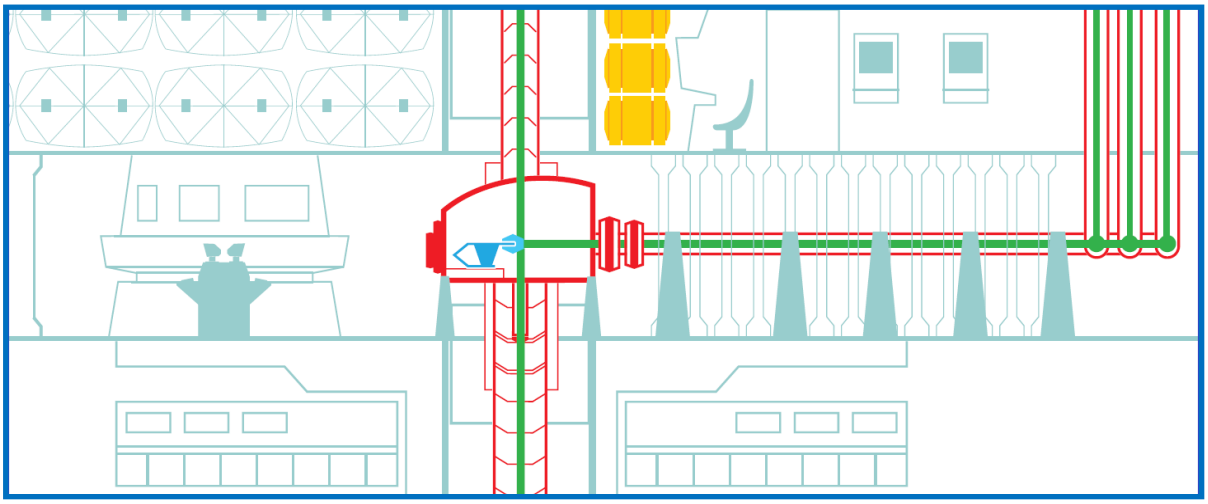




Ajax-class bridge, circa 2150 (typical configuration).

The admiralty had three main concerns about the possible fleetwide use of M/AM reactors. First, the admiralty did not have complete faith in the new reactors' safety and reliability. According to a classified reported prepared by the Weyland-Yutani Corporation in 2155, the UESPA should be prepared to accept the loss of approximately 1 of 15 ships each year through catastrophic reactor containment failure. Though the actual rate of ship loss was far less than feared, the fact that an entirely new reactor system

using the most unstable possible fuel had gone from theory to large-scale production in only ten years, part of that under wartime conditions, warranted extreme caution. In addition, endurance tests suggested that under normal operating conditions, the M/AM reactor would have a lifetime of only three to four years. However, before that time, the warp nacelles would also likely need to be refurbished or replaced because of accelerated degradation of the warp coils' crystalline structure, owing to the higher power output levels possible with M/AM reactors.



Lincoln-class main engineering and associated control space. Image courtesy of Utopia Planitia, Mars, Sol.

A second concern of the admiralty was that the start of full-scale production of M/AM-powered starships would likely cause at least a temporary decrease in the total number of starships in service. One reason for this decrease was that some existing fusion-powered hulls were to be withdrawn from service and converted to M/AM power. A second reason was that shipyard facilities, material, and manpower would necessarily be diverted to hull conversion and the production of new hulls and reactors. Furthermore, projected losses of fusion-powered ships (based on current loss rates) would likely exceed production of new M/AM-powered ships for at least several years. Finally, and perhaps most importantly, was an anticipated shortage of engineers able to operate and maintain M/AM reactors.

Such a decrease in fleet readiness levels might not be immediately dangerous, since the Romulans were considered unlikely to launch an offensive after the huge losses of ships and crews suffered in their failed invasion. However, despite this assumption, the production capacity of the Romulan Star Empire and the size of their fleet could not be determined with any degree of certainty. In fact, very little was known about the Romulans themselves: after the Battle of Hell's Gate, the Starfleet Bureau of Technology Assessment sifted through what little remained of the Romulan fleet and concluded that the Romulans were "likely humanoid." Although the possibility that the Romulans would soon attempt another invasion was usually discounted, should they do so while the UESPA was in a weakened state due to the transition from fusion power to M/AM power, the war might be lost.

A third concern of the admiralty about the fleetwide use of M/AM reactors was the availability of antimatter. As the only use for antimatter in 2157 was as a fuel for UESPA starship reactors, it was produced at high cost at a small number of facilities, all on Earth. In contrast, deuterium, although consumed in large quantities by fusion reactors to achieve warp speed, had been the chief starship fuel for more than 100 years and could easily be obtained anywhere. If antimatter was to power a fleet of starships operating across the galaxy, a system for its manufacture, storage, and transport far from Earth would eventually need to be established. However, since all ships were fully fueled at the time of their launching, the need to refu-

el, although inevitable, was not anticipated for one to two years. Similar concerns surrounded the availability of dilithium, a newly strategic mineral not found in the Sol or Alpha Centauri systems.

M/AM-POWERED SHIPS INTRODUCED

Despite these concerns, UESPA engineers continued their work into applications of M/AM power. The first ships to enter service were those of the *Krechet* class in May 2157. Reactors subsequently became smaller, allowing a greater variety of ship types to exploit the new power source. The significantly better performance of even these early M/AM-powered vessels over conventional fusion-powered vessels convinced the admiralty of the worth of the new reactors. The final years of the war saw the introduction of *Lincoln*-class heavy cruisers and the first "modern" starships, the *Hercules* class.

ADVANTAGES OF M/AM-POWERED SHIPS

The advantage that M/AM ships gave the newly established United Federation of Planets (UFP) cannot be overstated. With the higher speeds and greater ranges possible, the UESPA could choose when and where to engage the Romulan fleet and could attack too many targets for the Romulans to adequately protect. The sudden appearance of so many M/AM-powered ships of numerous classes and the rapid destruction of their invasion fleet at the Battle of Hell's Gate likely came as a profound shock to the Romulans. According to a Romulan commander who defected to the Federation in 2268, several members of the Romulan Imperial Fleet's High Command came to believe that the war could not be won. They recognized that the starship technology and industrial capacity of the Federation far surpassed their own. Even if the Romulan Star Empire could somehow resist the expected attacks from the Federation and transform the conflict into a war of attrition, the superior industrial capacity and greater population of the UFP would mean certain, eventual victory. These officers approached the praetor to suggest that peace feelers be sent through Vulcan intermediaries. Although they had clearly and correctly assessed the dire situation confronting the Romulans, they were tried and executed for sedition under emergency wartime laws. The war would drag on for a further three years with the outcome never in doubt.

Such was the importance of M/AM reactors to the war effort that the UESPA went to great lengths to prevent the technology from falling into Romulan hands: unknown to all but the most senior UE officers, most M/AM-reactor-powered ships carried self-destruct charges, the first ever on UE ships. Even after the war, the UE tried to prevent other powers, including Vulcan and wartime allies Tellar and Andor, from obtaining M/AM reactors. This policy naturally led to strains within the alliance, and nearly scuttled the foundation of the United Federation of Planets. However, by 2165 M/AM reactors had been installed in nearly all Starfleet vessels and in many Federation merchant vessels as well. Eventually, most spacefaring powers managed to obtain the technology, through purchase, licensing agreement, or, in many instances, through extralegal routes courtesy of the Ferengi. Such was the rapid dispersion of this technology that when Starfleet first encountered the Klingons in 2220, they were only slightly surprised when analysis showed that the Klingon vessels were powered by M/AM reactors remarkably similar to the standard Federation design.



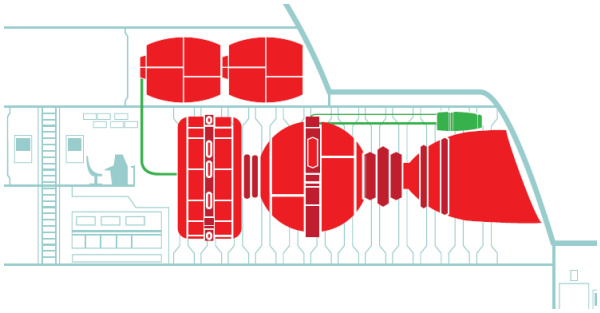
San Francisco class, on patrol near the Gamma Hydra star system.

Although most other powers had obtained M/AM reactor technology by the turn of the 23rd century, the Romulans were not to do so until their short-lived alliance with the Klingons after the Four Years War. The main reason for this delay was that the Romulans had long believed that quantum singularities would ultimately prove a more powerful energy source for warp drives and devoted most of their research to this goal. Indeed, even after trading cloaking devices for M/AM reactors, the Romulans continued their work on quantum singularity-based drives. Precisely when such drives became operational is unknown.

IMPULSE ENGINES

Impulse engines are reaction thrusters used to drive a ship at near-light speed for in-system maneuvering. The excess power can be diverted as the power from the warp drives is.

Many attempts have been made to use tandem impulse drives on vessels. For some unknown reason. whenever the tandem engines are activated, the warp drives refuse to work. It seems likely that the use of two impulse drives at the same time in such a small area creates a magnetic disturbance that causes an imbalance in the matter/antimatter reaction.



Lincoln-class impulse deck. Model shown is an FIA, MK III.

FIA

In 2145, Street & Smith Reactor Works Ltd. put into production the first mass-produced impulse engine. Although many different types of reaction drives were used previously, the FIA was the first engine to be used in quantity on UFP military vessels. It was useful only on vessels up to class III, however, severely limiting the size of vessel that the UFP could field.

The FIA was produced in three configurations, Marks I through III; now known as the FIA-1, FIA-2, and FIA-3, these produced varying amounts of power usable for ships of different classes. This versatility set the standard for all impulse engines that followed, though some were found to have the same maneuver efficiency characteristics and thus were little used.

FIB

In 2147, Smith produced the FIB to meet the demands for an engine to be used on larger vessels. The FIB was perhaps the biggest failure among impulse engines. Of modest power, it was hoped that it could be used as widely as the FIA series. but this was not to be. The first time the engine was tested, it created a disturbance in the vessel that literally shook the vessel apart. Fortunately, a quick-eyed engineer spotted the problem immediately and shut the engine down. This was just the beginning.

The FIB-2, the worst of the three models, was found to be completely unstable except in one configuration: on the *Ajax*-class destroyer. It has been removed from service in all other uses, where its reliability is so low (zero) that its maintenance costs are prohibitive. The FIB can be replaced with the FID in most uses, delivering more total power for the same movement efficiency.

FIC

Because of the failure of the FIB, the demand for engines to handle larger vessels still remained. Nine years after the introduction of the FIB, a new company, Kloratis Drives, began to market the FIC impulse engine. which could handle class XI ships, a new record. All three configurations of this model were successful. No other substantial leaps in impulse technology came for nearly a hundred years.

FID

Engine development continued at a moderate pace. The FID, built by the still-proliferate Street & Smith, was in development during the Four Years War, but did not see production until the war had ended. The FID, capable of han-

dling up to class XV vessels, was the first impulse engine to be extensively licensed for production around the UFP. It marked a plateau in impulse engine design that continued for twelve years after its introduction.

Weapons Systems

"The only thing different from our beginnings are the ways and means we use to attack each other."

This quote can be found on the first page of the tactics manual used by the Starfleet Academy. The author and the date it was written are unknown. Since the beginnings of history. there has been warfare. so it could have been written at almost any time. The first weapon was probably a stick or a stone, and the javelin and archaic pistol were their successors. The particle beam weapons and the laser weapons of the late twentieth century were the precursors of the laser weapons used sixty years ago, which, in turn, are the precursors of today's phaser weapons. The naval torpedo of the 20th century marks the beginnings of today's photon torpedo.

LASER WEAPONS

Laser weapons utilize lasers, a directed light technology that compressed photon particles into a beam that could have heat and blast effects. While many spacefaring species used lasers in other means, such as in data networks or communications, few used them as weapons by the late 23rd century, since a variety of exotic subatomic particles could be used to create a more powerful beam that duplicated lasers in use, but increased the weapon's effectiveness.

FL-1, FL-2 (2135)

The Williams' Mark I was the first laser that was capable of firing at any speed other than a slow crawl, and it was the first laser weapon to be accepted Federation-wide. Developed by Williams Weapons of Omicron Theta II, the demand for this weapon was significant enough to turn the three owners of the company into millionaires overnight. Not only did the design allow the weapon to be fired at a ship speed greater than one-tenth light speed, but the weapon also had an effective range of four times any previous laser system. The system worked well under normal circumstances, but for some unknown reason it lost power at the most inopportune times. Just one year later, Williams released the Mark II improved system. Though it massed 110 tons more and had no more power, its range was increased 20,000 kilometers. The power loss problem of the Mark I, caused by a faulty chip in the programming system, was corrected at the same time, and later Mark Is were built with the problem corrected. The Williams Mark I has been given the designation Fl-1, and the Mark II is now known as the Fl-2.

FL-3, FL-4 (2158)

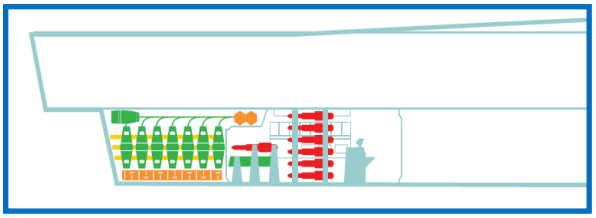
Scientists were stymied with the problem of range for another twenty-two years, when Johanson Energy Co-op produced their first production model with a range of 100,000 km. In this model, now known as the Fl-3, the beam was tightened and held tight by use of a frequency modulator that "reminded" the beam to stay tight. Use of the modulator also provided a pleasant surprise in that roughly 50% more firepower was gained at no increase in the power fed into the system. Johanson used a different computer system, the I-13, to control a power increase on their Mark I by 50%, thus making their Mark II. This meant more firepower was available in the Mark II, now known as the Fl-4, to be used. The modulator provided the same bonus that it had provided in the FL-3.

FL-5, FL-6 (2215)

OmniCorp Weapons used the I-25 computer system for fire control on the weapon that is now known as the Fl-5, though it took five years of testing before the two systems were made compatible. This increased efficiency and firepower slightly over earlier models. Less than a year later, OCW released an improvement, now known as the Fl-6. Although no bonus was gained over the previous model, its new power modulator improved the firepower slightly. These were the last lasers developed before phased weaponry was fully realized.

ACCELERATOR CANNON

The accelerator cannon system allowed missiles to be fired at the tremendous speeds required for space warfare. Most missiles used with the system were equipped with nuclear warheads having the destructive power of late-20th century warheads, which usually was enough to penetrate the hull and shields of any vessel in service at that time. Loraxial Ltd. was the sole designer of the accelerator cannon. Many smaller companies were licensed to manufacture the systems, but Loraxial held all copyrights.



Accelerator cannon launcher of the *Ajax*-class destroyer. This layout is typical for all Starfleet vessels of the era.

FAC-1 (2145)

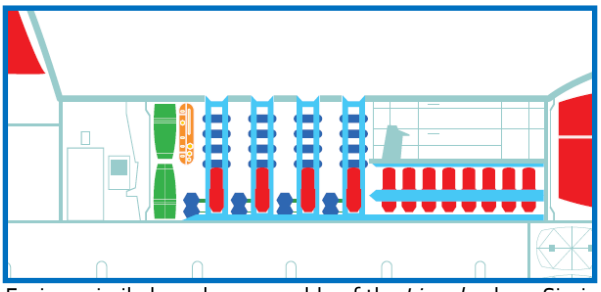
The first accelerator cannon system, now known as the FAC-1, was operational in 2145. At the time, weapons experts felt that advances in accelerator cannon technology would keep abreast of those in laser technology, but it would be twenty-two years before any significant advance would become reality when the L-14 computer was mated successfully to an accelerator cannon system; although the computer had been available for a number of years, the advances in interconnecting hardware were nonexistent until 2167.

FAC-2, FAC-3 (2184)

Seventeen years later, Loraxial announced production of the system that has become known as the FAC-2. Range and power both were increased by approximately 30%. Ten years after that, Loraxial was able to improve the system using the first M-Series computers. Although range was not increased, use of the M-1 did allow a refined FAC-2 to use a bigger warhead. This new model, now called the FAC-3, was the last accelerator cannon to see service with Starfleet.

FUSION MISSILES (2130-2200)

Fusion missiles, as their name implies, are chemical- or ion-propelled weapons with a thermonuclear warhead. After the Eugenics War, nearly all nuclear devices that were not expelled were destroyed or dismantled. As the United Earth Space Probe Agency took shape many years later, a suitable weapon was required that could be used at long range without adding excessive mass to the hull. While the accelerator cannon was still being developed, it was decided (much to the later chagrin of the Vulcans) to revisit fusion devices. The devices were housed and fired much the same as their 21st-century counterparts, even incorporating much of the same technology. Only one type of fusion missile was employed by the UESPA before they were incorporated into Starfleet, and Romulan models captured during the war were surprisingly similar, leading many in Starfleet Intelligence to believe the Federation design had somehow been stolen.



Fusion missile launcher assembly of the *Lincoln* class. Similar to subsurface vessels of the late 21st century (Earth), the launch tubes were oriented vertically.

In space, a fusion missile did not have the destructive capability it expelled in atmospheric conditions, but it did have the ability to inflict massive amounts of damage at a relatively small cost. After the Romulan War, with the help of the Andorians, a new projectile was developed. This new weapon would eventually become the photonic torpedo, itself replaced by the photon torpedo not long afterward.

PHASER WEAPONS

Before most ship-system research came to a standstill

during the Four Years War, scientists involved in laser research had been on the verge of a new discovery. Warren Shillinge of HiBeam Energies Ltd., in experimenting with beams of all types of energy, had discovered a way to "phase energy pulses," as they called the technique. The name "phaser" naturally was applied to the process, which was vigorously explored at HiBeam Energies, and by the outbreak of the war, success was felt to be so close that research continued unhindered.

Tests of the new weapon were conducted at several research facilities after the original scientists had been divided into four groups. The purpose of this was threefold. First, many times when several groups were working on the same project, fresh approaches could be taken because different viewpoints were being used. Second, secrecy could be handled more easily by breaking the large group into more easily watched, smaller groups at isolated facilities. Third and most important was concerned with the weapon itself: if one research facility were to be destroyed, the others could carry on.

As it turned out, the breakup of the original design team was beneficial, for the groups did branch off in different directions, ending with different uses for the same weapon. All were able to be put into effect in an individual weapon with the proper control system. Early test models of phaser weapons had heated up the molecules of the target, causing it to burn, but later developments showed that the phasers were capable not only of a heat setting, but also a disintegrate, disrupt, and a stun setting. On disintegrate, the phaser broke down the molecular cohesiveness of the target, causing it to fall apart completely. On disrupt, they shattered the target by ultrasonic vibrations set into the beam. On stun, a mild setting, they overloaded the nervous system of living things, causing them to fall unconscious.

Security proved to be no problem, and fortunately none of the facilities was completely destroyed, though a project head was killed when one test unit exploded.

FH-1, FH-2 (2240-)

Developed in 2194, the Mark I ship-mounted phaser went into full production two weeks after its successful trials, using assembly lines built before the weapon had even been fully tested. As one might have expected, such hurried production allowed quite a few problems to be overlooked. Many of the initial phasers exploded when used on the disrupt setting, but it took a while to evaluate data and realize that ships were blowing up from using their own weapons. The problem was traced to sabotage in the programming of the L-15 computer used for fire control.

The Mark I, now designated the FH-1 phaser system, was the smallest shipboard phaser to ever be built. It is also one of the few phasers that civilians can still purchase and use legally. The technology was miniaturized and refined by Dr. James Wilson, Sr., at Wilson Energies Ltd., and the first production model of the hand phaser weapon was made in 2198. HiBeam introduced the Mark II, now known as the FH-2, less than two years after the Mark I went into production. Range and power were increased slightly, and the modulator used on the old lasers was found to increase damage potential on phasers as well.

FH-3 (2252-)

Ten years further saw the introduction of a new phaser using the prototype M-1 computer. With ranges and hitting power virtually double those of the Mark II, this much-larger weapon is credited with winning the Four Years War. Many of these weapons were used in action only weeks after rolling off the assembly line, which lay only six days travel from the war zone. This weapon, now designated the FH-3, was produced by Tyrell Technologies, a short-lived spin-off of HiBeam Energies, now absorbed by that corporation. It, as with all the phasers produced during the war, is still available.

FH-4, FH-5 (2255-)

Basically an upgrade of the same technology as the Mark I and Mark II, the J. Watson Energy Consortium's Mark III model used the M-2 as the fire control computer. Easier to maintain than the Mark I or II, the Mark III gained a reputation for reliability. Because its date of introduction followed that of the FH-3, it is now known as the FH-4. The Mark IV, now called the FH-5, was still a larger version, giving it extra range and damage capability. It was the last phaser to be put in production during the Four Years War.

PHOTON SYSTEMS

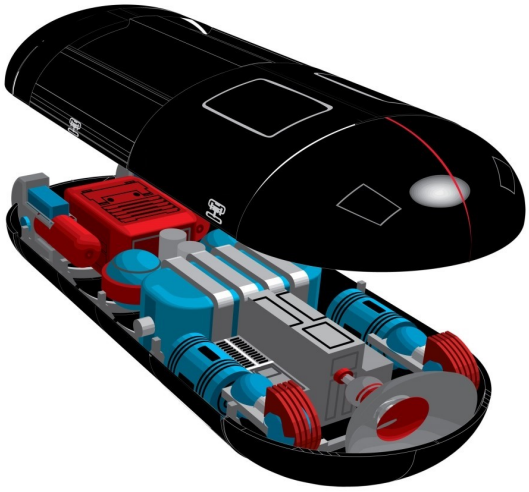
All missile weapons have the same basic principle: an

ejector sends a warhead in a fairly direct line to a target. There have been many types of missile systems throughout history, from the bow and arrow to the sling and rock, through the crude pistols and rifles of the 18th through 21st centuries, to today's photon torpedoes. Photon systems can trace their lineage directly back to the torpedoes fired from underwater ships of many cultures, through the warheads fired by the accelerator cannons that the photons replaced.

The accelerator cannons of 2145 to roughly 2200 used an accelerator system to propel a warhead to a target. Large, direct line-of-sight weapons, they were immense machines, massing up to 840MT. They were impossible to mount on very small craft and range was limited to roughly 100,000 kilometers. What was needed was a small device that could fire a small projectile to a target over 100,000 km away.

Toward the end of the Four Years War, Priscilla Feddric of Loraxial Ltd. had been studying the effects of magnetic fields on antimatter as part of an attempt to develop a smaller, more accurate accelerator cannon. Remembering earlier work at Shuvinaaljis Warp Technologies on a containment system for matter/antimatter mixes, she theorized that these magnetic fields could be made small enough to contain a tiny bit of antimatter. If the container could then be delivered to a target and exploded, she proposed, the antimatter could annihilate whatever it hit.

Unable to convince anyone at Loraxial to seriously study her idea, she worked with Collier Shane in their spare time and finally succeeded in capturing a bit of antimatter in a small magnetic field, which they encased in Tri-duralloy. With an antique mortar, they launched their projectile and captured the attention of Loraxial upper management when they destroyed half the parking lot at Loraxial Center XII through a slight miscalculation in trajectories. From these earthshaking beginnings, the prototype photon missile evolved rather quickly. The launch tube concept was borrowed from submersible craft technology, and the M-2 computer was used to handle programming for the magnetic field generators. The system was operational in six months. It did not require much power to use, and it packed a tremendous wallop, superior to most phaser hits.

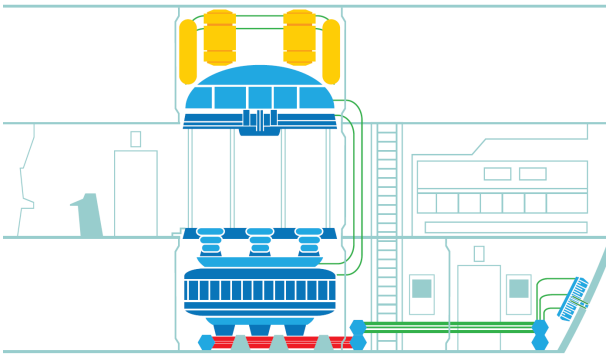


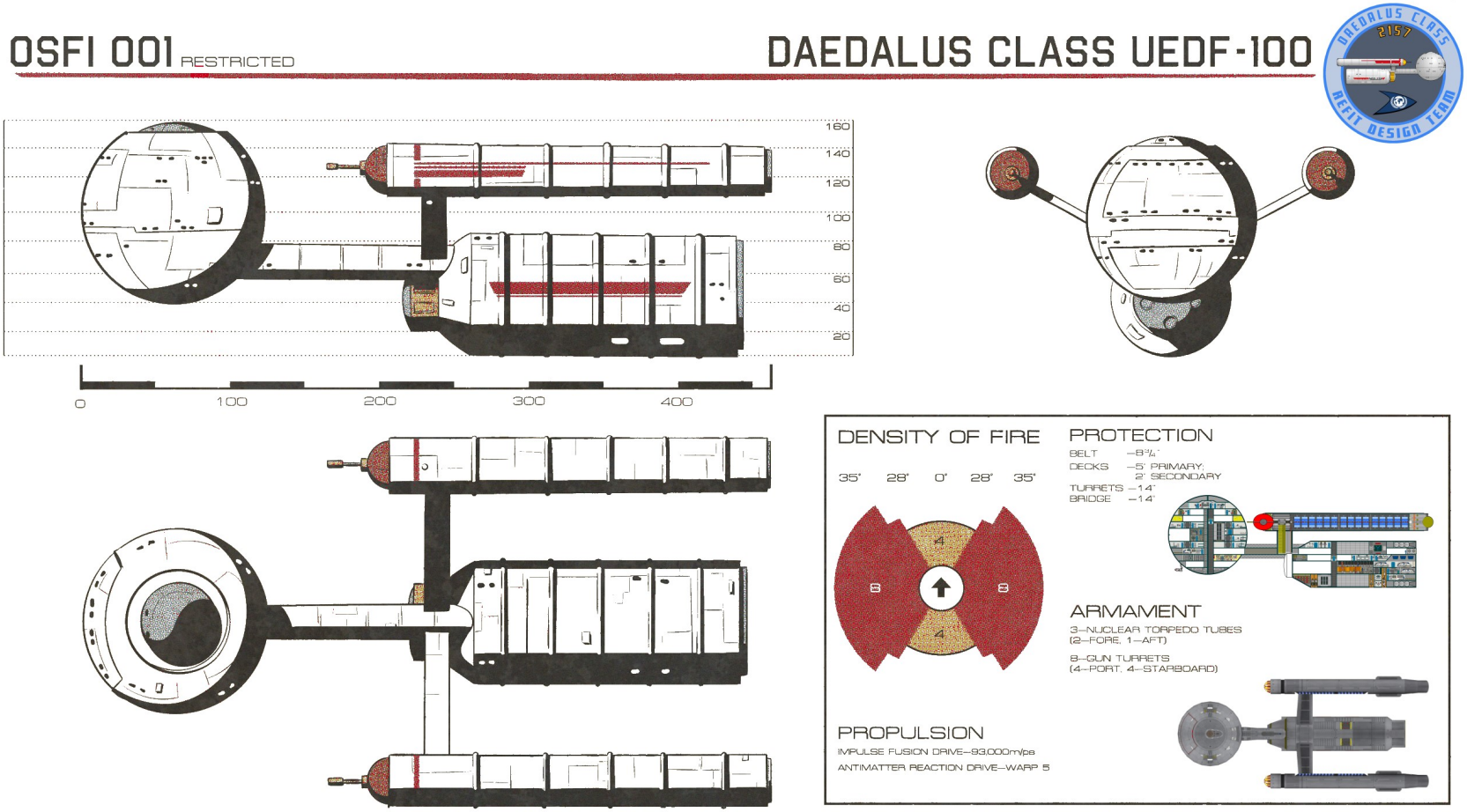
Mark V photon torpedo used in modern FP-3 systems.

FP-1, FP-2, FP-3 (2251-)

The FP-1 system, Loraxial's first operational photon torpedo system, was small. Displacing 200MT, it had an effective range of 120,000 km, and enormous destructive power, but its targeting system was not as well developed as the phaser technology of the time.

Two years later, attempting to create a range of weapons, Loraxial announced the FP-2, a more compact system that could be used on smaller ships. It used the less-sophisticated M-1 computer, but its range and destructive capabilities were not as great as the FP-1. The FP-3, using the L-14 computer, followed, with a greatly reduced range while retaining the punch of the FP-2, but was several months late to see use during the Four Years War. The FP-3 system is now the standard photon system used on Starfleet vessels.





Daedalus-class schematic, under review in 2157 by the Proxima Shipyards prior to its eventual refit to the *Lincoln*-class specifications.

The Romulan War

2156-2160

THE UNITED FEDERATION OF PLANETS

UFP BACKGROUND

The early years of the United Federation of Planets were characterized by territorial expansion and technological and cultural growth. Except for violent contacts with such races as the Vegan Tyranny, the period between Zefram Cochrane's development of the warp drive in 2063 and the loss of the USS *Avenger* in 2151 to the Romulans was generally peaceful. *(Note: some historians would argue the war officially began with the unprovoked attack and destruction of the Federation passenger liner SS* Diana *in 2154, as the* "Avenger *Incident" was too distant in the past to be considered applicable.)* The establishment of the United Federation of Planets in 2152, with its charter calling for the creation of a Starfleet Command, went a long way to ensure safety of lives and property within Federation space. Still, there were limitations. The antimatter warp drive had opened up space, but even it could not do the impossible. Advances in propulsion permitted speeds of Warp 3.5, but no higher. Significant breakthroughs in interstellar travel would not be forthcoming until the discovery of dilithium.

On the sociological front, though, things were progressing well. During the early 21st century, humans finally had been able to form a single, cohesive world government, and were psychologically ready to make contact with races among the stars. After the genocidal war started by the infamous Colonel Green, Terrans needed a positive sociological experience. Contact with the Alpha Centaurians proved to be just such an experience. They were humanoid in physical appearance, and their culture, though different, was not incomprehensibly so. Less than four years after first contact, the Alpha Centauri Zancmar Hodgkins formulated Hodgkins' Law of Parallel Planet Development, a brilliant piece of biosociological reasoning. This theory stated that two planets possessing similar temperatures, gravities, and atmospheres would produce similar intelligent life-forms and even similar cultures. When the UESPA *Bonaventure* discovered another intelligent, humanoid race on Axanar, it provided further evidence supporting the theory.

Ironically, while Hodgkins' theory was being transmitted back to Terra, the Xenobiological Probability Study was being completed. Underwritten by the University of Luna, this study postulated little chance of finding any non-humanoid intelligent life during the next century of galactic exploration. The study met serious criticism, however. Some scientists called it the homocentric ego theory, because it emphasized humans and humanoid life, implying their superiority. As a race, though, Terrans were grateful that their first encounter beyond their planet



was with an intelligent race similar to their own. They were equally thankful that there was little chance of meeting non-humanoid intelligence, since they as yet had no basis for dealing with totally alien beings.

Meanwhile, the Martian Colonies declared their independence from Terra. Though not a surprise in itself, this marked the first separatist political action in the Terran system since the United Nations became Terra's ruling governmental body. The practicality of extraterrestrial independence won out over a hasty attempt to keep a united Terran government in sole control of all humans

everywhere. Aside from a few protests, Terran imperialism met no further challenge until the formation of the Terra Return League on stardate 2150.

As more intelligent races were discovered, the need for an interstellar government to maintain security, promote trade, and serve all member worlds became evident. The first efforts toward that end began in 2090, when delegates from Vulcan and Alpha Centauri met on Terra to discuss a formal alliance. Although many people welcomed the idea of such an alliance, there was not universal acceptance for it. Certain financially powerful groups were opposed to a multi-planet coalition, and they waged an intense media and legal battle for nearly two years. However, public opinion eventually favored the formation.

During the next four years, meetings between the major races continued. They established an unofficial economic alliance, and diplomats urged their leaders to ratify a formal alliance between the respective governments. First contact with the Tellarites in 2093 proved the existence of yet another race and bolstered the argument for an interstellar governing body. The development of warp radio eight months later overcame the last technological obstacle to a workable interstellar community.

The first—hostile—contact with the Andorian Empire in 2120 proved that a military alliance could be extremely useful. The only way to secure the regions of space between the major worlds would be through a single coalition of planets and a corresponding force of armed starships. Though diplomacy resolved the Andorian problem, there were bound to be less cooperative races even deeper in space, and an organized defense was desperately needed.



Daedalus-class UESS *Hamburg* prior to her upgrade to the *Lincoln*-class specifications. She would be recommissioned as the USS *Hamburg*, NCC-130, in the process.

In 2145, a diplomatic meeting on Vulcan was unable to resolve the coalition's question. Though delegates from five of the six major spacefaring governments were in attendance (the Rigel-Orion Colonies were not), plans for a federation were incomplete. The primary goals and policies of such an interstellar government could not be defined to everyone's satisfaction, and several officials raised questions about authority and liability.

Seven years later, in 2152, these problems were finally resolved with the drafting of a comprehensive blueprint for interstellar government—The Articles of Federation were signed at the First Babel Conference. The original

signatory powers were the United Nations of Terra, the Alpha Centauri Consortium of Planets, the Planetary Confederation of 40 Eridani (Vulcan), the United Planets of 61 Cygni (Tellar), and the Star Empire of Epsilon Indi (Andor).

The UFP's specific functions and objectives outlined in the Articles of Federation were varied and extensive. They included maintaining interstellar security, conducting galactic exploration, establishing an interstellar judicial system, and promoting economic trade, scientific research, and interracial cultural exchanges. In conjunction with these objectives, Articles 52 through 54 called for the establishment of Starfleet Command within the next three years. The express purpose would be to provide a unified military force for exploration and common defense

The Orion Colonies were also invited to join the Federation, but their official delegate observer replied that certain conditions must first be met. As it turned out, the Orion Colonies would only sign the Articles if each of the founding member worlds paid them an economic compensation of two trillion credits. The exact nature of this compensation, however, was never explained. The other delegates were amused, until they realized the Orions were completely serious.

Needless to say, there were bad feelings toward the Orions at this point. When an enzyme-transmitted plague killed 200 people on an outpost on Pluto, it was linked directly to inadequate Orion trade-goods decontamination procedures. For this and other reasons, no one was willing to "compensate" the Orions. The Rigel Colonies did not join the Federation at that time. As of 2276, they still have not joined.

Aside from the problems inherent in any new government, the first real test of the UFP's cohesiveness and decision-making capabilities—and military effectiveness—came after the destruction of the USS *Avenger* (2151), the destruction of the Calvert Array (2152), and numerous sneak attacks (2150-2156) eventually led to the inconclusive Romulan War lasting from 2156 until 2160.

When that conflict finally ended, peace again became the Federation's watchword. Outposts along the Romulan border became operational in 2161, at which time the Federation continued its efforts toward galactic expansion and economic and sociopolitical prosperity.

STARFLEET

Before the United Federation of Planets, each of the major worlds had its own fleet of armed starships and system defense craft, but there was no centralized force. These ships maintained security in the vicinity of their homeworlds and any neighboring colonies, and general strategic policies varied widely depending upon the psychological makeup and astrophysical location of each government.

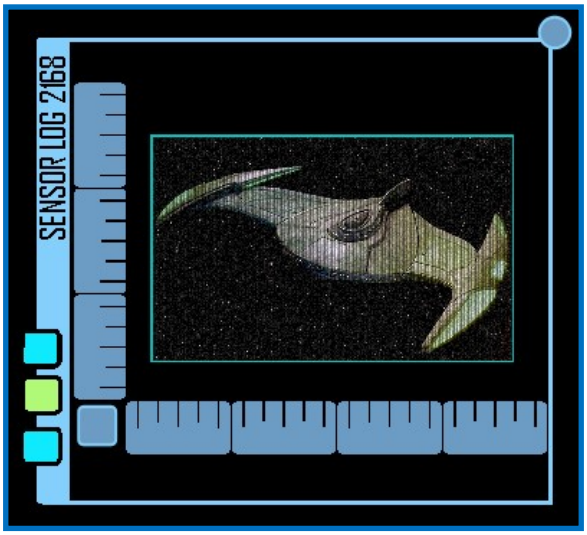


USS *Yorktown* and her *Minotaur* fighters entering Earth's orbit at the conclusion of the Romulan War.

Around 2130, for example, Terran forces were primarily assigned to exploration and patrol duties, though a variety of ship classes were available for assignments. *Verne*- and *Messier*-class cruisers made up the bulk of the United Earth Space Force's offensive potential at that time. The *MD-1000*-class construction dock was used to supplant Terra's surface-based repair and manufacturing facilities. *Cosmos*- and *Edison*-class scientific vessels began studying space on a comprehensive basis, but neither vessel was designed for long-range scouting missions. A number of scout classes would be manufactured in the not-too-distant future, however. The *Assist*-class tender resupplied starships and provided equipment and personnel for limited field repairs. In comparison, Vulcan forces

were used almost exclusively for scientific research or an occasional rescue mission. Alpha Centaurian and Tellarite warships were frequently employed for commerce escort. Finally, Andorian vessels were used most often for colonization and offensive military operations.

After the Articles of the Federation were signed, Terran and Alpha Centaurian military officials began working together. Joint fleet maneuvers took place and construction projects started to take shape. In 2120, the Alpha Centaurian government gave permission to begin building a massive industrial complex in their system. This base, the Centauri Test Range, was a research center and facility for testing shipboard weapons and propulsion systems. Even before the installation was finished, Starfleet's Engineering Command worked there on new ship designs and weapons. 2130 marked the very successful culmination of the Range's first full-scale project, the *Daedalus*-class cruiser. Within the next two decades, a new generation of launch torpedoes and lasers would also be designed and tested at that site. These new weapons would see service on many Starfleet vessels during the Romulan War.



Long-range sensor log showing a Romulan warship. This is from the USS *Cutty Sark* (NFC-686) near Devron.

Not everything, however, was going well. In 2151, Centaurian warships were operating in a routine joint fleet maneuver. The squadron was in the middle of a training mission when tragedy struck.

Because of a translation error, an Alpha Centaurian corvette misunderstood their set of navigational instructions. Taking the wrong course, it inadvertently struck the side of the Terran destroyer USS *Scythe*. At that moment, the *Scythe* had been firing its lasers at two other "attacking" Tellarite destroyers. Unlike future practice, warships did not have the capability to fire reduced-power lasers for combat simulation. Instead, the weapons were fired at full strength, but on a wide-diversion arc, to deliberately miss their intended "target." In any event, the impact of the corvette reoriented the *Scythe* and changed its firing arcs. This caused the beams to rake the hulls of the USS *Enmity* and USS *Hammer*, with a total of 232 casualties. Captain Henri Fourrier, commander of the *Scythe*, reported later that there was a component failure in his ship's weapon-fire control systems. This failure prevented the ship from ceasing fire once the lasers began to hit the other destroyers.

This accident vividly pointed out the need for a single command structure and a central training facility for starship crews. Ironically, Starfleet Command was born shortly thereafter, but it was no consolation to the families of those killed, or to Captain Fourrier, who retired from the United Earth Space Probe Agency just three days after completion of the exercise.

When Starfleet Command was founded and the agency received its initial funding eight months after the joint maneuvers incident, its first assignment was one of organization and policy development. For example, all Terran vessels previously designated as United Nations Space Ships became United Space Ships. The same also held true for the Alpha Centaurian Consortium Fleet Vessels and starships from other worlds. Starfleet's senior officers were fully aware that their forces could be misused. For this reason, and to allay some Vulcan concerns, General Order Number One was formulated and adopted as the most important regulation within Starfleet.

After that, starships had to be acquired. Some of the vessels, particularly Terran and Tellarite designs, were conscripted from local defense forces and reassigned to Starfleet. The Andorians, possibly the best warship manu-

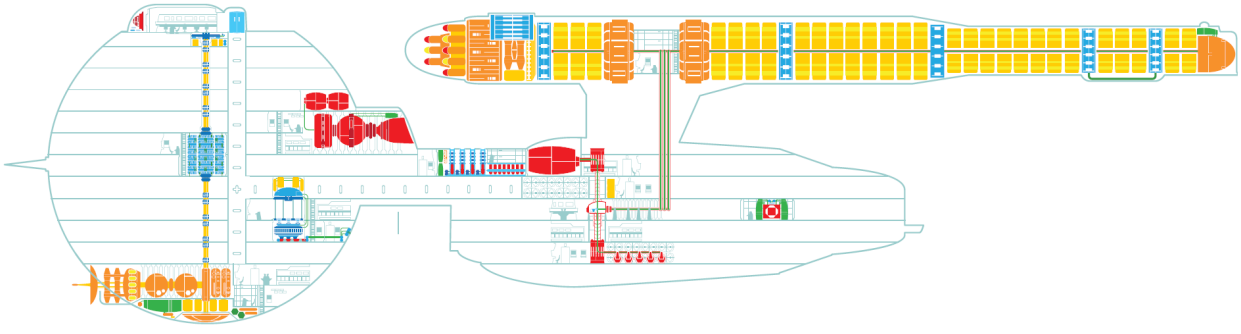
facturing race, showed great reluctance to share their military secrets or hardware. Andorian warships were added to the fleet only after Starfleet officials demonstrated enormous patience, giving the Andorians time enough to feel secure with the situation. Other classes also had to be designed to fulfill the special needs of an interstellar combat force.

Starfleet was established to replace the spacegoing military forces of its members, and each member planet was free to maintain its own system defense forces. Though some governments did retain their own forces for a few years, the success of Starfleet showed that the additional expense was not necessary. Within three decades, almost every local defense force had been disbanded except for ground forces. Incidentally, the creation of the Marine Corps Command in 2155 led to the disbanding of most local ground forces as well.

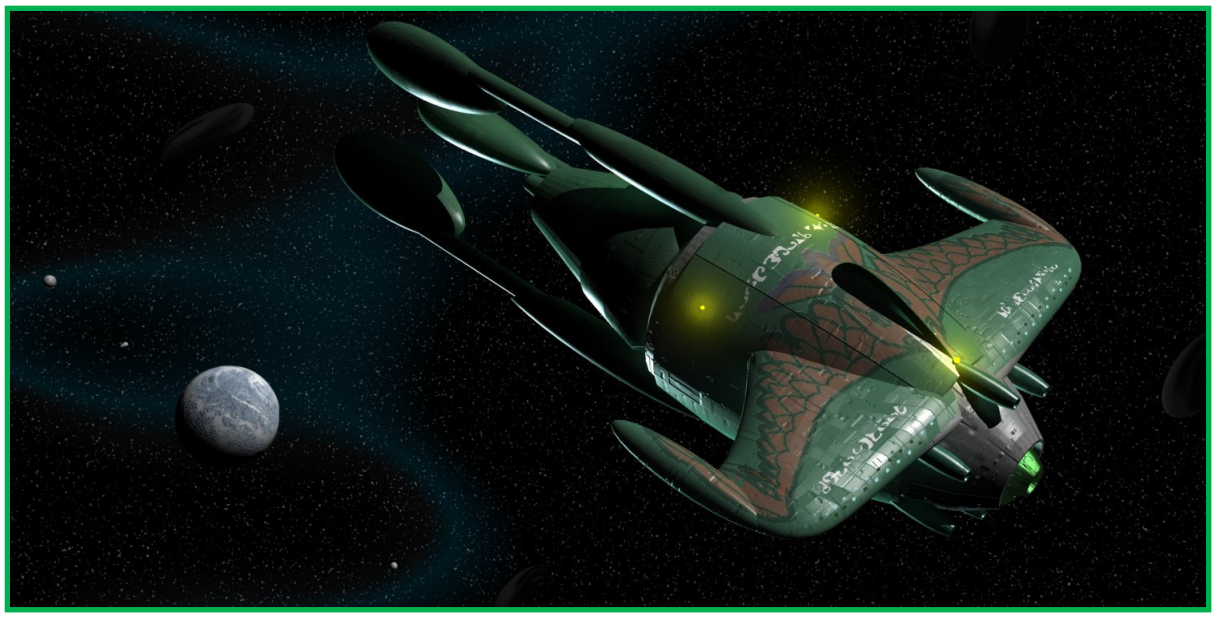
After the war games disaster, efforts were intensified to complete the Starfleet Academy. By 2152, the training facility was fully established, and its first class had 300 representatives from eight different races. Most of these students were high-ranking Starfleet officers who had served with their respective planetary navies before the UFP was formed. Having an enormous pool of talent to draw upon, the entire Academy curriculum was designed and written by this "class," and then used for all future classes. By developing and standardizing the training process for all Starfleet field officers, quality and competence increased immediately. Before the Romulan War began, every member of Starfleet had gone through the Academy, regardless of rank. Time showed that the lessons learned there were the most effective training program possible outside actual combat experience.

Aside from the Centauri Test Range, Starfleet's engineers had one other major accomplishment. They completed designs for a starbase; an enormous headquarters and construction, repair, and service facility to meet Starfleet Command's growing needs. After several years of preparation and construction, Starbase 1 was completed in 2155. Though each base was enormously expensive, a total of seven starbases were built and in operation before the Romulan War began.

After the Romulan War, ranking officials in the Federation felt certain another war would not occur quickly. Once border installations were complete along the Romulan border, the future role of Starfleet Command seemed limited to navigational and simple law enforcement duties. As a result, appropriations for Starfleet Operations were cut sharply. Funds were allocated mainly for the replacement of unsafe vessels, with very little toward research and development. At one point, Starfleet submitted plans for an entirely new generation of combat vessels, but the Federation Council rejected any further expenditures. It is difficult to say how much this cutback was due to fiscal restrictions and how much was prompted by the recent and drastic failures of the Starfleet Engineering Command. The unsuccessful performances of the USS *Goliath* and USS *Juggernaut*—two prototype battle cruisers—cast doubt on the reliability of the Command's architects and technicians. Fortunately, conditions remained peaceful, and the battle-proven *Lincoln*, *Ajax*, and *Hercules* classes served Starfleet's needs admirably for the next decades.



Lincoln-class cutaway diagram showing most major systems. This was the final approved layout prior to construction.



Romulan "Chowder" on patrol.

ADVANCES IN MILITARY TECHNOLOGY

In the decades before the Romulan War, Federation military vessels were equipped with monochromatic lasers and launch tubes capable of firing thermonuclear hydrogen fusion torpedoes. By 2120, particle beam cannons became practical, and were installed on the *Messier* -class cruisers. A few decades later, the *Daedalus*-class cruisers were equipped with quasi-nuclear photon-neutron torpedoes, a significant improvement. Finally, after research lasting for several years, a new generation of polychromatic lasers was developed. The *Marshall*-class destroyers were so equipped, and many *Lincoln*-class cruisers, among others, were refitted with the newer, more powerful beam weapon.

Yet all improvements were relative. Weapons of that time had only a fraction of the power and range of current warp-engine-powered phasers and photon torpedoes. The maximum range for the most advanced polychromatic lasers was slightly greater than 50,000 kilometers, or roughly one-fourth that of the FH-3 phaser. The first particle beam cannons required almost as much energy to operate as the damage they inflicted. Ship-launched torpedoes had a range that was measured in thousands of kilometers, rather than in tens of thousands.

Additional technical advancements would not occur for decades. It took until 2135 before the first truly effective Federation beam weapon, the FL-1 laser, saw service. The FAC-1 accelerator cannon was being produced by 2145.

The Romulans had two primary shipboard weapons systems: a drill-like energy beam and a variety of guided missiles similar to Starfleet fusion missiles. The energy beam could be selectively "tuned" to penetrate tritanium or any equivalent inorganic compound. The beam would disrupt its target, quickly weaken its molecular structure, and dematerialize. The advantages of this weapon were enormous. For example, the beam could rupture one specific location on the hull of a freighter while doing only superficial damage to the rest of the ship. That would leave any valuable cargo intact for plundering. Such a weapon appears to have been custom-designed for that purpose.

While the drill beam was a weapon of finesse, the Romulan guided missiles could only be used for brute force. The missiles came in a wide assortment of different sizes and capabilities, ranging from the "cell rupture," which massed only a few hundred pounds, up to the so-called "star bomb," which massed almost eighty tons.

All Romulan missiles had certain characteristics in

common: they were all fusion-explosive missiles, and they were fairly awkward to guide or maneuver, despite their built-in propulsion units. Almost every Romulan warship carried a quantity of the smaller missiles. Apparently each vessel had some internal storage capacity for missiles massing about twenty tons. On occasion, a Romulan cruiser was known to carry several hundred aboard. Fortunately, the smaller the missile, the more erratic the control. Sometimes, when several dozen missiles were fired at once, a few usually lost control and detonated against other missiles. At least two Romulan ships were destroyed by their own missiles in the Romulan War. The small warheads were not considered to be a serious threat to Federation ships, unless the ships were caught between several salvos.

The larger missiles were handled differently. From one to four of these star bombs could be attached by magnetic grapples to the exterior of the hull. They were released and then guided by Romulan crewmen operating remote controls from within the ship. This was very similar to the way air-to-surface missiles were deployed by Terran atmospheric craft during the 20th and early 21st centuries. Because the star bomb moved freely and had an extensive range, however, much of its mass was needed for propulsion, leaving little room for its explosive payload. Nevertheless, a single star bomb could easily destroy a ship (or a group of ships if they were in close proximity). Its effects on planetary targets were also devastating, rivaling that of 20th-century hydrogen bombs. As a result, it was a fearsome weapon, causing more than one Federation squadron to panic.

During the war, starships had a maximum speed of warp 3.5 or less. Even those speeds required a great deal of pre-warp acceleration time. The modern (post refit) USS *Enterprise*, for example, can accelerate from complete motionlessness to warp speed in less than one minute. In comparison, the *Messier*-class cruiser required more than two and a half hours to perform the same maneuver. Even then, however, progress was being made. The newer *Marshall*-class destroyer could reach warp speed in just over an hour and a half. Although these speeds seem incomprehensibly slow compared to modern battle-performance ratings, the Romulan ships were not significantly better. Because it required a lot of time to accelerate or decelerate, all battles were fought at sublight speeds. By the time the vessel sped up or slowed down enough to join in battle, the minutes-long conflict would already be over. Also, the K-series computer systems of the era were far less sophisticated than the M-series computers currently aboard Federation starships. Those earlier computers could not synchronize lasers to fire when the vessel was traveling at warp speed. The ability to fire projectiles such as torpedoes or missiles was archaic by today's standards. As a result, the only way to get into a fight was to arrive at the combat zone as quickly as possible, and then slow down.

Another major difference was in defensive systems. Starships, even warships, did not possess elaborate defenses. The first prototype energy deflector shield was constructed in 2150, and the FSA shield did not reach production until 2156. Most vessels had hull armor of minimal thickness, which quickly proved ineffective against the Romulan drill beam weapon. A handful of ships had experimental point-defense systems, consisting of numerous low-powered lasers or rapid-fire plasma cannons designed to knock incoming missiles off target. These systems did deflect the smaller Romulan cell-rupture missiles, but they too were totally useless against the larger missiles like the star bomb.



The *NX*-class starship *Enterprise*, circa 2150. This class, a pioneer of Federation design, was found to be completely inadequate to fight a prolonged conflict. The entire class was mothballed not long after the war began in 2153.

Andorian scientists invented another defense system. A few vessels, including some *Hercules*-class cruisers and *Yorktown*-class fleet carriers, were equipped with energy overload dampeners. Added as giant energy storage circuits, these devices were grounded to the hull's external

skin. In theory, energy attacks against the ship's hull would be harmlessly diverted into the dampeners, then discharged safely into space. The devices were somewhat effective, but they occasionally took an excessive charge and exploded within the ship. Despite this, they were incorporated into future generations of starships until deflector shields were perfected. The only other defense a starship had was its speed and the skill of its commander, neither of which always sufficed.

FEDERATION STARSHIP TACTICS

During the Romulan War, Romulan commanders often outthought, as well as outfought, their Starfleet counterparts. This was especially true if the engagement was in deep space and involving only a few ships. As the war continued, it became apparent that the Romulans were experts in the art of interstellar war, while Federation races were novices by comparison.

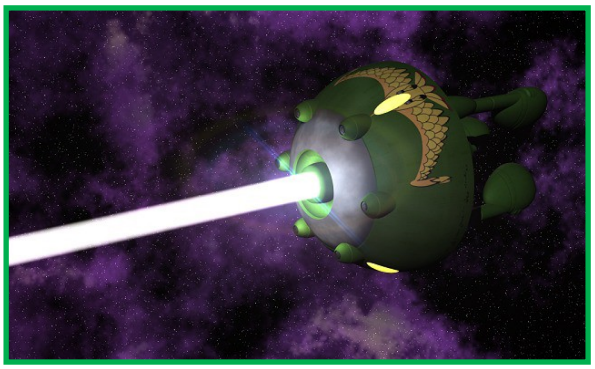
This is not to say, however, that Federation crews were incompetent. Extensive computer simulations at the Starfleet Academy prepared crews to the greatest possible degree of readiness. Unfortunately, the best simulation was no substitute for genuine combat experience. Also, peace had reigned over the Federation for decades, and very few Starfleet crews or commanders had ever participated in actual combat. Nor had the Federation ever met a race as combat-oriented or openly hostile as the Romulans. Even the Andorians, the most militant of the major Federation races, were taken by surprise at some of the Romulans' tactics.

While a single patrolling Starfleet vessel was preparing to react against the surprise attack of a Romulan warship, the Romulans had already opened fire while closing at high sublight speed. The Romulans' initial attacks were not hasty and ineffective, as might have been expected. The bird-like lines of a Romulan warship quickly became associated with uncanny marksmanship. By the time a second Romulan vessel appeared, the Federation ship had regrettably few choices remaining. Most ships caught in this way chose to fight as skillfully as possible, trying to damage or destroy a Romulan ship before their own vessel was obliterated.

Romulan attacks were aggressive. Though they apparently had no knowledge of the Federation, they fought with unrestrained ferocity, almost as if our race had been their mortal enemies for centuries. Federation crews soon realized that no prisoners would be taken. By necessity, this led to fierce ship-to-ship dogfights. In fact, the Federation only achieved combat parity after adopting the Romulans' combat tactics as their own.

The United Federation of Planets' major advantages and disadvantages in combat were as follows:

Advantage 1: Federation forces usually outnumbered Romulan forces. By achieving a ratio of at least 3:1, Starfleet forces were generally able to defeat the Romulans. (Unfortunately, even this degree of superiority could not ensure a UFP victory in at least one instance.)



Romulan *Cabbage*-class cruiser firing its primary drill beam.

Advantage 2: Federation starship commanders worked closely together for the group's overall benefit and protection. This meant covering the weak flanks of individual ships or formations, and assisting each other when combat conditions became difficult

Disadvantage 1: Individual Romulan commanders were more skilled at combat than their Starfleet counterparts. It is not known whether they were better trained or simply had a more militant society, thus giving them an inherent edge.

Disadvantage 2: Starfleet had great difficulty in transferring large numbers of ships from one area to another, due to the relatively low speed of warp travel and the distances involved. Even at warp 3.5, starships took more than eight years to travel from Federation homeworlds to

the battle zone. No senior officers expected the skirmishes with the Romulans to last for years, so reinforcements were slow in arriving, even when authorized. This does not appear to have been a problem for the Romulans, indicating that the center of the Romulan Empire was much closer to the combat area

Disadvantage 3: The Romulan Navy contained fewer classes of warships, simplifying supply, repair, and training requirements.

The single exception is the Cochrane Deceleration Maneuver, created by Zefram Cochrane. Though a man of peace, Cochrane formulated several tactical maneuvers in the event of war. Not only did deceleration prove to be effective in the Romulan War, but after being modified for deflector and improved warp propulsion technologies, it is still a viable defensive maneuver. The most current procedure for the use of this tactic is taught at Starfleet Command school.

ROMULAN STARSHIP TACTICS

When war with the Federation broke out, the Romulans were ill prepared to fight a prolonged war with a major power like the Federation. As the Star Empire had already been fighting the Klingons for a long time, their already-poor resources were severely strained. The Romulans did not know for certain who they were fighting in the early battles of our war with them. Intercepted messages seem to indicate that during their first confrontations with the Federation, the Romulans thought they were fighting the Klingons. The eventual discovery that they were fighting another power shaped their subsequent tactics. In the beginning, the Romulans did not know whether they were fighting a minor spacefaring race or a major power like themselves. In either case, they were relatively short of vessels and men to fly them. This made hit-and-run tactics—for which they later became famous—a necessity.

During the war, the Romulans took cover in asteroid belts, on small planets, and the like, waiting for single vessels to wander past. After a successful strike or two, Romulan ships shilled their location so they could not be traced. They did not consider this cowardice (as would the Klingons), but merely conservation of forces. A quote from *Thoughts of War*, a possibly fictional work found among the Eridam Papers, supports this point of view:

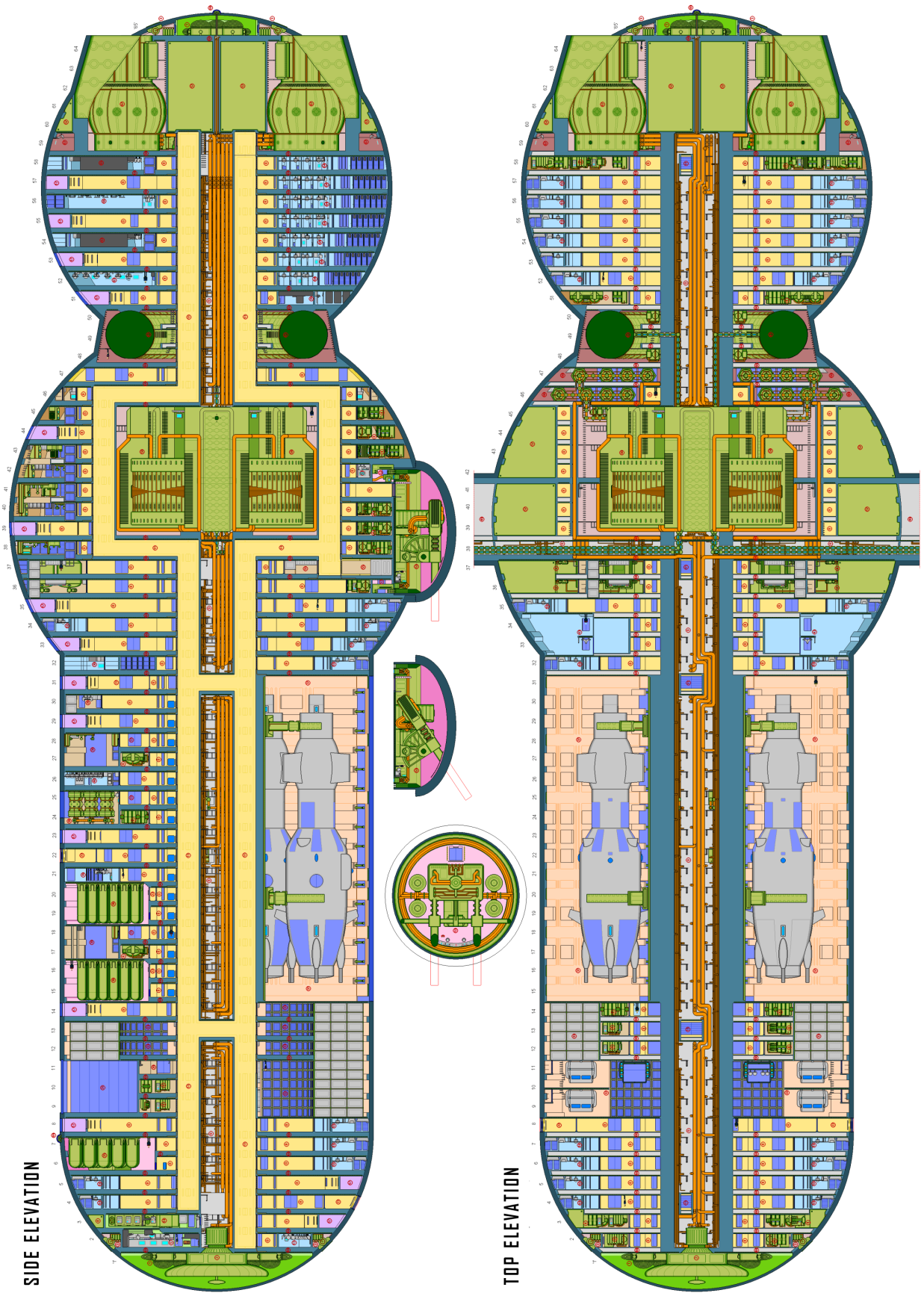
"To hide is not cowardice. Neither is avoiding combat when the odds are not in your favor. It is using your limited resources to their best potential."

The Romulans did not run when confronted, but fought and fought well. They worked together, coordinating attacks as if directed by one mind. Romulan ships rarely communicated with each other in combat. Evidently, the ships' crews had fought together for so long that they acted as one. (However, during one long-running battle with Starfleet, a communications stream between two Romulan warships was intercepted by an intrepid communications officer, although the transmission was coded and garbled.)

Romulan ships often worked in pairs. The first vessel would strike and then run, drawing out the defending vessels in a convoy or from a base. This gave the second warship a chance to strike at an unprotected target. After Federation officers caught on to this tactic, the Romulans employed a third vessel whenever possible, using what came to be known as the "double draw method." The second vessel would draw out the last defending ships, then the third would strike. Another quote from *Thoughts of War* emphasizes this:

"Work together. Strike fast. Hit and withdraw before they know what hit them."

The Romulans used guerilla tactics to their advantage, striking hard and fast and shifting the battleground to their choice of locations. Only the Federation's superior forces allowed them to stalemate the Romulans' superior tactics. Without doubt, the Romulans will use these tactics against us in any future conflict. Given their advances in technology, the outcome might be very different next time.


SIDE ELEVATION
TOP ELEVATION

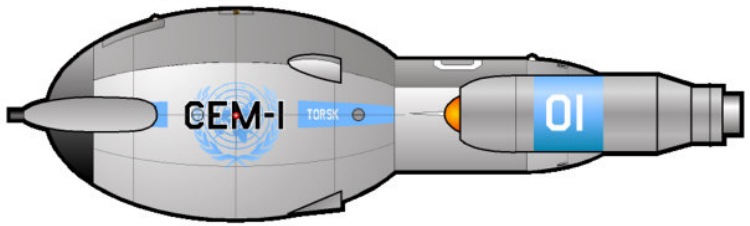
Selected Starfleet Vessels

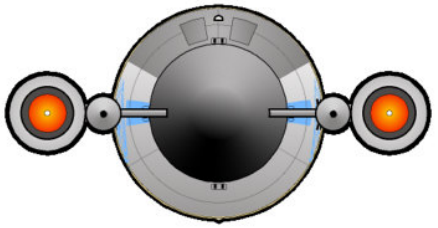
Torsk

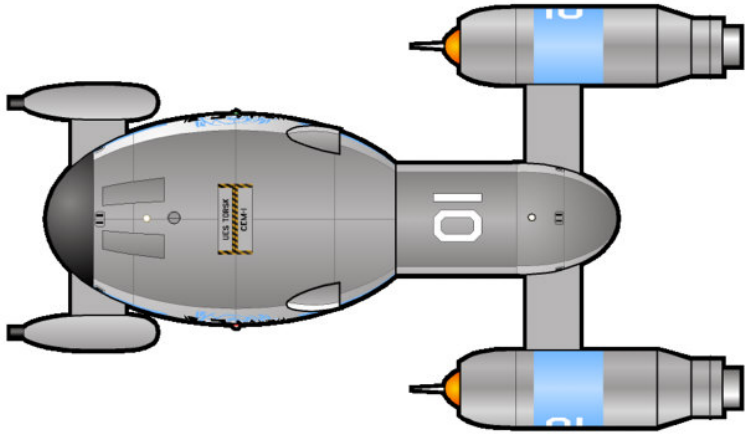
The *Torsk*-class cruisers were designed with two distinct missions in mind: to gather intelligence along border areas and to hunt and destroy enemy scout ships. *Torsk* was the first to carry the improved SSWR-II-C warp reactor, which was 30% smaller but only 5% less powerful than the SSWR-II-B carried by the *Krechet* class. Because of the narrowly-defined roles *Torsk*s were to play, they were much less expensive to build and operate than were *Krechet*s. They carried fewer weapons, had a 35% smaller crew, and were 25% lighter despite having two main warp nacelles to *Krechet*'s one. Fourteen *Torsk*-class cruisers entered service from February 2140 through December 2148. However, they saw little action in their intended roles as Romulan forces withdrew and consolidated in anticipation of a UFP offensive. Instead, they were used as escorts and scouts when Starfleet task forces pushed into Romulan territories in the final two years of the war. *Torsks* did well in these limited roles, but were eventually superseded by the significantly more capable *Ajax* class.

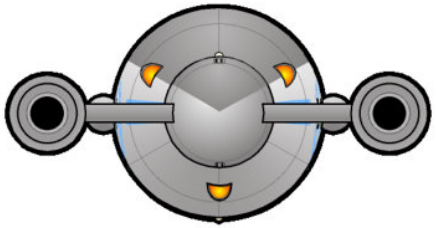
The remaining *Torsk*-class cruiser USS *Stingray* is on display at the Starfleet Museum.

TORSK









STANDARD COMPLEMENT	
OFFICERS [COMMAND]	38
CREW	204

DIMENSIONS	
DEADWEIGHT	97,600 MT
LENGTH	147M
BREADTH	84M
HEIGHT	42M

ARMAMENT	
LASERS	4 [2F/P, 2F/S]
MISSILES	1 [F]

DEFENSIVE DEFLECTOR SHIELDS	UES-2
NAVIGATIONAL DEFLECTOR	MARK II
TRACTOR BEAM EMITTER	MARK III

PROPULSION SYSTEMS	
WARP DRIVE	YOYODYNE TYPE F
IMPULSE DRIVE	LOCKHEED-T'MARAS II-A
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS II

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	1

SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERDYNE MARK III
ACTIVE SENSOR SUITE	HUGHES MKIXX ASM
PASSIVE SENSOR SUITE	HUGHES MK III PSM
TRANSPORTERS	1 STD, 1 CARGO
LIFE SUPPORT	LEE TYPE B

MISSION PROFILE	
MISSION TYPE	DESTROYER
MAXIMUM OPERATING RANGE	1.5 YEARS

Farragut

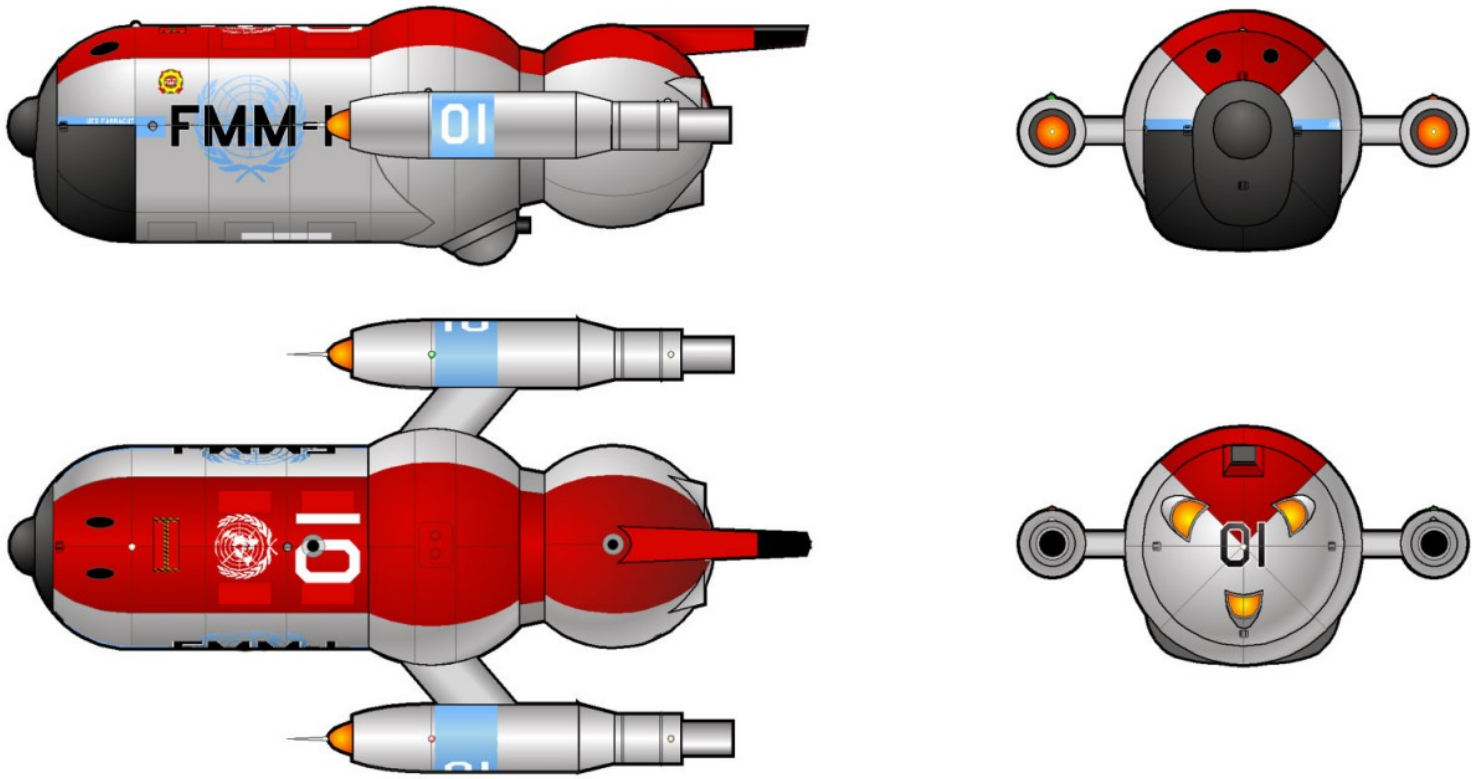
Like many other heavy warships, *Farragut* was based on the reliable *Bison* design. The ventral forehull was modified to accommodate a drop bay for orbit-to-ground attack missiles. Unlike ship-to-ship missiles, where speed and maneuverability were key, ground attack missiles were slow, but optimized for descent through a planetary atmosphere. *Farragut* also carried an orbit-to-ground pulse laser mounted in a ball turret for intercepting missiles launched from the planetary surface. A modified, more powerful version of this weapon was also installed on *Yorktown*-class carriers. Finally, because it would always be escorted by *Krechet*- or *Tannhäuser*-class cruisers, *Farragut* carried only a small complement of defensive missiles for space combat.

However, *Farragut*-class ships rarely saw action in their intended roles as assault cruisers. The Romulans fought so ferociously to defend their planetary holdings that a direct orbital assault was usually impossible. Instead, most task forces had to resort to standoff bombardment of a Romulan planet, a much more destructive and time-consuming operation. In other assaults, the Romulan bases would self-destruct by detonating their fusion reactors rather than succumbing to enemy occupation.

Farragut also suffered from more rapid obsolescence. Because of its nature as a planetary assault ship, *Farragut* was considered a frontline vessel, and deployed accordingly. However, its SSWR-III-C reactor, state of the art when first launched in May 2145, was quickly outperformed by the newer *Hercules*- and *Lincoln*-class heavy cruisers in the early 2150s. Fleet commanders found that *Farragut*s could not keep up with their own escorts, requiring task forces to cruise at slower speeds to their targets. As a result, only nine *Farragut*-class ships were built out of a planned twenty. The remaining hulls, already under construction, were converted into *Olympus Mons*-class transports instead.

One ship, USS *Hartford*, was converted to a cargo transport after it was decommissioned in December 2159. It had a long career as part of the Federation Colonial Command and commercial services. It has since been restored to its wartime service appearance (depicted in the accompanying datasheet), and is on display at the Starfleet Museum at Memory Alpha.

FARRAGUT



STANDARD COMPLEMENT	
OFFICERS [COMMAND]	60
CREW	520

DIMENSIONS	
DEADWEIGHT	120,800 MT
LENGTH	201M
BREADTH	113M
HEIGHT	64M

ARMAMENT	
LASERS	4 [4F, 2P, 2S]
MISSILES	1 [F]

DEFENSIVE DEFLECTOR SHIELDS	UES-2
NAVIGATIONAL DEFLECTOR	MARK II
TRACTOR BEAM EMITTER	MARK III

PROPULSION SYSTEMS	
WARP DRIVE	YOYODYNE TYPE II
IMPULSE DRIVE	LOCKHEED-T'MARAS TYPE II-B
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS III

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	2

SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERDYNE MARK III
ACTIVE SENSOR SUITE	HUGHES MK XX ASM
PASSIVE SENSOR SUITE	HUGHES MK III PSM
TRANSPORTERS	1 STD, 1 CARGO
LIFE SUPPORT	KOSUGI TYPE II

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	1.5 YEARS

Yorktown

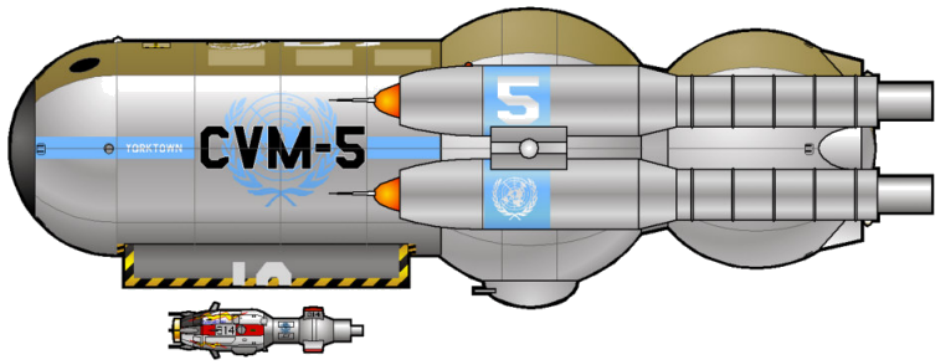
In June 2135, the fusion-powered *Minotaur* fighter and the M/AM-powered *Yorktown* carrier were introduced in an attempt to overcome the operational limitations of early M/AM ships by combining the speed and range of M/AM-powered warp flight with the maneuverability of high-impulse fighters. *Yorktown* was based on the *Pioneer*-class cruiser, which had entered service in 2130 and had itself been developed from the *Bison*-class transport. Whereas *Pioneer* had a large fusion reactor, a single midline Pachyderm III warp nacelle, and two auxiliary nacelles, *Yorktown* carried a new SSWR-III-B M/AM reactor and four paired nacelles. The impulse drive and its fusion reactor were moved to the extreme stern. At the front of *Yorktown*'s cylindrical forehull, which had been lengthened by 20 m, were sensors and the navigational deflector, command centers, the computer core, crew facilities, and life-support machinery. In the center section of the forehull were docking cradles and missile-loading equipment for five *Minotaur* long-range fighters. In the aft section of the forehull were support facilities for the *Minotaur* fighters. With a displacement of some 670,000 tons, *Yorktown* was by far the largest Earth-designed warship produced to that time.

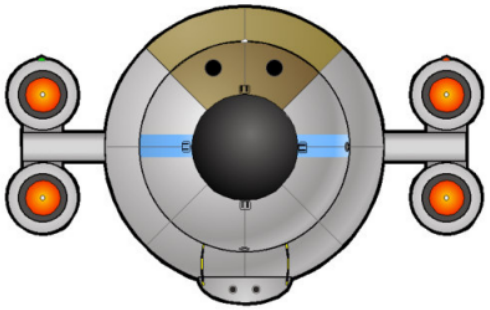
In 2150, several *Yorktown* carriers and their fighters were selected to be upgraded to Mk II specifications in an attempt to augment the fleet while newer classes were designed. The new fighter/carrier system proved extremely effective in both its long-range strike and anti-ship roles. Both ships were now at least twice as fast as their Romulan counterparts of the period, and fighters were also able to evade or outrun most enemy missiles until late in the war. In ship-to-ship combat at warp speeds, a flight of five *Minotaurs* could easily run down any Romulan warship or cargo vessel and overwhelm its defenses. At sublight speeds, a *Minotaur*'s relatively low weight allowed it to hold its own against Romulan warp-capable fighters or even sublight fighters. Moreover, because of its superior speed, a *Minotaur* could disengage and escape at will if it found itself in danger.

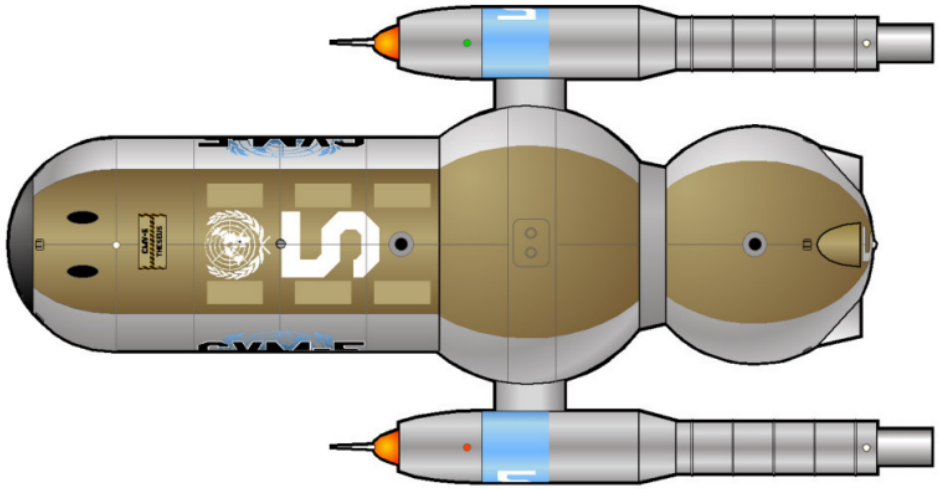
In addition to numerous strikes against ground-based targets and anti-shipping raids, *Yorktown* ships participated in most major engagements of the war, including the Battle of the Krakowski Void and the Battle of Cheron. In several campaigns, notably Yadalla and Kaph-42, *Minotaur*s provided low-orbit fire support during Marine Corps landings. A total of five *Yorktown* carriers and thirty-eight *Minotaur* fighters were lost in operations from 2135 through 2160. After the war, most Mark I *Minotaur*s were retired from service, but many Mark IIs were fitted with improved 54J M/AM fuel cells and twin nacelles and continued in service as long-range strike fighters into the 2180s. In addition, many retired *Minotaur*s were purchased by private citizens and, nearly 200 years after their withdrawal from service, have had a long second career as sport racers. After the war, many *Yorktown* carriers were converted to fast transports and tankers.

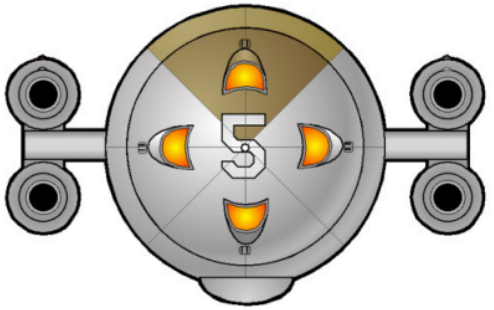
The *Yorktown*-class carrier *Lexington* and the *Minotaur*-class fighter *Gwendoline* are on display at the Starfleet Museum.

YORKTOWN









STANDARD COMPLEMENT	
OFFICERS [COMMAND]	68
CREW	546
FLIGHT CREW	160
DIMENSIONS	
DEADWEIGHT	219,800 MT
LENGTH	234M
BREADTH	75M
HEIGHT	69M

ARMAMENT	
LASERS	8 [4F, 2P, 2S]
MISSILES	2 [F]
LASER CANNON	1 [DUAL EMITTER]
DEFENSIVE DEFLECTOR SHIELDS	UES-3
NAVIGATIONAL DEFLECTOR	MARK II
TRACTOR BEAM EMITTER	MARK III
PROPULSION SYSTEMS	
WARP DRIVE	YOYODYNE TYPE III
IMPULSE DRIVE	LOCKHEED-T'MARAS TYPE II
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS IV

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	4
SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERDYNE MARK IV
ACTIVE SENSOR SUITE	HUGHES MK XIX ASM
PASSIVE SENSOR SUITE	HUGHES MK IV PSM
TRANSPORTERS	2 STD, 1 CARGO
LIFE SUPPORT	NORRIS TYPE VI

MISSION PROFILE	
MISSION TYPE	FLEET CARRIER
MAXIMUM OPERATING RANGE	2 YEARS

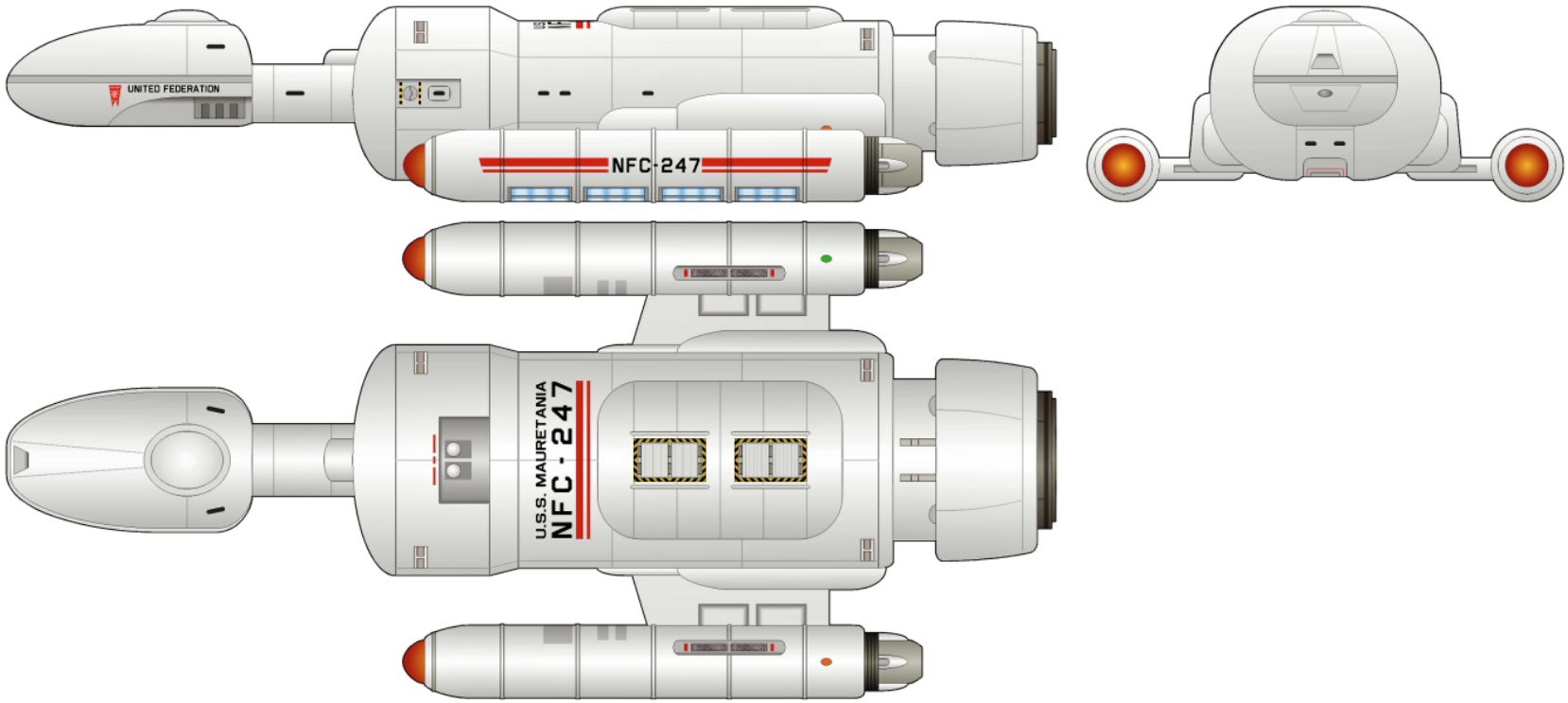
Mauretania

When Starfleet was founded in 2152, several outdated and often battle-damaged fusion-powered warships were rebuilt to serve as transport ships. Starfleet Command soon recognized that these vessels were too slow and had too short a range for the demands of the new united fleet with its extended range of operation. Moreover, in many cases the former cruiser-type ships wound up as overcrewed and also oversized, especially because the possible cargo spaces deep inside the ships were not directly accessible.

This is why Starfleet's first standard transport (indeed, the first vessel to be designed specifically *for* Starfleet), the *Mauretania* class, was developed. The design was facilitated and accelerated by reusing many construction principles of the *San Francisco* class. Weapons appeared to be dispensable. Many other components were simplified with respect to the *San Francisco* class, so that eventually merely the external shape remained similar. The internal arrangement of the small crew section remained essentially the same as on the *San Francisco*. The bulky midship section, on the other hand, was converted to cargo bays. The two upper decks were designed to hold general cargo that came in various shapes, such as food, medical supplies, equipment and spare parts. The lower half of the section was for bulk cargo in standard containers and was accessible through big sliding doors on the ventral side. The *Mauretania* class was approved for any kind of cargo except for fuel, other chemicals and explosives. If necessary, the ship could carry troops as well.

The most innovative change, however, was that the *Mauretania* used a matter/antimatter reactor (M/ARA) as the main power source. The M/ARA was located at the intersection between the mid and the aft section, leaving essentially the whole latter section as a huge fuel tank. The *Mauretania*-class ships achieved warp 2.4, which was significantly faster than transports of similar size. Nevertheless, owing to their obsolete basic construction, no more than sixteen of them were ever built in two batches, instead of the originally ordered six batches and twenty-six ships. The last ship of this class was decommissioned already in 2205, nearly fifty years after its commissioning. After their Starfleet service, most of the remaining ships were purchased by private citizens or corporations and converted to luxury transports.

MAURETANIA



STANDARD COMPLEMENT	
OFFICERS [COMMAND]	7
CREW	58
TROOPS	100
DIMENSIONS	
DEADWEIGHT	51,300 MT
LENGTH	74M
BREADTH	38M
HEIGHT	14M

ARMAMENT	
LASERS	4 [2F/P, 2F/S]
MISSILES	1 [1F, 1 VENTRAL]
ACCELERATOR CANNON	FAC-1
DEFENSIVE DEFLECTOR SHIELDS	UES-5
NAVIGATIONAL DEFLECTOR	MARK III
TRACTOR BEAM EMITTER	MARK III
PROPULSION SYSTEMS	
WARP DRIVE	KELAD TYPE G
IMPULSE DRIVE	THAVIAS TYPE KA
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS VIII

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	1
SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERTRONICS CT 1
ACTIVE SENSOR SUITE	PARKER MK X ASM
PASSIVE SENSOR SUITE	HARDISAN MK VI PSM
TRANSPORTERS	1 STD, 1 CARGO
LIFE SUPPORT	NATFORD LS T-3

MISSION PROFILE	
MISSION TYPE	ASSAULT TRANSPORT
MAXIMUM OPERATING RANGE	2 YEARS

San Francisco

The Charter of the United Federation of Planets from 2152 called for the immediate formation of Starfleet for the Federation's common space programs. The member planets obligated themselves to contribute a variety of starships that the new Starfleet would assign to the exploration of space, defense of the Federation, and to humanitarian and diplomatic missions.

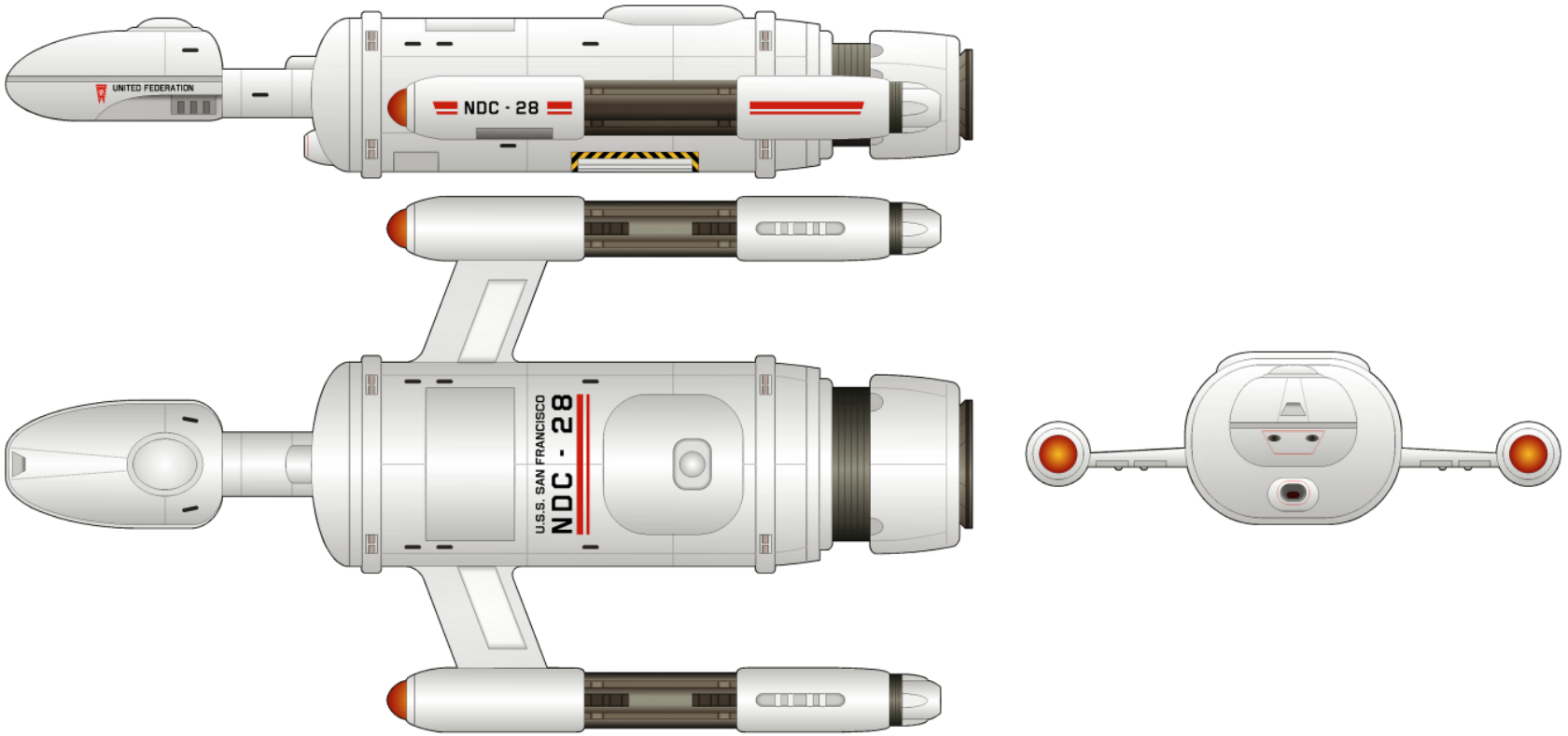
Among the many vessels designed for the newly established Starfleet was the *San Francisco* class, although their speed and range of operation would be limited. The UFP, however, couldn't afford to be picky in pursuing its goal of taking over a lead role in the new Starfleet. Interestingly, the UESPA had named the lead ship for San Francisco, the city where its headquarters was located and the future site of Federation Starfleet, so there was also a symbolic meaning in providing Starfleet with a *San Francisco* class.

The design was one of the few real warship types predating the Romulan War. The prototype USS *San Francisco* had just been completed when hostilities began. During the following years, twenty-three more ships were rushed into service. Their endurance and firepower being limited, *San Francisco*-class ships nonetheless took part in many of the major battles of the war, and were used quite effectively for planetary defense and as escorts.

The bow section of the *San Francisco* class, including the bridge, the mess hall and the main weapons bay, could be detached in case of an emergency. However, it was not built for reintegration. The main power source was a PFR-3 fusion reactor. The ships were armed with a twin pulse laser cannon in the bow and one in the stern and eight fusion missiles. Like many other fusion-powered ships, they became obsolete after the appearance of the M/ARA, and the final vessel was retired in 2180.

In 2266, the ex-USS *Anchorage*, now operating under civilian operators, made a scheduled stop at Federation Earth Outpost 2 near the Romulan Neutral Zone. Shortly thereafter, the base and the ship were destroyed by a Romulan V-8 *Bird-of-Prey* that had been ordered into Federation space on a mission of espionage and destruction.

SAN FRANCISCO



STANDARD COMPLEMENT	
OFFICERS [COMMAND]	8
CREW	63

DIMENSIONS	
DEADWEIGHT	56,250 MT
LENGTH	81M
BREADTH	45M
HEIGHT	14M

ARMAMENT	
LASERS	4 [2F/P, 2F/S]
MISSILES	2 [F]
ACCELERATOR CANNON	FAC-1
DEFENSIVE DEFLECTOR SHIELDS	UES-3
NAVIGATIONAL DEFLECTOR	MARK IV
TRACTOR BEAM EMITTER	MARK IV

PROPULSION SYSTEMS	
WARP DRIVE	KELAD TYPE F
IMPULSE DRIVE	THAVIAS TYPE KA
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS VIII

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	1

SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERTRONICS CT 1
ACTIVE SENSOR SUITE	PARKER MK X ASM
PASSIVE SENSOR SUITE	HARDISAN MK VII PSM
TRANSPORTERS	1 STD, 1 CARGO
LIFE SUPPORT	NATFORD LS T-3

MISSION PROFILE	
MISSION TYPE	FRIGATE
MAXIMUM OPERATING RANGE	2 YEARS

Ajax

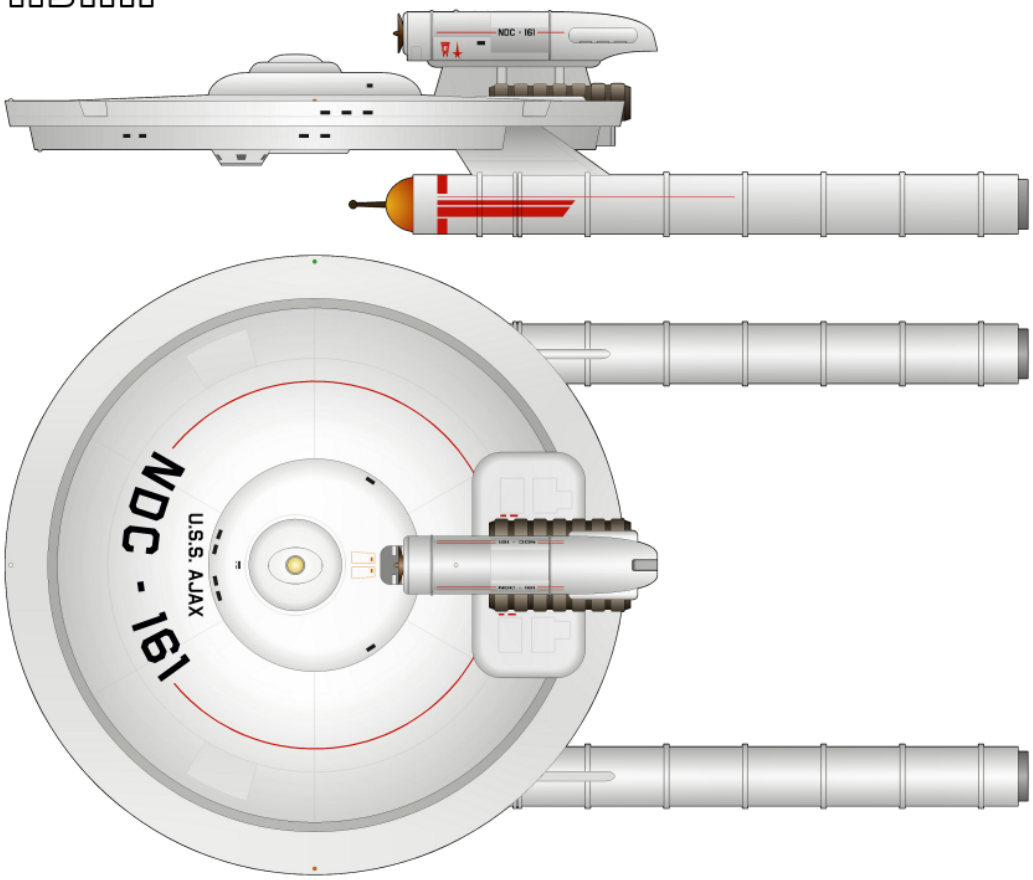
After the Romulans had launched surprise attacks on the remote Delta VII outpost in 2153, the only line of defense consisted of a number of scout-type vessels: for instance, the *Archer* class or the *San Francisco* class. These ships were never designed for an extended military conflict, but rather as system patrol ships. Still, with their considerable armament consisting of pulse lasers and atomic missiles, they performed well. Many historians believe that, had they not met any resistance from those ships, the Romulans may have regrouped quickly and launched a deadly attack on the inner colonies and perhaps even Earth itself.

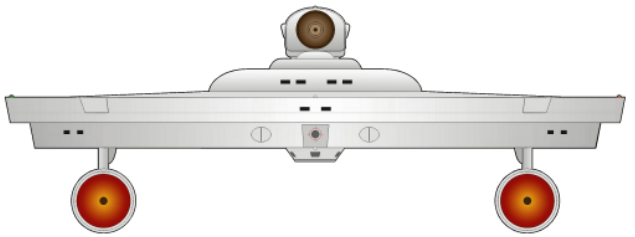
The *Ajax*-class warships were developed in 2154 as a more heavily armed variant of the *Daedalus*-class ships to gradually replace the battered fleet of *Archer*-class vessels. The *Ajax*-class prototype was laid down in January 2155, and the USS *Ajax* was commissioned eleven months later. The relatively fast ships with their newly developed matter/antimatter reactors were intended to scout and to attack Romulan convoys outside star systems with Federation outposts. Fortunately the war ended sooner than expected. The political decision to establish the Neutral Zone and the outposts along its border made this type of ship expendable.

The first batch of eight *Ajax*-class ships were completed as late as 2158 and classified as destroyers. Since their role was limited and the larger *Hercules*-class ships turned out superior and more versatile, no further *Ajax*-class ships were commissioned after that time. The *Ajax*-class design considerably deviated from the *Daedalus* class in that only few components, most noticeably the warp nacelles, were adopted, while the flat hull shape followed a new understanding of warp field dynamics at speeds beyond warp 3. Unlike the coupled single-beam emitters of the *Daedalus*, the navigational deflector was implemented in the form of a characteristic "dish." *Ajax*-class ships were armed with one laser turret, one fixed laser cannon and three missile launchers, two facing forward and one facing backward. Instead of a shuttlebay, two docking ports in the saucer underside allowed them to keep shuttles permanently docked, although no more than one shuttlepod was usually carried.

Ajax-class ships were mainly employed for system patrol and local defense after the war, with the last of these remarkable vessels (since upgraded to Mk III specification) decommissioned in 2192. One vessel, the ex-USS *Tripoli*, was taken from the Federation Depot at Minos II and sold at auction to a collector in 2272. It is currently under restoration to its wartime appearance.

AJAX





STANDARD COMPLEMENT	
OFFICERS [COMMAND]	19
CREW	105

DIMENSIONS	
DEADWEIGHT	97,600 MT
LENGTH	112M
BREADTH	68M
HEIGHT	25M

ARMAMENT	
LASERS	4 [2F/P, 2F/S]
MISSILES	1 [F]
ACCELERATOR CANNON	FAC-1
DEFENSIVE DEFLECTOR SHIELDS	UES-5
NAVIGATIONAL DEFLECTOR	MARK V
TRACTOR BEAM EMITTER	MARK IV

PROPULSION SYSTEMS	
WARP DRIVE	KELAD TYPE DW
IMPULSE DRIVE	THAVIAS TYPE KT
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS VII

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	1

SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERTRONICS CT 2
ACTIVE SENSOR SUITE	PARKER MK X ASM
PASSIVE SENSOR SUITE	HARDISAN MK VI PSM
TRANSPORTERS	2 STD, 1 CARGO
LIFE SUPPORT	NATFORD LS T-6

MISSION PROFILE	
MISSION TYPE	DESTROYER
MAXIMUM OPERATING RANGE	3 YEARS

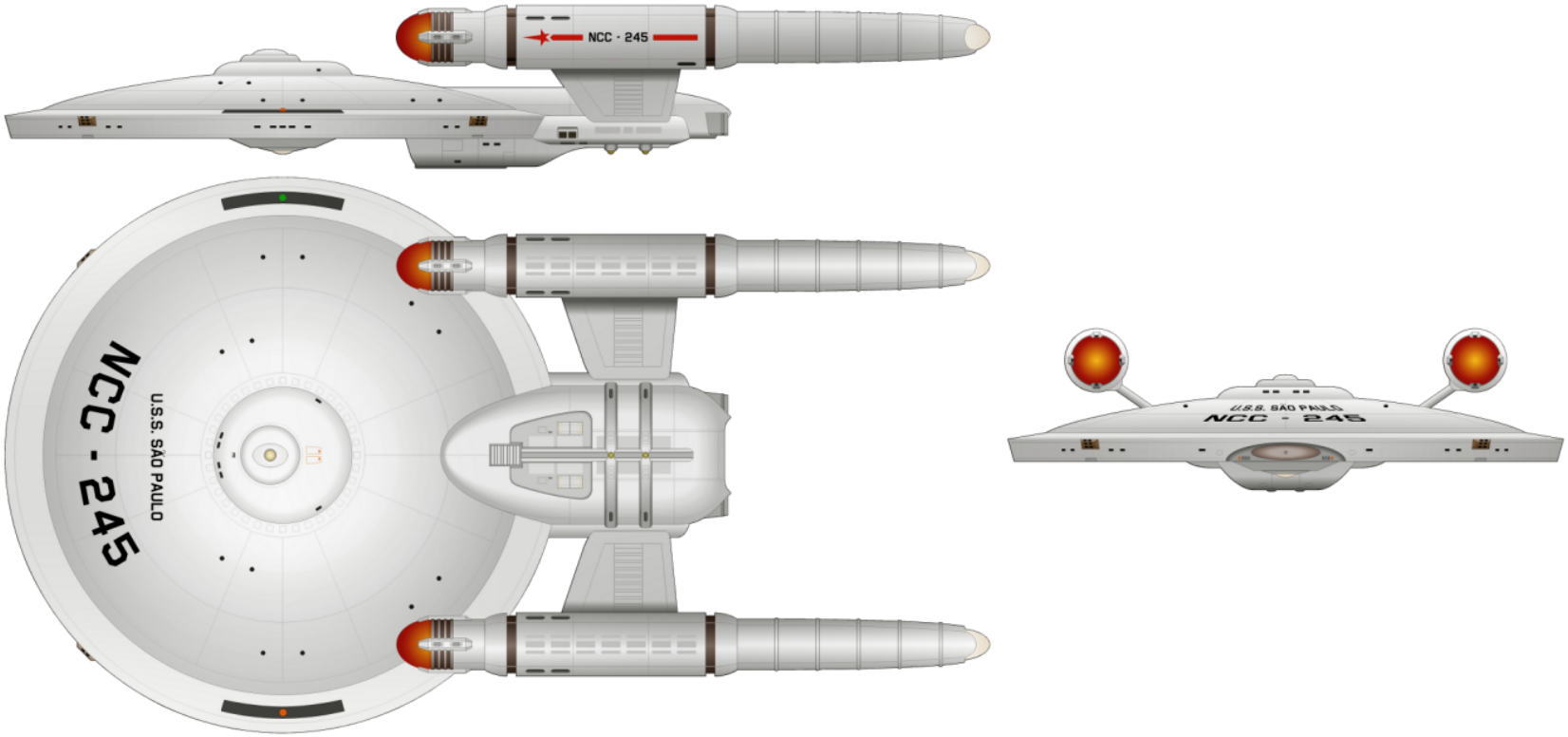
Hercules

The *Hercules* class was one of the faster and more spacious developments to replace the aging *Daedalus* class and augment the incoming *Lincoln* class, while incorporating many design cues from the *NX* class of the 2150s. With the commissioning of the first ship in 2155, *Hercules*-class ships were designed to achieve a maximum speed of warp 4, thereby reducing the average travel time between the star systems of the Federation from several months to a few weeks. In order to boost the short-term performance as well as provide redundancy for long-time runs, the *Hercules* class originally had two separate M/AM chambers that fed two parallel transfer conduits leading to each nacelles. Warp 5.5 was achieved on test runs, but the stress on the warp coils was found to be so high that twenty-eight of the thirty-four coils had to be replaced after the test.

In contrast to most previous starships that were designed for combat situations, the *Hercules* class was only moderately armed, but included a number of science labs of different branches, including stellar cartography, astrophysics, exobiology and anthropology. The shuttlebay in the stern usually held two shuttles on permanent standby and two more that could be prepared for launch in case of an emergency. The *Hercules* class was originally armed with high-yield plasma cannons only. The ships were later refitted with FL-4 lasers and two additional plasma cannon turrets in 2158.

With the introduction of the larger and more versatile *Asia* class in 2170, the *Hercules* class gradually became dispensable. By 2190, the ships were no match for more recent Klingon cruisers, like the D4, and they were withdrawn from their role as frontline ships when tensions with the Klingon Empire rose after 2218. The simple structure with one large deck and the easy maintenance of the systems subsequently made the *Hercules* an ideal support vessel. After the labs and most of the crew quarters had been removed and a grapple arm and additional loading ports had been installed, twelve ships of the class served as tenders. The second warp core was removed as well. The last four ships of the modified *Hercules* class were still in Starfleet in 2276 (in ready-reserve status), but all are slated to be decommissioned by 2280.

HERCULES



STANDARD COMPLEMENT	
OFFICERS [COMMAND]	24
CREW	188

DIMENSIONS	
DEADWEIGHT	97,600 MT
LENGTH	164M
BREADTH	94M
HEIGHT	27M

ARMAMENT	
LASERS	6 [2F, 2F/P, 2F/S]
MISSILES	2 [F]
ACCELERATOR CANNON	FAC-2
DEFENSIVE DEFLECTOR SHIELDS	UES-6
NAVIGATIONAL DEFLECTOR	MARK VI
TRACTOR BEAM EMITTER	MARK IV

PROPULSION SYSTEMS	
WARP DRIVE	KELAD TYPE T
IMPULSE DRIVE	THAVIAS TYPE KR
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS VIII

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	2

SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERTRONICS CT 2
ACTIVE SENSOR SUITE	PARKER MK XI ASM
PASSIVE SENSOR SUITE	HARDISAN MK VII PSM
TRANSPORTERS	2 STD, 1 CARGO
LIFE SUPPORT	NATFORD LS T-6

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	3.5 YEARS

Lincoln

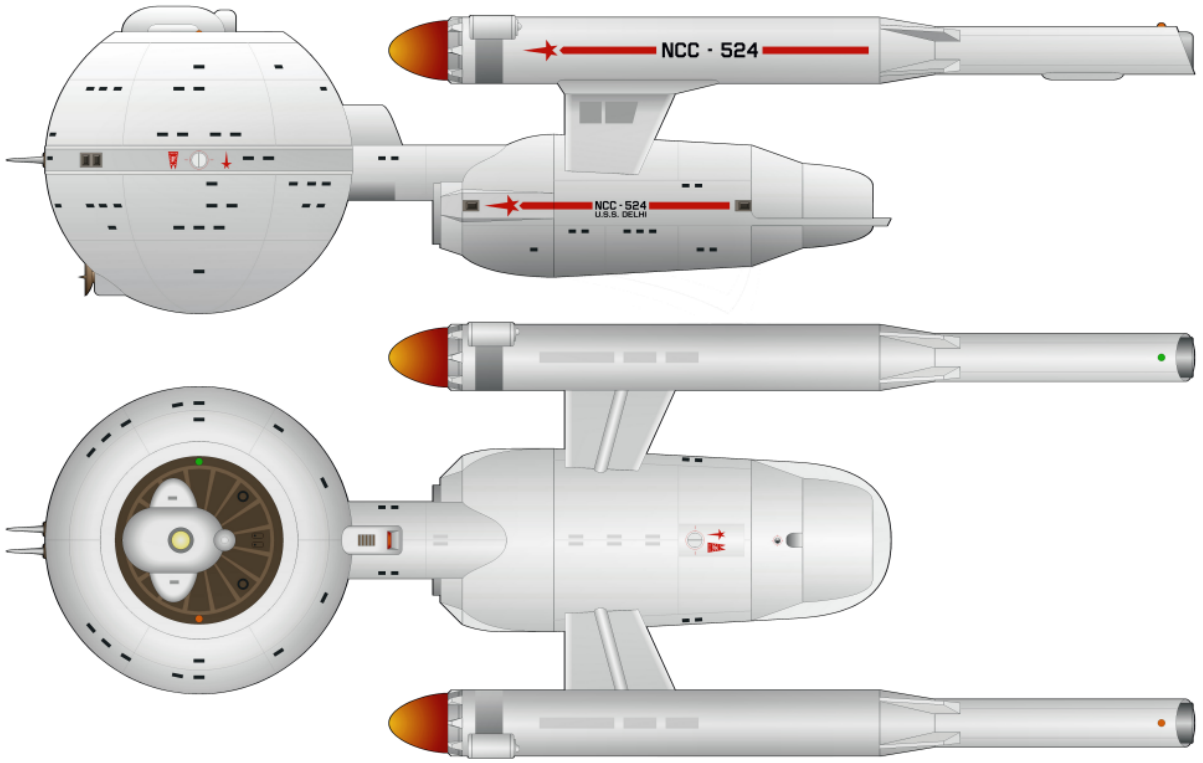
The *Lincoln* class was designed in 2156 as a further development of the *Daedalus* class. Envisioned as a Mk IV upgrade, the class was soon given its own designation. Together with the *Hercules* class, they subsequently formed the backbone of Starfleet. Most of the ships were built in the newly established Proxima Fleetyards, the location being ideal since most of the retired *Daedalus* classes that the new ships were built around were already in storage there. The computers, accommodations, life support, warp cores and impulse drive systems were upgraded, and the newly designed FL-2 lasers and FAC-2 accelerator cannons were installed. In addition, a new deflector dish was installed for the first time—a multipurpose instrument that not only generated a deflector field to disperse dust in the ship's flight path but also included the navigational sensors and subspace transmitter. The spherical bow section was detachable and, for the first time, designed with its own limited propulsion system. The separation was limited to emergency situations such as an impending warp core breach.

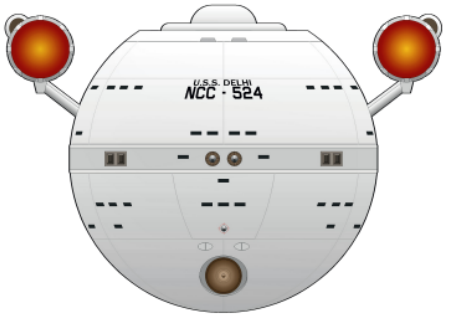
In 2157, the Mk II series of this class was supplied with more powerful weapons systems, including fusion missiles, as well as improved shields. Although the laser guns of the *Lincoln* class turned out inferior to Klingon disruptors of the 2200s, thanks to their pulsed shields the ships could withstand prolonged disruptor fire from enemy vessels that would have decimated the *Daedalus* hulls they were based on.

In 2222, USS *Passat* withstood the attack of three Klingon D-2 light cruisers with only minor damage and without any casualties until the Klingons could be lured into the Hromi Cluster, where Starfleet had installed automated defense platforms that destroyed one of the Klingon ships and forced the two others to retreat.

On the other hand, USS *Waterloo*—a ship that was due to be transferred to Starfleet Training Command in 2225—fell victim to a Klingon sneak attack in the Becker system in 2224. This was the incentive to withdraw all the old ships from the border and to upgrade a number of selected *Lincoln*-class ships to new standards. The final commissioned vessel of the class, the USS *Devon*, is still in use as a training vessel in the Starfleet Cadets program to this day. Based on Alpha Centauri, this program introduces high school students to Starfleet and its operations. All other *Lincoln*-class cruisers were decommissioned and scrapped by 2240.

LINCOLN





STANDARD COMPLEMENT	
OFFICERS [COMMAND]	26
CREW	254

DIMENSIONS	
DEADWEIGHT	180,250 MT
LENGTH	174M
BREADTH	63M
HEIGHT	45M

ARMAMENT	
LASERS	6 [2F, 2F/P, 2F/S]
MISSILES	2 [1F, 1 VENTRAL]
ACCELERATOR CANNON	FAC-2
DEFENSIVE DEFLECTOR SHIELDS	UES-6
NAVIGATIONAL DEFLECTOR	MARK VI
TRACTOR BEAM EMITTER	MARK IV

PROPULSION SYSTEMS	
WARP DRIVE	KELAD TYPE T
IMPULSE DRIVE	THAVIAS TYPE KS
REACTIVE CONTROL	LOCKHEED-T'MARAS RCS IX

SUPPLEMENTAL CRAFT	
TYPE A SHUTTLEPOD	3

SECONDARY SYSTEMS	
MAIN COMPUTER	CYBERTRONICS CT 2
ACTIVE SENSOR SUITE	PARKER MK XI ASM
PASSIVE SENSOR SUITE	HARDISAN MK VIII PSM
TRANSPORTERS	3 STD, 1 CARGO
LIFE SUPPORT	NATFORD LS T-6

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	3.8 YEARS



The Romulan Star Empire

The Romulan Star Empire

Even now, over a century after the conclusion of the Earth-Romulan War, relatively little is known about Romulan history prior to the outbreak of that conflict.

What is known for certain is that the Romulans are an offshoot of the Vulcan culture, and that they left close to 2000 years ago. Vulcan records describe early colonization attempts, before the Peace of Surak took hold completely. (Contrary to popular belief, Vulcan did not become automatically pacifist, nor was nonviolence a strict rule—defensive wars were common against those societies that had not yet adopted Surak's teachings.) A wave of several dozen massive, sublight vessels departed from Vulcan and headed out into interstellar space. Some of the vessels only made it a short distance, settling relatively close to the Vulcan homeworld. These colonies were later reabsorbed into the Vulcan Confederation in the 1500s, after Vulcans developed warp drive. A few other colonies, such as the ones on Dessica or Calder, failed and died out.

However, a handful of colony ships made it as much as thirty light-years away from Vulcan, and settled on a pair of class M planets which the travelers named ch'Rihan and ch'Havran—literally translated "of the Declared" and "of the Travelers," respectively—and later designated "Romulus" and "Remus" by human explorers ignorant of their true names. Against all odds, the colonists managed to survive and flourish, establishing first a foothold and then an empire based on the two pristine worlds.

For the first millennium and a half, the Romulans (or more appropriately, the Rihannsu) spent the vast majority of their combined efforts in taming the two worlds to suit their needs, and gradually spreading to inhabit most of the surface of both planets. However, some colonies were also established in three nearby systems, so that by the early 22nd century, a loosely held union called the Romulan Star Empire comprised a total of four star systems with six inhabited planets and a total of close to twelve billion citizens.

Although the Romulans were a much more passionate culture than their Vulcan brothers, they were not (contrary to popular opinion) a decidedly warlike race prior to the early 22nd century. However, that changed after Romulans made first contact with another sentient species around 2119, when they encountered the Klingons for the first time. The Klingons had recently developed warp capabilities themselves and were beginning to expand their empire beyond their own homeworld. As a result, the blatantly aggressive Klingon attitude was a poor match for the passionate and confident Romulan demeanor. However, although the Klingon and Romulan empires could be considered to be hostile to one another and frequent skirmishes took place in the region between their respective homeworlds, neither side then possessed the technology to wage a true interstellar war at that point in time.



Romulan Fleet at anchor at the planet Cheron.

The Romulan political scene began to change, however, in the early 2130s. Traditionally, the Romulan "empire" was just a loosely organized union of the two homeworlds and three major colonies of the Romulan settlers. Communication (and by extension political authority) was limited by the speeds of physical warp travel, because the Romulans did not develop subspace communications until the 2130s. Once interstellar communications became practical, though, the central government on Romulus began attempting to assert greater and greater control over the outer colonies. This trend did not sit well with the people on the outer colonies, creating a good

deal of internal friction that could lead to a Romulan civil war if left unchecked.

Thus, by the early 2140s, the Romulan Star Empire was considered relatively weak and divided, torn by internal disagreements, social and economical strife, and considerably smaller than the vast union controlled by the United Earth government.

THE ROMULAN PEOPLE

The Vulcanoid appearance of Romulans and their overt tendency toward apparent emotionlessness often subconsciously led officers into dealing with Romulans as though they were Vulcans. In fact, though the appearances and some of the personality traits were similar, the thought processes and personalities that produced these appearances were markedly different.

The Romulans, unlike the Vulcans, do not seem to believe in suppression of emotion. They do, however, maintain a very businesslike, perhaps even cold, presence when on duty. This passionlessness does not stem from a desire for inner serenity, but has been learned over the years by Romulans in dealings with other cultures. Quite simply, one is less vulnerable to an enemy if that enemy cannot tell from one's appearance what one is thinking or feeling.

A Romulan ship commander will not give away his plans in his voice or mannerisms. It is doubtful that the old saying that "Romulans know no fear" is true, but Romulans certainly *show* no fear.

Neither will they show mercy. A Romulan gives and expects no quarter in battle or in negotiations. In the negotiations to conclude the Romulan War, Romulan diplomats had difficulty understanding an enemy who would not necessarily take advantage of any momentary weakness. Romulans are extreme pessimists, always expecting the worst of a rival. This personality quirk has been successfully turned against them in the past through use of reverse psychology.

Romulan officers show a dedication to duty that borders on the extreme. Certainly no Romulan would allow an enemy to capture his ship, and they are known to prefer death to being made prisoner. Circumstances that would make a Romulan prisoner worth more to his people alive and imprisoned than dead and safe from interrogation are most rare. Therefore, under most situations, it is useless to risk one's ship and crew to attempt such a capture.

Romulan tacticians see no lapse of the morality of warfare in sneak attacks, or attacks against unprepared or unarmed installations. The enemy is the enemy, and little distinction is made between civilian and combat soldier. Romulans do not fight limited war or recognize non-military targets. For them, survival is the only rule of war. To expect any other view from a Romulan is to invite disaster.

The skill of Romulan commanders in hit-and-run tactical situations is legendary and certainly is the result of chronic shortages of men and materials. If one has few ships, one cannot take chances by attempting an open frontal attack. Strike from hiding and run away: these are the tactics of conservation, and the tactics most used by the Romulans. The Romulans are not marauders of the Klingon fashion.

They rarely take possession of what they cannot use, nor commit atrocities for no purpose other than demoralization of the enemy. But neither do they divide their efforts with infighting nor underestimate their enemy. And, unlike the Klingons, they are not vulnerable to appeals to personal greed or glory. One must not make the mistake of thinking of the Romulans as "better" or "worse" than the Klingons. They are simply "different."

ON THE ROAD TO WAR

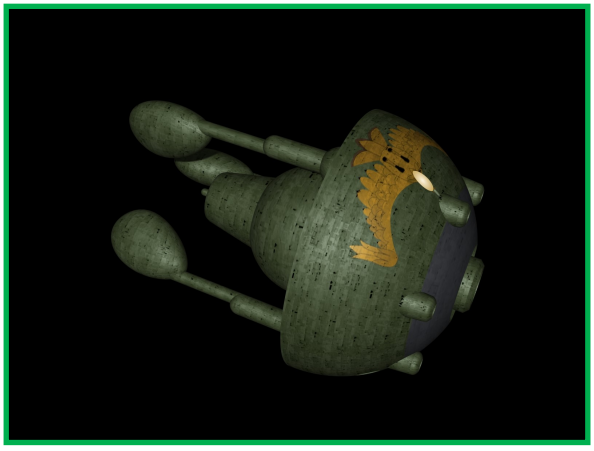
Based on intelligence gathered in 2268, the Earth-Romulan conflict started, ironically, with an incident involving a Vulcan survey ship in orbit of the Romulan homeworld in 2143. The Vulcan Science Academy had sponsored numerous deep space survey missions for more than a century, since Vulcan first discovered warp drive in 2011. It was one of these missions, in fact, which contacted Earth in 2063.

In 2143 the scout ship *T'sannu* began a survey mission into the eastern galactic frontier beyond the Qualor and Tarod systems. According to the mission plan, the crew

was to survey the Tomed system, the Zeta Reticuli (Tranome Sar) system, the Beta Draconis (Romulus) system, the Alpha Mensae (Sotarek) system, and the Cheron system. The total mission duration was expected to be approximately twenty-eight months.

Nothing is known about the *T'sannu*'s mission prior to entering the Romulan star system, since all data and records were lost when the ship was destroyed. In fact, the ultimate fate of the *T'sannu* was unknown until 2268, when Starfleet came into possession of a large amount of data from a stolen Romulan databank. A small portion of this data described the Romulan perspective on the events leading up to the war, including an incident involving a Vulcan ship in the Romulan system.

According to the military archives, the *T'sannu* entered the Romulan star system on or about February 26, 2143. Upon detecting signs of habitation, the crew apparently



Romulan *Cabbage* cruiser, circa 2150.

chose to conduct discreet observations prior to making contact. It is not known whether the Vulcans on board realized just whom they had found. The Romulans, on the other hand, knew exactly who these intruders were. Fearing that the *T'sannu* was an advance scout for a general invasion, a panicked Romulan commander ordered the Vulcan ship destroyed. This panic spread quickly throughout the empire, and the gears of war were set into motion.

ROMULAN MOTIVATION FOR WAR

It is extremely difficult to evaluate the Romulans' racial motivations for war because no direct contacts with them have been made. Nevertheless, we can draw some conclusions by translating subspace communications and making other educated guesses; future intelligence reports, however, may change or radically contradict the suppositions made in this report.

Based on all available information at the time, the Romulan War against the United Federation of Planets began because of a territorial dispute. In their spinward expansion of territory, the Romulan Empire claimed an area of space within the Federation's sphere of influence and exploration. When the USS *Avenger* unwittingly entered that portion of space, the Romulans attacked it. Simply put, it was a matter of Romulan expansion versus Federation exploration. In fact the Romulans, already well into the process of strengthening their borders, were well prepared for the invasion they felt was coming.

The Romulans' actual reasons for expansion toward Federation space in the first place are not clearly understood. There were possibly conditions preventing the Romulans from expanding in other directions. It may also be that, once they became aware of the Federation's existence, their psychological makeup made them want to fight. Perhaps such a conflict between the two powers was inevitable; even the galaxy is limited in size.

It is fair to assume that the Romulans are a resource-poor race. Their general combat tactics emphasize the most efficient use of available personnel and material. They are inferior in sheer manpower, too. Oddly, the general region of space they occupy has a higher stellar density than most areas within the Federation, offering more stars and more usable planetary systems as well. One possibility for the Romulan shortages is that those stars may not contain needed resources, or they may not be suitable for Romulan life. Only direct investigation will confirm or deny this hypothesis, but that is impossible at present.

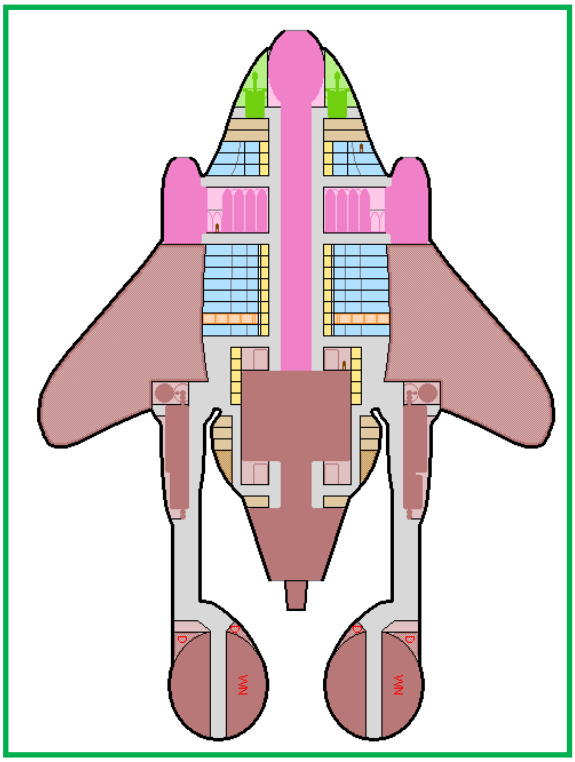
The attack against the USS *Avenger* was only the first indication of their ferocity and hostility toward non-Romulans. A willingness to destroy their own coveted

resources, including ships and personnel, to avoid capture recalls a Spartan ethic. Based on Hodgkins' Law, both qualities usually are indicative of a warlike race. Unfortunately, it is not possible to determine whether Romulan aggressiveness is due to previous encounters with an equally hostile race, or to a violent xenophobia—a fear and hostility toward other alien life-forms. If the Romulan Empire feels threatened by another hostile spacefaring race, we must find out about them, too.

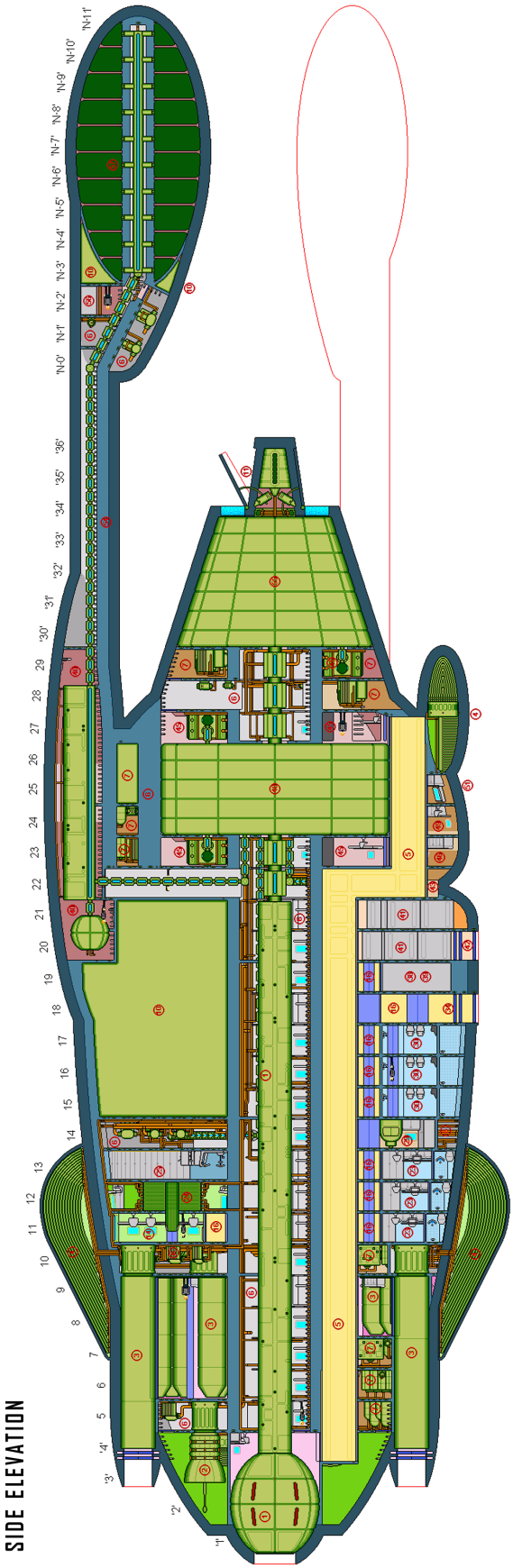
Another factor characterizing the Romulans is their tenacity. During fourteen years of undeclared action and almost three years of open war, Romulan forces conducted attacks and attempted to invade Federation-controlled space. Several hundred starships were destroyed as a result, with casualties in the tens of thousands. This points to a military government willing to devote resources exclusively to combat, if necessary. It seems unlikely that a civilian ruling body (if such a phrase holds any meaning for a race like the Romulans) would be able to maintain power under such conditions. Despite this, the Romulan who signed the Treaty of Peace holds the translated title of "leader of the people." The governmental relationship between the Romulans' military and nonmilitary is another area requiring further information.

The only thing that could so strongly motivate an impoverished race to open hostilities is a need for something they do not already possess. If this is the case, we can expect the Romulans to attack again in the future whenever they feel their goals have a chance for success. Depending on how long it takes for them to recover from this war, it could be decades before they make another move against the UFP.

Or it could be weeks.







SIDE ELEVATION



TOP ELEVATION

Selected Romulan Vessels

U-22 "Cabbage"

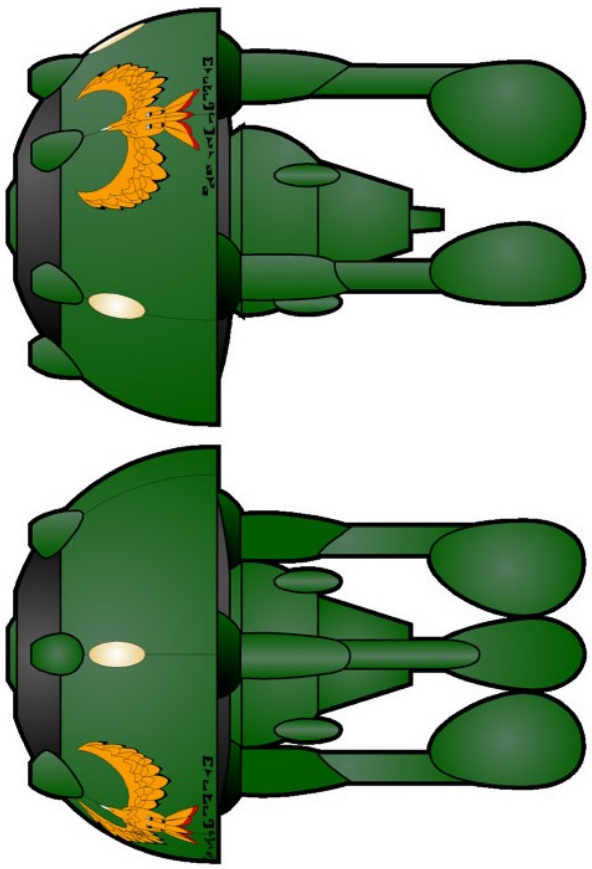
The U-22 (codenamed *"Cabbage"* by the UESPA) entered service in 2140, and was one of the most commonly encountered Romulan cruisers during the war. The design was created to allow fleet advances across interstellar distance. They were equipped with a formidable arsenal of cluster missiles and star bombs, and also mounted the most powerful plasma weapon yet produced. This could be carried for distances farther than any other Romulan cruiser, save for the U-13A.

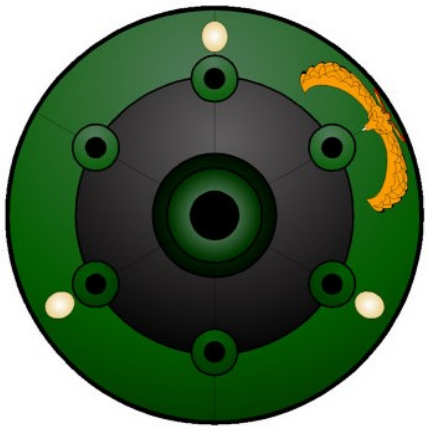
However, this massive capability came at a price: the amount of deuterium fuel required by the fusion reactors to give the required range meant that the ships weighed an estimated 500,000MT. Plans to use the twin-engine system developed for the U-20 were abandoned due to delays in that program, and a modified version of the long-serving RFTL-3 was adopted in a triple-nacelle arrangement. The massive size of this class adversely affected its maneuverability and performance at warp (2.5 maximum speed).

Early in the war the U-22 was used to great effect, its firepower overwhelming many Federation ships; the sheer size of the vessel meant that the damage inflicted on the U-22 was easily absorbed. Later in the war as newer designs entered service with Earth and its allies, the slow, ponderous U-22s became easy prey.

The vulnerability of the U-22 was demonstrated very clearly at the Battle of Hell's Gate. This battle saw the allied forces crush a massive Romulan invasion attempt. A total of twenty-seven U-22 cruisers were committed to this battle, and not even one survived. It is estimated that the Romulan loss of life in this single battle was in excess of 30,000 crew and troops. The last reported sighting of a *Cabbage* took place in 2214 by the USS *Ranger* during a routine long-range sensor scan of the Neutral Zone. It is assumed the Romulan Empire has retired them by now (2276).

U-22 "CABBAGE" CRUISER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	28
CREW	465
TROOPS	500
DIMENSIONS	
DEADWEIGHT	164,200 MT
LENGTH	157M
BREADTH	112M
HEIGHT	112M

ARMAMENT	
DISRUPTORS	4 [2F, 2/P/S,]
PLASMA CANNON	1 FORWARD
MISSILE	6 LAUNCHERS [F/P/S]
DEFENSIVE DEFLECTOR SHIELDS	RF-1
NAVIGATIONAL DEFLECTOR	TYPE 2
TRACTOR BEAM EMITTER	TYPE 1
PROPULSION SYSTEMS	
WARP DRIVE	IPP 6 - TRI
IMPULSE DRIVE	IMY 23
REACTIVE CONTROL	IMF 11

SUPPLEMENTAL CRAFT	
SHUTTLES	1
SECONDARY SYSTEMS	
MAIN COMPUTER	G-2 MK I
ACTIVE SENSOR SUITE	MK 2
PASSIVE SENSOR SUITE	MK 3
TRANSPORTERS	2 (X)
LIFE SUPPORT	MK 1

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	1 YEAR

U-24 Veronus "Chowder"

The U-24 (Codename *"Chowder"*) was a strike cruiser, designed in 2142 (speculated) for use as part of the defensive strategy. Compared to the U-22 class, the U-24 was a far lighter and more maneuverable design. This performance improvement also included an increase in maximum speed to warp 3.2. The U-24 gradually replaced the U-22 in production as the Romulans shifted from offense to defense; operating close to bases meant that cruisers no longer required the amount of fuel that the U-22 had carried to extend its reach.

In terms of armament, the U-24 did still pack an appreciable punch, again carrying star bomb anti-ship missiles and defensive cluster missiles. The class also carried a nose-mounted plasma cannon, although this was of lower power than that of the U-22. Frequently, U-24s were employed in an anti-capital ship role, their speed and maneuverability giving an edge over the lumbering Terran cruisers and carriers of the day. They proved to be vulnerable themselves, as the lighter structure that gave the U-24s their speed made them vulnerable to attack from nimble *Minotaur*-class fighters and *Farragut*-class cruisers.

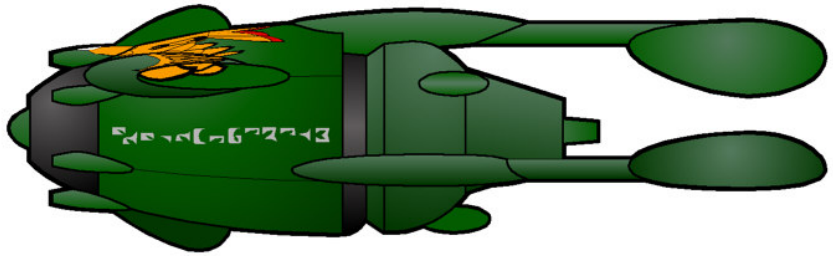
U-24s managed to destroy five *Yorktown*-class carriers, and nineteen other capital ships of various types, but that was at enormous cost: of the 216 U-24s deployed during the Romulan War, ships destroyed or listed as missing totaled 110.

Three distinct variants of the U-24 exist, the most common encountered being the U-24A, which entered service in 2145. This mounted a mix of defensive and offensive missiles as well as the plasma cannon, and eighty-one of the ships built during the war were of this type. Production continued postwar and a further thirty-eight ships were built of this mark. The second variant (in service from 2150) was the U-24B, which carried only star bomb anti-ship missiles. It could, however, carry ten of the weapons, and it retained its plasma cannon as a backup. Some thirty of the completed ships were of this model.

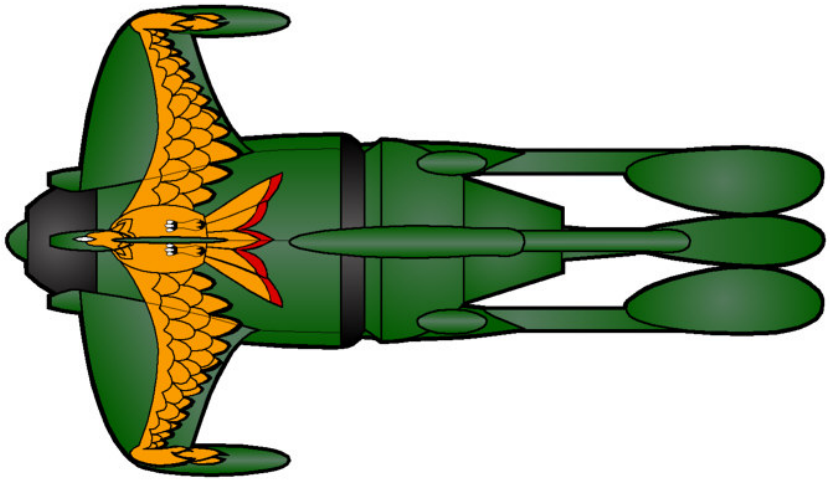
The U-24C, which saw only a single prototype built, adopted an all-or-nothing approach. This variant dispensed with all weapons except for the star bombs. The variant was also fitted with an additional star bomb in its nose, for use as a last resort weapon in ramming actions. Intended for use in the defense of Romulus, this variant began testing in mid-2160. Luckily for both sides, the war ended before this model saw action. Testing indicated that the ship was severely underpowered, and could only fire a useful salvo if not maneuvering or not powering the already-inadequate defensive screens; additionally, it lost the maneuverability that made the U-24A so devastating.

The U-24 was a departure from the larger designs that preceded it. Many things including the changing nature of the conflict and the need for quick-to-produce ships caused this change. However, the striking power of the U-24 was almost equal to that of many earlier and far larger cruisers; both the Romulan and Federation fleets followed this trend postwar. meaning the leviathans that saw action in the Romulan War soon faded into history.

U-24 VERONUS "CHOWDER" CRUISER









STANDARD COMPLEMENT	
OFFICERS [COMMAND]	28
CREW	105

DIMENSIONS	
DEADWEIGHT	90,230 MT
LENGTH	128M
BREADTH	68M
HEIGHT	68M

ARMAMENT	
DISRUPTORS	3 [1F, 1P,1S,]
PLASMA CANNON	1 FORWARD
MISSILE	4 LAUNCHERS [F/P/S]
DEFENSIVE DEFLECTOR SHIELDS	RF-2
NAVIGATIONAL DEFLECTOR	TYPE 2
TRACTOR BEAM EMITTER	TYPE 2

PROPULSION SYSTEMS	
WARP DRIVE	IPP 6 - TRI
IMPULSE DRIVE	IMY 26
REACTIVE CONTROL	IMF 14

SUPPLEMENTAL CRAFT	
SHUTTLES	1

SECONDARY SYSTEMS	
MAIN COMPUTER	G-2 MK III
ACTIVE SENSOR SUITE	MK 3
PASSIVE SENSOR SUITE	MK 3
TRANSPORTERS	1 (X)
LIFE SUPPORT	MK 2

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	1 YEAR

U-25 Tyrannus "Clavicle"

The introduction of matter/antimatter power plants into the majority of new UESPA/Federation ship designs from 2158 onward meant that in virtually every confrontation, the Romulans were outmatched.

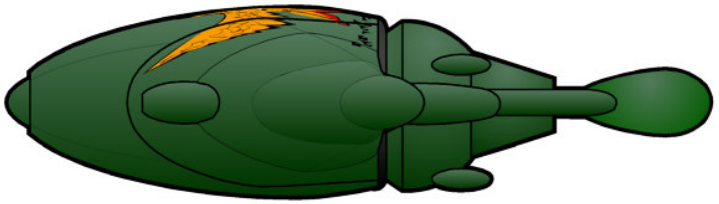
The Romulan fleet had invested heavily into developing artificial quantum singularities as a power source, to try to counter these new power plants. This meant, however, that they neglected research into the far simpler matter/antimatter source, and only put limited funds into improving their fusion reactor systems, meaning that no significant improvements occurred in this field until very late in the war.

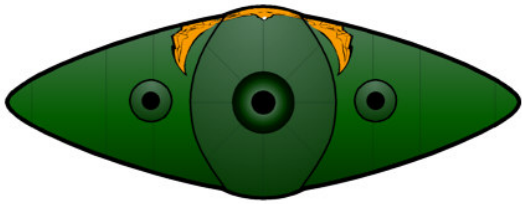
The U-25A (codenamed *"Clavicle"*), which entered service in 2150, benefited from the new fusion reactor research, and was the first Romulan cruiser that could match most Earth vessels in a confrontation since the advent of matter/antimatter power in the Federation ships. The U-25A returned to the flatter shape of prewar ships, as the Romulan fleet acknowledged that the increase in production time and cost was far outweighed by the improved warp dynamics it offered. The combination of this improved shape and the new power plant gave a top speed in excess of warp 4.2.

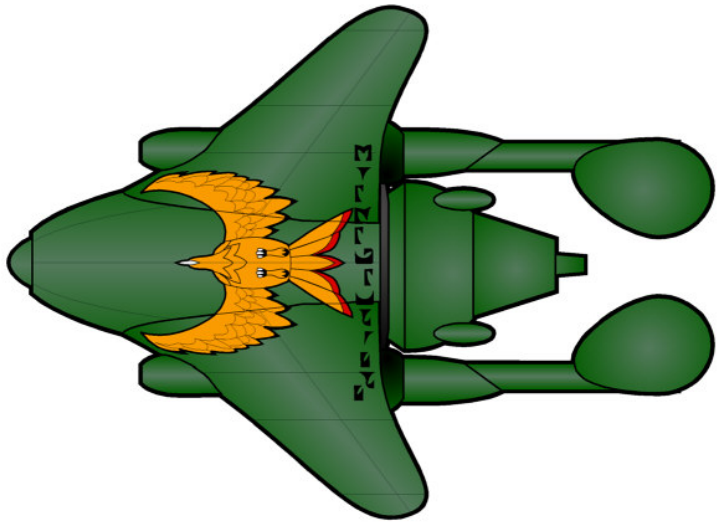
The use of fusion, which relied on ample supplies of deuterium fuel, limited the range, but as with the U-24, the Romulan fleet was now fighting within range of its home bases, so this was no longer a priority. Firepower was still a priority; the U-25A carried an impressive mixed and balanced arsenal. When used cleverly, the U-25A was a good as most opposition it would face. In a chase, the weaknesses of the limited range would soon show, but when used to ambush enemy forces, the class was devastating. Even in an ambush situation, the U-25A had to destroy its target before reinforcements arrived, as full speed would soon exhaust the fuel supply if pursued.

The other factor of the U-25A that weakened it was the power plant itself. The technical achievement in almost doubling the power output was impressive, but the penalty was that if pushed too hard the reactor could easily overload. Reactor explosion, rather than enemy fire, accounted for half of all U-25A losses. Some ninety U-25As were built in total, of which seventy saw Romulan war service, and of these, fifty-six were destroyed. The limited numbers produced and the lateness of the introduction into service meant that the U-25 had only limited influence on the outcome of the war. It did, however, reassert the Romulan style of ship design that later became synonymous with all their vessels. By 2190, these ships were no more.

U-25 TYRANNUS "CLAVICLE" CRUISER









STANDARD COMPLEMENT	
OFFICERS [COMMAND]	36
CREW	170

DIMENSIONS	
DEADWEIGHT	102,250 MT
LENGTH	148M
BREADTH	107M
HEIGHT	39M

ARMAMENT	
DISRUPTORS	2 [F]
PLASMA CANNON	1 FORWARD
MISSILE	3 LAUNCHERS [F/P/S]
DEFENSIVE DEFLECTOR SHIELDS	RF-2
NAVIGATIONAL DEFLECTOR	TYPE 3
TRACTOR BEAM EMITTER	TYPE 2

PROPULSION SYSTEMS	
WARP DRIVE	IPP 5 - DUAL
IMPULSE DRIVE	IMY 25
REACTIVE CONTROL	IMF 14

SUPPLEMENTAL CRAFT	
SHUTTLES	1

SECONDARY SYSTEMS	
MAIN COMPUTER	G-2 MK II
ACTIVE SENSOR SUITE	MK 3
PASSIVE SENSOR SUITE	MK 2
TRANSPORTERS	1 (X)
LIFE SUPPORT	MK 2

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	1 YEAR

U-26 Venastrum "Warbird"

The U-26 entered service in 2155 and saw action in all the battles of the Romulan War. The ship combined the highly effective power plant and wings of the failed U-19 prototype with the light and simple-to-manufacture hull of the U-20.

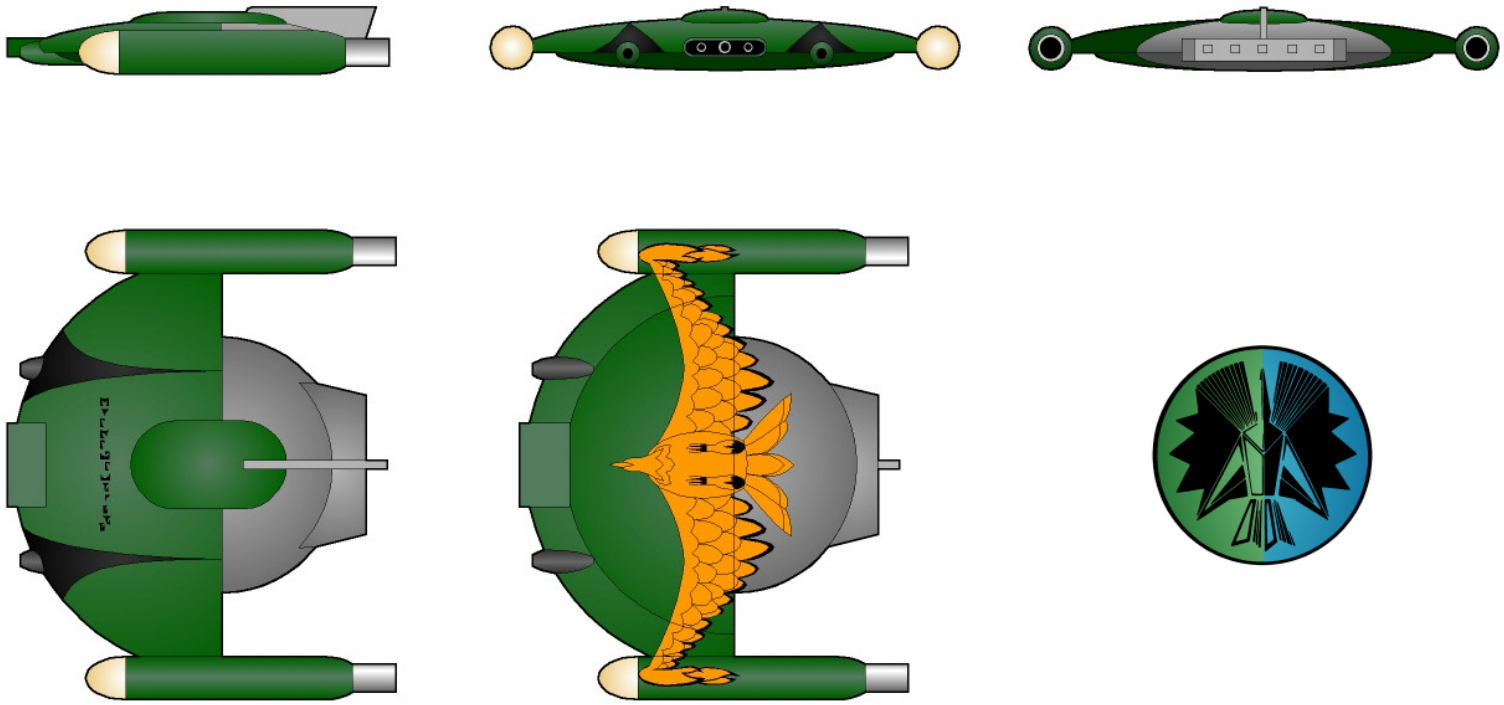
The main delay in building the U-19 came from the building of the primary hull, as it incorporated a number of stealth features and required the use of the latest computer for control purposes. An additional problem was that the hull relied on tritanium, a strategic resource the Romulans could only obtain in small quantities (usually by piracy). The wings of the U-19, on the other hand, used duranium, as all other Romulan starship designs did, but the increased amount of hull material required to give structural strength resulted in a 25% weight growth that the engines could not handle.

The simpler hull offered a straightforward solution. Even accounting for the heavier, less-strong material, a U-20 hull weighed 10% less than a U-19 hull, and the appeal of combining the two was unquestionable. A U-20 hull was mated to the U-19 wings to produce the prototype U-26A. The ship was as fast as a U-19, and only slightly less maneuverable. Most importantly, it only cost 75% more than the cost of a standard U-22, took only 50% longer to build, and gave a 150% improvement in combat efficiency over the U-22. Although primitive by modern standards, the design was superior to any ship in Starfleet at that time.

Powered by a fusion reactor linked to twin RFTL-1 warp nacelles, the design exhibited many of the traits of later Romulan designs. It had a birdwing-like shape to the nacelle supports, and stressed maneuverability over power generation. In all, 120 U-26 class cruisers were built between 2155 and 2180. Based on data provided by the ongoing Starfleet Intelligence Operation Neptune, the U-26 was phased out entirely by 2220 due to its inability to be adapted to Romulan cloaking technology.

The U-26 was one of the first designs positively identified by the UESPA, when in January 2152, a U-26 engaged the UESPA *Runemark* near Canis Minoris 12. The *Runemark* was destroyed in the long-running skirmish, and the U-26 escaped with minor damage.

U-26 VENASTRUM "WARBIRD" CRUISER



STANDARD COMPLEMENT	
OFFICERS [COMMAND]	30
CREW	180
TROOPS	250
DIMENSIONS	
DEADWEIGHT	100,310 MT
LENGTH	138M
BREADTH	193M
HEIGHT	23M

ARMAMENT	
DISRUPTORS	4 [2F, 1P, 1S]
PLASMA CANNON	1 FORWARD
MISSILE	4 LAUNCHERS [2F,1P,1S]
DEFENSIVE DEFLECTOR SHIELDS	RF-3
NAVIGATIONAL DEFLECTOR	TYPE 3
TRACTOR BEAM EMITTER	TYPE 3
PROPULSION SYSTEMS	
WARP DRIVE	IPP 6 - DUAL
IMPULSE DRIVE	IMY 26
REACTIVE CONTROL	IMF 20

SUPPLEMENTAL CRAFT	
SHUTTLES	1

SECONDARY SYSTEMS	
MAIN COMPUTER	G-3 MK I
ACTIVE SENSOR SUITE	MK 4
PASSIVE SENSOR SUITE	MK 3
TRANSPORTERS	2 (X)
LIFE SUPPORT	MK 3

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	2 YEARS

The Four Years War

2251-2255

THE UNITED FEDERATION OF PLANETS

UFP/KLINGON BACKGROUND

Relations had been strained between the Federation and the Klingon Empire ever since the two powers first learned of each other's existence. In 2247, a personal warp-driven shuttle made contact with the USS *Sentry* near Gamma Demetrius. Not long after, an alien warship calling itself the *Devisor* of the Klingon Empire arrived and demanded the return of this shuttle and its passengers. The *Sentry*'s commander reluctantly honored the shuttle pilot's request for temporary political asylum, and shots were exchanged briefly between the Federation and Klingon ships. The *Devisor* then departed, promising to return and wreak havoc on the Federation and its citizens. This was the first contact with the hostile government of the Klingons, a race who seemed to enjoy combat purely for its own sake. Over the next several stardates, an assortment of contacts and brief skirmishes were reported between individual Federation picket ships and Klingon pirate vessels near the disputed Klingon/ Federation border.

The second major encounter occurred in 2238, when a Klingon starship, modified to transmit a Federation scout identification signal, seized the USS *Flying Fortress*, a slow but heavily-armed prototype transport. By means of a sneak attack, the Klingons were able to destroy the transport's bridge, killing all command personnel and rendering weapons systems inoperative. The ship also happened to be carrying an experimental deflector shield, although the Klingons never did discover that fact. Even though the ship was temporarily in Klingon control, a successful interception by a Federation anti-piracy task force forced the Klingons to release their tractor beam, returning the badly-damaged *Flying Fortress* to Starfleet's control with all its secrets intact.

These increasingly unrestrained acts of piracy and combat by the Klingons greatly concerned Starfleet Command and resulted in emergency appropriations to construct two new starbases near the Klingon Empire. Starbases 22 and 23, completed on stardates 1/6401 and 1/6905 respectively, would serve as centers of operation for Starfleet's task forces, protecting Federation space and shipping from further incursions by Klingon vessels. After the attack on the USS *Flying Fortress,* there were no multi-ship confrontations between Klingon and Federation vessels until the Four Years War began. Occasional skirmishes and exchanges of fire between vessels of the two governments, however, would continue.

One notable period of remarkable inactivity lasted from 2238 to 2250. The popular belief is that it was due to a war being fought by the Klingon Empire along another border. Though there is no knowledge of any intelligent race on the Klingon Empire's coreward border, the covert discovery of massive Klingon shipbuilding during this period would seem to reflect some form of open warfare with an enemy other than the Romulans or the UFP.

SOCIOPOLITICAL BACKGROUND

The early years of the United Federation of Planets can be characterized by consistent territorial expansion and technological and cultural growth as warp-driven ships traveled between the inhabited worlds of intelligent beings. Not including the violent contacts taking place between the Vegan Tyranny and other races, the period between Zefram Cochrane's development of the warp drive in 2063 and the loss of the USS *Avenger* to Romulans in 2151 was generally a time for peace. The establishment of the United Federation of Planets in 2152, with its charter permitting the creation of a Starfleet Command, went a long way to ensure safety of lives and property within Federation space.

Still, there were limitations. Technology and the anti-matter warp drive had opened up space, but even warp drive could not do the impossible. Advances in propulsion permitted speeds of up to warp 3.5, but no higher. Significant breakthroughs in interstellar travel would not be forthcoming until the discovery of pure dilithium in 2180.

After the inconclusive Romulan War, peace again became the watchword within the Federation. After outposts along the Romulan border became operational in

2161, the Federation could expand without significant difficulties, and began to grow complacent. Thus, funding for Starfleet operations was reduced dramatically.

In 2185, the Federation Council voted against appropriations for a totally new generation of warships. This, coupled with the monumental design failure of a later ship class, resulted in obsolete, 46-year-old destroyer and cruiser classes serving as the Federation's first line of defense when first contact did finally come with the Klingon Empire on stardate 2190.

In 2195, a political body calling itself the Terra-Return League was formed on Benecia Colony. The goal, as described in their Proclamation, was to end the Federation's policy at expansion and have all humans return to the Sol system from the most outlying regions of space. Observing that mankind had gone deep into space and still had not solved many of humanity's basic problems, the League felt resources were being exploited and abused on an interstellar level. They said room enough existed on the now-habitable worlds of Mars, Venus, Ceres, Ganymede, and Titan, and therefore the Federation should be disbanded and Terra observe a strictly isolationist view of extra-solar activities. The recent contact with the warlike Klingons only added to the League's argument.

The final challenge came at the Babel Conference in 2205. The Terran-Return League, now representing a respectable and vocal minority, officially raised the question of dissolving the Federation. After strenuous debate and impassioned speeches by the participants, the decision to maintain the Federation passed by an acceptable margin. Some of the factors leading to the decision included the recent advances in development of the large-scale transporters, superior subspace transmitters, the willingness of Starfleet to offer more patrols on protection, and the very recent discovery of pure dilithium crystals and the subsequent effects on interstellar travel.

Between the time of the Babel Conference and the Four Years War, the new advances in technology and increased speeds of interstellar travel encouraged a second period of economic growth and territorial consolidation. Alternating between complacency and the raw edge of crisis, the Federation now stood ready for the open warfare that was to come.

UFP MILITARY BACKGROUND

After the Romulan War, high officials in the Federation felt certain another war would not occur quickly. Once installations were complete along the Romulan border, the future role of Starfleet Command seemed limited to navigational and simple law enforcement duties. As a result, appropriations for Starfleet Operations were cut sharply. Funds for research and development permitted only modest technological improvements. Funds for new construction allowed only for the replacement of vessels no longer safe for use. At one point, plans for an entirely new generation of combat vessels were submitted to Starfleet, but the Council rejected any further expenditures.

This went on until Stardate 2210, when the first of a new class of cruiser was commissioned. The USS *Tritium* was the first starship designed with three warp nacelles. According to Zefram Cochrane's original warp theories, no more than two warp nacelles could be used on a single ship, because imbalances in the warp fields generated by the nacelles would nullify the drive's effect.



Several flag-rank officers in Starfleet Engineering Command disagreed. They believed the third nacelle would stabilize and harmonize with the performance of the other two, dramatically increasing maximum operating performance. Many billions of credits were put into the project, and a total of six *Tritium* class ships were constructed before the project was terminated. Simply put, Cochrane was right, and the theoretical engineers were terribly wrong. Many officers had staked their careers on the decision and later found themselves out of a job.

On Terra, the ships in the ancient nautical fleets were built around the size of the guns or the thickness of the armor. However, the overriding limitation on the efficiency of a starship was not the hull material or the size of its turrets. With these ships of the line, it was the warp drive that served to power all other systems. After the failure of three warp nacelles on a single ship, efforts continued to increase the efficiency of the warp drives



Larson-class destroyer USS *Anzio* during the Four Years War.

themselves. These efforts resulted in steady progress, as the maximum ship speed crept slowly upward to warp 4.8. The *Mann*, *Rickenbacker*, and *Baton Rouge* classes, among others, contained improvements over earlier designs, but additional substantial progress would be limited until dilithium became a component in warp drives.

Tactics continued to develop as well, with Starfleet ships usually working in groups of three or four similar ships, allowing convenience in repair throughout the growing Federation sphere of influence. In many ways, the situation near the Klingon Empire was ideal for starship crews. There was enough excitement to keep officers alert, and the brief conflicts gave numerous commanders at least some combat experience. Many of the lessons learned in minor confrontations served to train them better than any simulation at the Academy could. (Of course, the historical simulations at Starfleet Academy were second to none, but no amount of simulation could substitute for actual field experience.)

Another source of pride for Starfleet was the newly upgraded Marine Academy, opened in 2230 on Starbase 1. This new institution would provide Marine Corps Command personnel with the specialized training needed for their particular duties. And now that they had their own educational and training facilities, a special sense of esprit de corps could be imparted to them as well. This enhanced their overall efficiency and unintentionally maintained an interservice rivalry dating back at least to 18th-century Terra.

With both Starfleet and Marine Academies supplying highly skilled personnel, and with the establishment of regular duty patrols for the majority of our territory, we were as ready for open warfare as we could be without violating the Prime Directive or actively initiating interstellar war on our own.

ADVANCES IN MILITARY TECHNOLOGY

Periods of warfare have always been the most significant for technological advancement in Terran history. This was no less true on a Federation-wide level as a result of the Four Years War.

Almost all UFP warships had been equipped with dilithium-moderated warp drive nacelles before the Four Years War started. By the war's end, all warships, almost all commercial transports, passenger liners and freighters, and many private warp-driven ships were thus equipped. This increased the overall speed and efficiency of interstellar commerce. The overall efficiency of impulse and deflector shields was improved as well, with much of the credit going indirectly to the new, enhanced warp drive.

In addition, Starfleet began developing some of the basic theory needed for the vastly superior transwarp

drive during the Four Years War. Facts such as load/stress capabilities, maximum engine operating temperatures, and other scientific information invaluable for designing the new propulsion system were gathered from test stations operating at the Arcturus and Centauri Test Ranges and from starships returning from battle-stressed conditions. Based on findings from interstellar probes and theoretical research, a complete report was concluded one year after the war ended.

The transporter, developed almost a century before the war, entered widespread use as a weapon for the first time during the Four Years War. Starfleet needed a rapid method for the transportation of large numbers of Marines to planetary surfaces and other ships. Until the time of the Four Years War, only the standard six-man transporter was in wide use within the Federation. The greater effectiveness of the larger transporter systems on Klingon assault ships led to an intensive research project. Federation engineers made necessary modifications, resulting in the development of the now-common 22-cell transporter. This new transporter unit permitted debarkation of Marine personnel with unprecedented speed, greatly enhancing their shock potential for rapid strike missions.

The photon torpedo was designed expressly to replace the aging, and increasingly ineffective, accelerator cannon. The accelerator cannon, essentially a high-powered mass driver, was the primary Federation shipboard missile system through the first half of the Four Years War. The introduction of Klingon ships such as the D-9, D-10, and D-20 cruisers, equipped with KSF and KSJ deflector shields, demonstrated the need for a more powerful weapon.

Starfleet's Engineering Command placed top priority on designing a more effective shipboard missile system, powerful enough to defeat the newer Klingon shields, yet not requiring large amounts of operating energy like the laser. They made slow progress until a research team from Loraxial Ltd. headed by Priscilla Feddric found the way to magnetically contain small amounts of antimatter. This breakthrough provided the means to construct small torpedoes or missiles of tremendous power. A launch system was quickly developed and tested at the Arcturus Test Range. Using the M-2 computer as the guidance system for the weapon, extended range and accuracy were finally obtained. The system was finally pronounced ready for operation in 2251. It went immediately into production, and the new system reached frontline ships before hostilities ended.

The last major technological development was the invention of the phaser. At the outbreak of the war, scientists involved in laser research had been on the verge of a new discovery. In experimenting with all types of energy beams, Warren Shillinge of HiBeam Energies Ltd. had discovered a way to "phase energy pulses," as he described the technique. The process, now named the phaser, was vigorously explored at HiBeam. Further secret research developed heat, disintegrate, disrupt, and stun settings for the new weapon system. Early models were placed into production in 2240, but these at times did more damage to Starfleet ships than to the Klingons. Further development and use of the M-1 computer as a guidance and control system produced the FH-3. Use of this weapon turned the tide of war in favor of the Federation. In early 2252, the FH-3 became part of most fleet inventories, a major contribution to Starfleet victories of that time.



Klingon D-6 on patrol near Deneva.

Starfleet Doctrine

STARSHIP TACTICS—FEDERATION

Starfleet commanders serving in the Four Years War preferred working in large squadrons or groups when possible, defending strategic targets or conducting fleet actions against Klingon forces. Unfortunately, the superior numbers of Klingon warships often forced UFP units to fight in small, highly skilled groups of three to six ships—at least during the early part of the war.

During times of peace, Federation starships did not initiate any hostile action, such as firing first or even raising shields, unless threatened. An official declaration of war, however, suspended these gentlemanly rules of conduct. Therefore, Federation vessels in the Four Years War engaged in combat after positive enemy identification was made, usually through direct, visual means. Being allowed to fire at will kept the lives of Starfleet crewmembers from being placed in undue jeopardy. Confirming the hostile identity of opposing forces before conducting combat ensured the safety of all but the enemy.

Simply put, the United Federation of Planets had three major advantages in combat:

1) Despite the UFP's overall peaceful intents, individual Starfleet commanders were generally better trained than their Klingon counterparts. This led to situations where sheer ship-to-ship tactical skill on the Federation's part would win battles.

2) Starship commanders worked closely together for the group's overall benefit and protection. This meant covering the weak flanks of individual ships or formations, and generally assisting each other when combat conditions became difficult.

3) By using creative tactics, including temporary tactical withdrawals and regroupings, Starfleet forces were able to withstand and eventually neutralize the Klingons' early numerical superiority in warships.

STARSHIP TACTICS—KLINGONS

When possible, Klingon starship commanders during the Four Years War preferred to strike against weak targets, quickly obtain as much glory from combat as possible and withdraw before Federation forces had adequate time to regroup or come to the aid of the target. When necessary, however, Klingon vessels also engaged in combat when drastically outnumbered, at times preferring racial pride and the pursuit of posthumous glory over sound military tactics.

Klingons used a number of different formations for combat, but individual commanders often conveniently forgot the tactical battle plan after the first few minutes of battle. Though the Klingon Empire was and is predominantly a structured military society, Klingon warship commanders resented having specific assignments as part of a mission. With each commander eagerly seeking honor in combat, having a rigidly detailed assignment to fulfill (particularly if it was a subordinate or defensive one) went against their desire for a quick victory and individual glory. As a result, battle formations often deteriorated shortly after engagement with an opposing task force, with each Klingon vessel engaging one on one against enemy vessels. The greater the number of ships involved, the more common and severe the breakdown in Klingon cohesiveness.

Also, Klingons did not particularly like to work together, because of the dangers in having to trust a "fellow" commander. This distrust, common through nearly all levels of starship command, contributed to the Klingons' difficulties in effectively using the V- and U-formations. A damaged Klingon ship could not depend on assistance from another Klingon vessel, and many Klingon ships crippled in battle were abandoned by their squadronmates. It is even said a Klingon squadron commander preferred having a known enemy covering his flank or rearward positions to having a potential enemy among his own ranks.

SPECIAL TACTICS

V- AND U- FORMATIONS

Federation and Klingon starship commanders were trained in many of the same basic formations through years of computer simulation and operational testing. One of these included forming a V- or U-shaped task

force using three or four ships. Physically, the formations are the same. If three ships are used, it is called a V-formation, and if four ships are used, it is called a U-formation. With this formation, the center ship, usually the group's flagship, would generally be up to 40,000 km in front of or behind the other ships in the formation, depending on the purpose of the task force's mission.

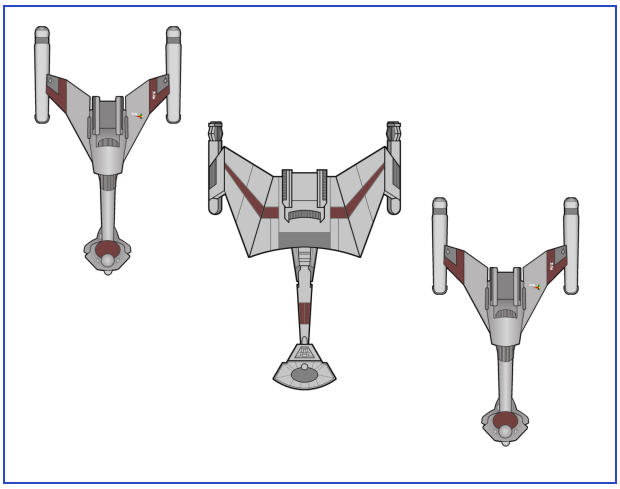
If the flagship was leading, the mission would probably be a general, all-purpose attack, or to drive a wedge into the opponent's line of defending starships. The area with the strongest combined concentration of fire would be to the port and starboard sides of the flagship's position.

If the flagship was trailing, the mission might be to meet in a general defensive engagement, an offensive engagement against a single, more powerful ship, or to encircle an enemy ship prior to capture. One major advantage of a trailing flagship is that the combined concentration of fire is greatest directly in front of the formation.

The position of the flagship in Klingon-employed formations often revealed the esteem of that group's commander or the cohesiveness of that task force. If the flagship led, the commander could trust his two (or three) subordinate ship commanders, and in turn, they trusted him. If the flagship trailed, it was because the group commander knew that an ambitious ship commander might be willing to fire into the flagship's rear arc in order to lead the formation himself. Alternately, if the flagship commander could not be trusted, his fellow ship commanders wanted to be able to catch him between their ships if necessary. On more than one occasion, the flagship would change its relative position within the task force just before entering battle, usually on the order of a Klingon Imperial Security officer aboard one of the ships.

The Klingons had two different names for the V- or U-formations, not based on the number of ships, but on the position of the flagship occupying the formation's center. If the flagship was leading, it was called "oma'i yuth" ("brave wedge"), and if the flagship was trailing, it was called "hu toj maal" ("mouth of fear").

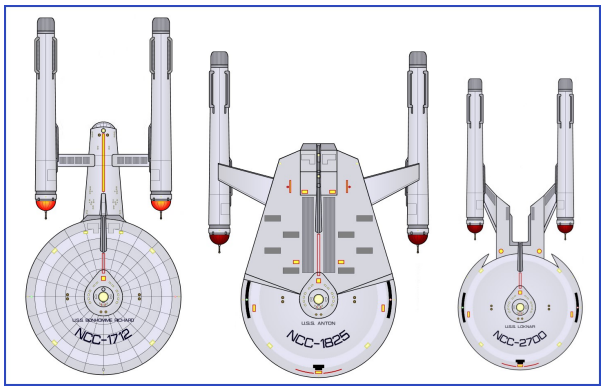
STAGGERED FORMATION



On at least one occasion, the positional change of the Klingon flagship just before combat adversely affected the resolution of a battle. As a partial solution to their problems with the V-formation, a staggered formation was adopted and is still used by many Klingon task forces today.

This maneuver places the three ships in a linear, equidistant formation. The flagship leads, the second ship is behind and to port or starboard of the first ship, and the third ship is behind, on the same side as the second ship. If a larger number of ships is involved, a variety of intricate patterns is used by several groups of staggered ships working in the same formation.

STRAIGHT LINE FORMATION



The Federation used the staggered formation only on

rare occasions such as in fleet reviews, as they had their own alternate to the V- and U-formations. Theirs was a simple formation with straight line movement along the line of advance, and all ships holding equidistant positions. If larger numbers of ships were involved, parallel formations two or three ships deep might be used. Also, the flanking ships might be moved forward or aft of the rest of the formation, causing the line of advance to be slightly curved in one direction. The· Klingons called this "puk'ian eden'z" ("lizards in a line," named after a passive species of reptiles on Hruns'la).

PICKET PASSING

A tactic called "picket passing" by the Federation and "zhu t'lan'nol" ("thrusting the pawn") by the Klingons, was occasionally used to attack a desired target or pass through an area under surveillance. The target could be a boundary or region of space, a fixed installation, or less often, a convoy. Though used first by the Klingons, the Federation adopted it, until both sides finally caught on and the tactic lost some of its effectiveness.

The idea was to confuse and distract the defending ships through the use of two or more attacking task forces. The first task force would move into sensor range, hopefully causing the defending ships to respond and intercept, which would lure them out of position. As long as they fulfilled their mission as a decoy force, the first task force might not even engage the defenders in combat. This ruse allowed a second, generally much larger force to strike against the now-undefended target, taking them completely by surprise.

DELTA-Z MANEUVER

A tactic called "Delta-Z maneuvering" by the Federation and "khas'lan t'waxnor" ("vertical claw") by the Klingons was often used in anticipation of an attack on a planetary system. This maneuver was popular with the Federation. Klingon commanders disliked it because of its subtle and "cowardly" approach to warfare.

More often than not, Klingon forces preparing to attack a planet or planetary defense system approached along the plane of the planetary system's ecliptic, or "level" with the other planets, rather than coming in from "above" or "below" the targeted planet. They used this maneuver because their vessels could take cover in asteroid or cometary belts.

When Federation forces knew a planet was coming under attack, a defending squadron took up positions far above or below (or both) the plane of the ecliptic. Coming into the system, Klingon forces might not detect the defenders, permitting those squadrons to move up or down into attack positions in the rear arc of the Klingon warships.

A second variation used by Federation forces was to deliberately remove all warships defending a planetary system known to be a target, making it appear undefended. After Klingon forces moved in, the Federation squadron warped back in-system on several divergent courses, to make multiple flanking attacks that sometimes caught Klingon ships fatally off guard. A somewhat risky technique, it worked more often than not. When the tactic backfired, however, Federation commanders were themselves caught unaware.

SIX O'CLOCK LOW

A tactic called "six o'clock low" by the Federation and "eddakh w'ujalla" ("striking for the spleen") by the Klingons was a common ship-to-ship tactic that used individual warships with forward- and aft-firing weapons systems.

Klingon ships, usually equipped with forward- and aft-firing weapons, would deliberately leave their ships open for a flanking attack by Federation ships. As soon as the forward-firing Federation ship moved into the Klingon's rear arc, the Klingon ship unexpectedly opened fire with the rear disruptors, taking the Federation commander by surprise. This technique did not work successfully against Federation squadrons very often because many commanders quickly caught on. It was often used successfully against lone convoy escorts whose officers were less experienced against general Klingon tactics.

A second variation often used by Klingons was to move into the Federation ship's rear arc, knowing that this was often the most vulnerable area of UFP vessels. This ma-

neuver was used throughout the war whenever conditions permitted, though these conditions grew less common as the battles raged on.

CONVOY BAITING

A tactic called "convoy baiting" by the Federation and "vakh to gal" ("glory seeker") by the Klingons involved the use of a ship or small convoy, apparently without escort. Several friendly warships would surround and maintain a parallel course with the convoy just outside sensor range. These warships left a narrow area or alley through which the enemy vessel(s) could pass. As soon as the enemy detected the convoy and moved through the alley to attack, the escorting ships would also move in, catching them in a globe.

This tactic, initially used to protect conventional wartime convoys, was later used as a deliberate ploy to catch and possibly capture enemy warships. In these situations, the Federation often used a group of automated ore carriers or similar ships as the decoy, rather than risking the lives of crewmen. The Klingons, less concerned with lives, used a single ship manned by servitor races as the bait. Of course, should the crew of the decoy ship attempt to break formation during the operation, the Klingon-manned escort ships would destroy it before Federation forces arrived.

SWARMING

A tactic called "swarming" by the Federation and "v'kari z'mortamas" ("many stings of death") by the Klingons employed a large number of small ships, often gunboats or scouts. The attackers moved in against a smaller group of heavier Federation vessels. Making passes at the highest possible velocity, the smaller Klingon ships could direct most of their power to energizing weapons systems, and any remaining energy to defense systems. Federation ships, unable to engage the vast swarm of attackers, had to try merely to survive. Most of their vessels' power had to be deployed in shield operation, which did not permit much in the way of counterattack.

The technique was often suicidal for individual Klingon ships. However, the tactic's effectiveness in destroying enemy ships also brought great honor to the Klingons involved. The Federation, on the other hand, rarely used swarming. Aside from occasional groupings of *Portsmouth* destroyers, UFP forces rarely had enough ships in one place to use such a tactic. In any event, the Federation's high regard for the lives of starship crews all but prohibited it.

Though not seen during the Four Years War, a more recent variation of "v'kari z'mortamas" using cruisers in conjunction with the gunboats has been successfully employed by Admiral zantai Kaneda in the Triangle. Klingon destroyers come in and engage opposing forces, giving the cruisers time to maneuver for best attacking positions. As the cruisers begin their engagement, large numbers of gunboats then swarm in and overwhelm the opposing ship's fire-control systems and shields. This permits the cruisers' heavy fire to easily penetrate defenses and destroy their targets, with few losses to any part of the Klingon force. No simple solution currently exists to counter this new tactical threat. One goal of the upcoming UFP Tactical Encounters Fleet Maneuvers is to find a neutralizing maneuver that also considers the safety of Federation forces.

COCHRANE DECELERATION

A tactic called "Cochrane Deceleration," named for Zefram Cochrane, was used by Federation ships as a ship-to-ship tactic to partially counter both swarming and the Klingon-executed six o'clock low. This technique was even more effective when the Federation ship faced an attacking ship with greater speed and maneuverability.

The defending Federation ship would cease all forward tactical movement. As the attacking ship came and passed by at close range, the Federation ship would make a stress turn, pivoting 120 degrees. While doing so, the forward shields remained at their highest state of readiness, and all possible forward weapons systems would engage the attacking target, now hopefully presenting its rear arc.

The Cochrane Deceleration worked best if the Federa-

tion ship was near one flank of the swarm, or if the attacking ship was expected to pass at high speed within accelerator cannon or photon torpedo range. The Klingons never adopted the technique because of the skill required in execution. They learned to respect it, however, calling it "k'yan ndar'sliv" ("slow source of doom").



USS *Bonhomme Richard*, caught in the middle of a scattered defense maneuver. Another D-7 is out of view, but opens fire on the cruiser within seconds of this sensor image.

SCATTERED DEFENSE

Though most defensive formations are created as the tactical situation develops, the Klingons did have one tactic used to deliberately confuse and divide large Federation forces attempting a full-scale engagement with outnumbered Klingon units. This defense, known as the "scattered" or "starburst defense" by the Federation and "hul fal tora'n" ("glorious exploding star") by the Klingons, was used to achieve a single-unit engagement with Federation forces, or to mislead them about the actual destination of one or more Klingon task forces. The Federation never developed any effective countermeasure, because it involved two entirely different philosophies of combat. The only thing Federation commanders could do after a scattered defense was to laboriously track down and neutralize each Klingon ship or task force, one at a time.

OTHER FORMATIONS

Specialized formations, seeing limited use, were created by both Federation and Klingon squadron commanders, often as circumstances dictated. These special tactics included, but were not limited to: false ship recognition signals for deception; assorted convoy escort formations; the widespread use of decoys and gravitic mines (a Klingon specialty); tactics designed for the reduced capability of damaged ships or ships with detached command sections; tactics using available physical or astrophysical phenomena such as asteroid and cometary belts, or ion storms; and straightforward suicide tactics using ships of all sizes, from shuttlecraft up through class VIII cruisers.

TASK FORCE COMPOSITONS

The Klingon Imperial Navy and Starfleet Command both designed task forces to meet the particular needs of each tactical situation. The UFP was more likely to combine different classes of ships in one group, allowing the strengths of some ships to make up for any weaknesses of the others in the force. The Klingons, because of their mutual distrust, would generally have several ships of the same class in one force, or alternately, have one large ship with two to six smaller ships. This discouraged any deliberate acts of coercion between ship commanders, and later in the war, would decrease some difficulties in supplying and repairing frontline vessels.

A three-ship unit was called a battle group. A battle squadron consisted of three battle groups. A battle force consisted of three battle squadrons, or a total of twenty-seven ships. Larger assemblies were called strategic groups, squadrons, forces, and finally, fleets.

The availability of specific warships, combined with the general purpose and cruising speed of those ships and their similarity for repair purposes, went a long way toward deciding which ships would be assigned together in task forces. The Klingon K-23A escort, for example, was a small but powerful warship used for escorting convoys. Working alone or in very small numbers, the K-23A was also designed to defend itself. The D-10A cruiser, on the other hand, was intended for use in major fleet actions and planetary neutralization. Similar in design to a number of other warships, the D-10A usually operated with a supporting escort of three to six D-16A destroyers. The fact that the newer Klingon D-7A cruiser could not cruise for extended durations at warp 6 directly led to the selection of the D-4E as the cruiser for the Axanar task force.

FLEET ORGANIZATION

Starfleet adopted the following convention for parsing out assignments to their vessels, the most notable of which was the First Combined Fleet during the Romulan War, and the Third Fleet during the Four Years War:

FLEETS: At this time Starfleet was divided into three fleets, each consisting of nearly 1,440 vessels. Each fleet was commanded by a full admiral. The commanders of these fleets reported to directly to the Commander In Chief of Starfleet.

STRATEGIC FORCE: Each of the fleets were subdivided into two strategic forces (six total) of approximately 720 vessels each. Each of these strategic forces was commanded by a vice admiral.

STRATEGIC SQUADRON: Each strategic force was further broken down into three strategic squadrons each (eighteen total). Each of these contained roughly 220-245 vessels. These were commanded by rear admirals.

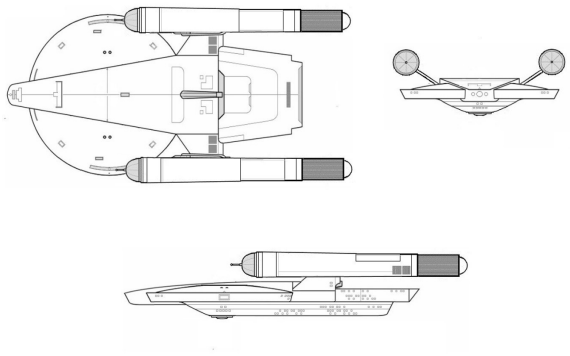
STRATEGIC GROUP: (54 total in the fleet.) A strategic group was composed of 80-95 vessels. These units were commanded by commodores.

BATTLE FORCE: (162 in the fleet.) Battle forces, three of which formed a strategic groups, consisted of approximately 25-35 starships each. These units were commanded by a fleet captain. *(NOTE: Only in times of war is the organization of Starfleet broken down beyond this point. Even during times of peace, all Federation starships are assigned to a battle force, though they may operate independently—and at very large distances from—their assigned force or starbase.)*

BATTLE SQUADRON: (486 in the fleet.) A battle squadron is composed of 6-10 starships. Three battle squadrons equal one battle force. These squadrons are commanded by a senior officer in the rank of commander or captain.

STRIKE SQUADRON: (1,458 total in the fleet.) Strike squadron is three vessels, with at least two of those vessels being designated as combatants. The remaining vessels may be a scout, tender, transport, or any other such vessel up to and including a combat vessel.

INDIVIDUAL VESSEL: (4,326 vessels in all of Starfleet during the Four Years War.) The lowest number in relation to the fleet. This is a single vessel, which may be commanded by anyone in the rank of lieutenant commander or above. Only on rare occasions during war has a single vessel operated independently from a fleet and not been assigned to a strike squadron by default.





FLEET CAPTAIN KELVAR GARTH'S VALEDICTORY ADDRESS

(as witnessed by the Author at the conclusion of the signing of the Peace Treaty of Axanar)

Garth approached the podium, limping only slightly. The crowd, filling the gallery, consisted of leadership academy attendees just now graduating from Starfleet. There were scores of newly promoted captains, commanders, and lieutenant commanders present. As Garth reached the podium, the large amphitheater bearing the usual subdued murmur of private conversation suddenly quieted to an unnatural, almost eerie, silence. He cleared his throat, and gave a lopsided smile.

"I have been granted the tremendous honor of speaking to you today in this valedictory address. My name is Garth, and I should like to share a few thoughts with you as you leave Starfleet Academy, having just completed the leadership training curricula, and as you embark upon your new missions as starship captains and executive officers.

"The war we've just ended with the Klingon Empire has been costly. Devastating. We must never forget the sacrifices made by those who fought, and most especially those who gave their lives, to preserve those ideals we hold precious. And yet, out of those ashes, from the tragedies of warfare that have befallen some of our worlds and many of our number, will arise—must arise—a stronger, more unified Federation of Planets, as men of all species overcome the challenges . . . as men always have.

"When I say 'men,' I do not distinguish between genders, nor by specific race of man—be they humans, Alpha Centaurians, Andorians, Vulcans, Tellarites, or any of the other sentient races we are beginning to discover on the frontiers of explored space. I mean all the races of man—all those who believe in the ideals of peaceful existence, in beneficial trade, of appropriate technology transfer, of collaborative advancement, of altruistic goodwill toward their fellow man."

Garth took a sip from a cup on the podium placed for his use.

"Captains: let me offer a tiny shred of perspective and a few syllables of advice, a few dos and don'ts. Always remember you are in command of your starship and its crew, for good and ill. Being a starship captain is a wonderful, awful thing, a position of vast, often-lonely responsibility . . . and not for everyone. You may be the only mobile Federation resource for a dozen light-years in any direction. If something goes wrong, you're all we have. Your vessel may have the firepower to devastate a world, but such force must only be used as a last resort when all other means fail. At times, you may be a diplomat or ambassador, a first responder to a disaster, or a warrior. But first and foremost, you must always be an ex-

plorer: venturing forth, carrying the flag and making it welcome wherever you can, wherever you go.

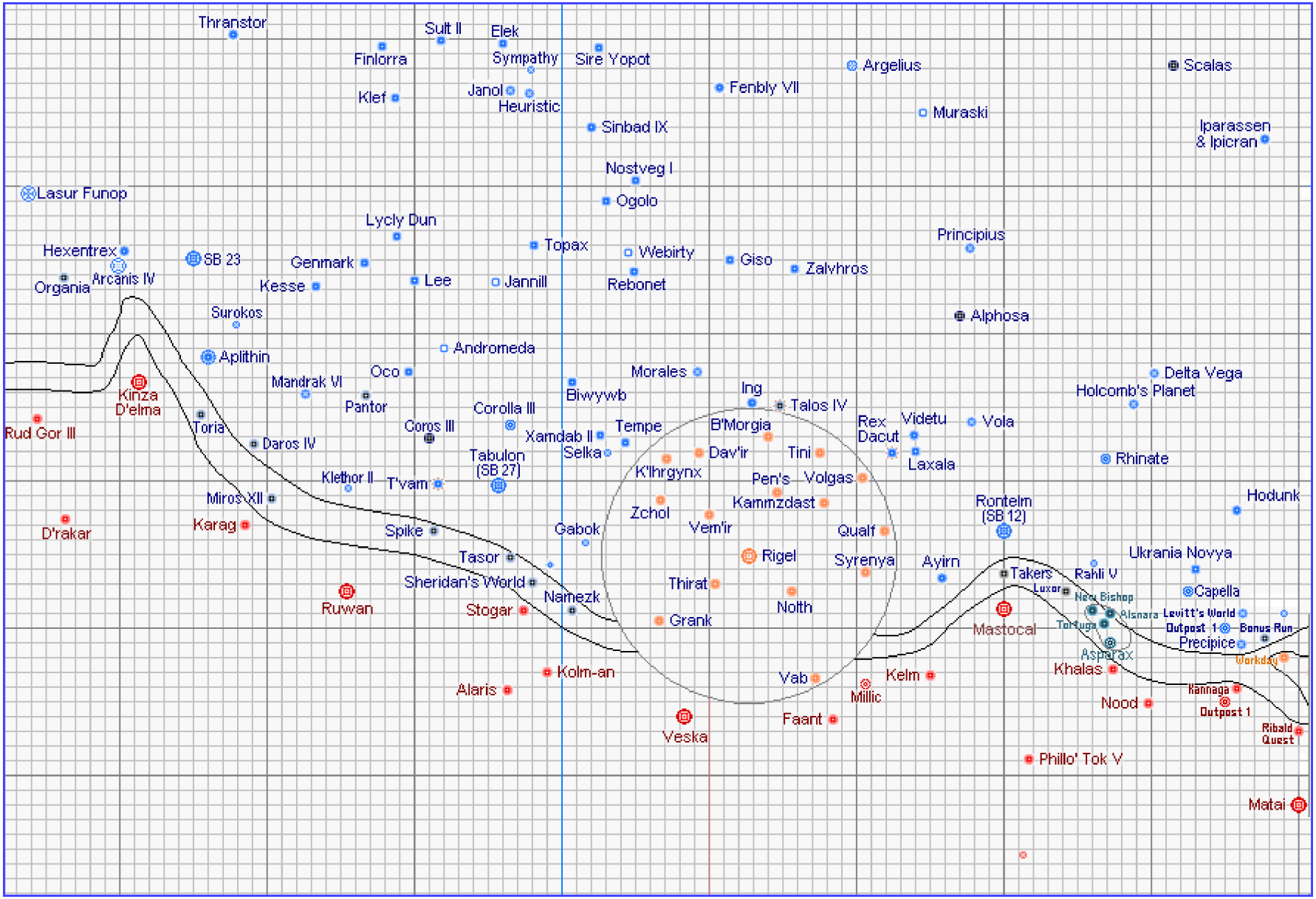
"Captains, lead your men by example and by your presence—do not shirk, do not skulk in your shipboard cabin and let others take the risks on your behalf. The great leaders and explorers of history did not lead or explore from the rear. Alexander, Nelson, Napoleon, Sardon, Lee, Buckner, Patton, Hillary, Gagarin, Armstrong, Cochrane. They were always in the front ranks, and they were seen by their men taking the same—or even greater—chances than those they expected of their subordinates. Yes, it can be risky, but such calculated risks pay enormous dividends—and separate true leaders from those who merely keep the center seat warm. Never fear taking a necessary risk.

"Captains, you have all made it this far. You are the brightest and the bravest, and those who will represent the Federation in the years and decades to come. For this, I congratulate you all, and caution you, and welcome you to the ranks. From here, you will follow Starfleet orders while still exercising enormous autonomous authority to conduct independent action. Such action may save worlds or destroy them. Use this authority and responsibility with great care. But enough words. Go and explore, not hesitantly, but boldly! Indeed, you must boldly go—where no man has gone before. You must explore strange new worlds, and you must seek out new life and new civilizations. For you are destined to be Federation starship captains, and this . . . this shall be your oath. Thank you."

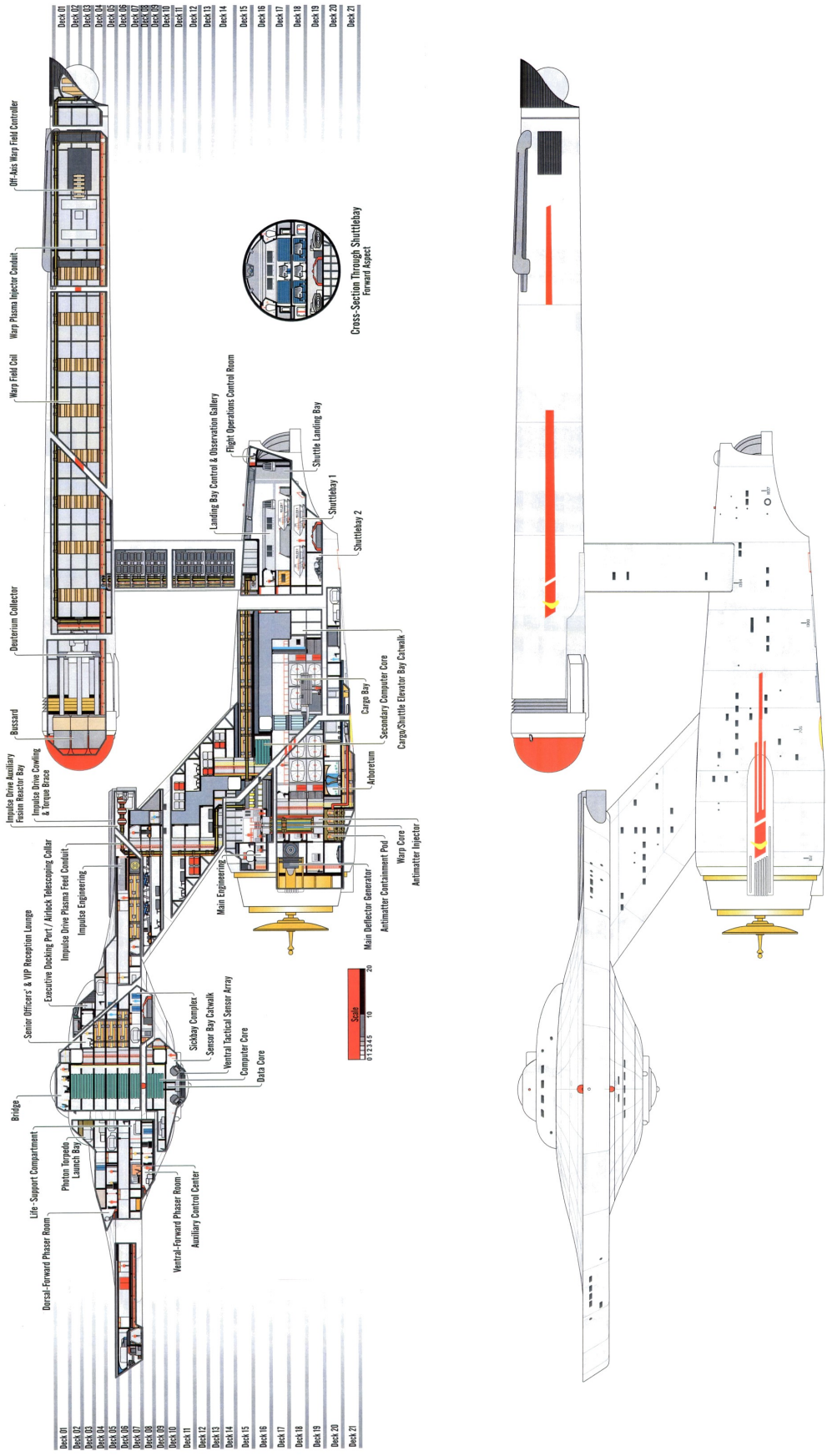
The accompanying applause from the standing ovation was quite deafening.



USS *El Cid*, firing on a Klingon supply convoy during the Four Years War.



Map of Federation and Klingon space showing the locations of all major battles during the Four Years War.


Deck 01
Deck 02
Deck 03
Deck 04
Deck 05
Deck 06
Deck 07
Deck 08
Deck 09
Deck 10
Deck 11
Deck 12
Deck 13
Deck 14
Deck 15
Deck 16
Deck 17
Deck 18
Deck 19
Deck 20
Deck 21
Off-Axis Warp Field Controller
Warp Plasma Injector Conduit
Warp Field Coil
Deuterium Collector
Bussard
Impulse Drive Auxiliary Fusion Reactor Bay
Impulse Drive Cowling & Torque Brace
Cross-Section Through Shuttlebay Forward Aspect
Landing Bay Control & Observation Gallery
Flight Operations Control Room
Shuttle Landing Bay
Shuttlebay 1
Shuttlebay 2
Cargo Bay
Secondary Computer Core
Cargo/Shuttle Elevator Bay Catwalk
Arboretum
Main Engineering
Warp Core
Antimatter Injector
Main Deflector Generator
Antimatter Containment Pod
Impulse Drive Plasma Feed Conduit
Impulse Engineering
Executive Docking Port / Airlock Telescoping Collar
Senior Officers' & VIP Reception Lounge
Sickbay Complex
Sensor Bay Catwalk
Ventral Tactical Sensor Array
Computer Core
Data Core
Bridge
Life - Support Compartment
Photon Torpedo Launch Bay
Dorsal-Forward Phaser Room
Ventral-Forward Phaser Room
Auxiliary Control Center
Scale
0 5 10 20

Selected Starfleet Vessels

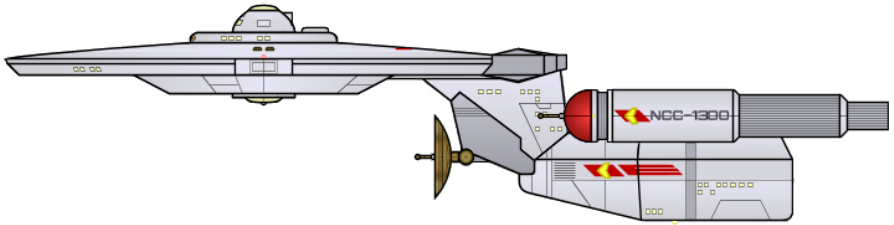
Baton Rouge

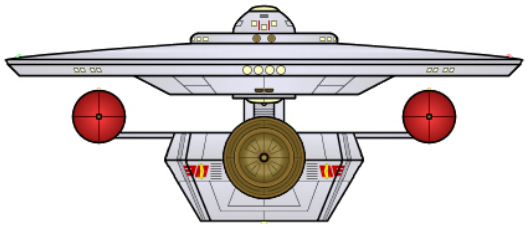
The *Baton Rouge*-class was a Federation Starfleet cruiser-type starship designed in 2232. Ships of this class were divided into two types, light cruisers and escort cruisers, both introduced in 2237. Cruiser variants began undergoing refits in 2240; the escorts started receiving refits in 2244, with an additional advanced sensor and weapons refit in 2250.

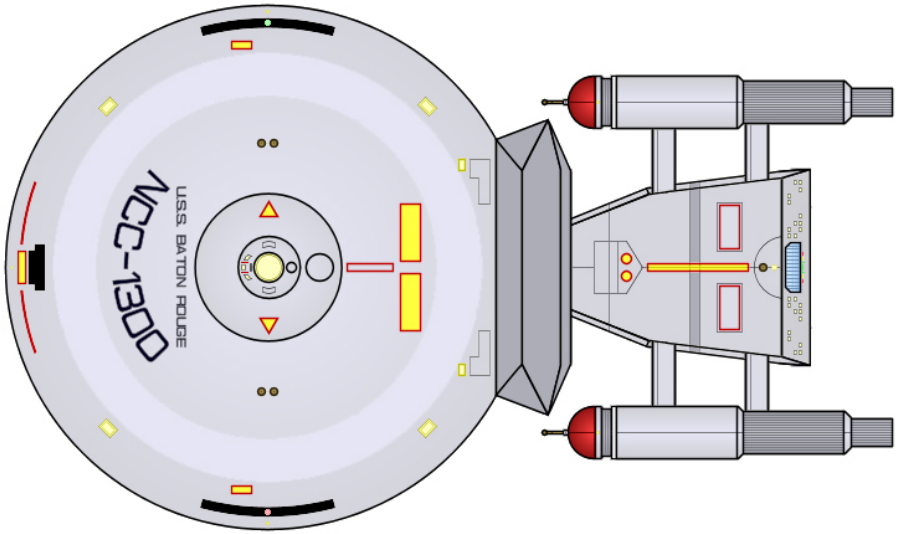
Baton Rouge-class cruisers would have been among the capital ship classes on the front lines during the Battle of Donatu V as well as other skirmishes with such threat forces as the Klingon Empire.

By the late 2270s, the *Baton Rouge*-class was officially retired around the same time as the *Constitution* class began their Mark III upgrades. However, over twenty *Baton Rouge*-class starships remain in the "Mothball Fleet" at the Starfleet Museum.

BATON ROUGE







VESSEL NAME		STATUS
USS BATON ROUGE	NCC-1526	ACTIVE
USS ACHILLES	NCC-1528	ACTIVE
USS DENPASAR	NCC-1551	ACTIVE
USS SAVANNAH	NCC-1565	INACTIVE - RESERVE

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	31
CREW	326

DIMENSIONS	
DEADWEIGHT	185,000 MT
LENGTH	287M
BREADTH	130M
HEIGHT	75M

ARMAMENT	
PHASERS	3 [F, F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF3-B
NAVIGATIONAL DEFLECTOR	MK 3
TRACTOR BEAM EMITTER	MK 3

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK II - TANDEM
IMPULSE DRIVE	IMP84-B
REACTIVE CONTROL	RSC45B

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	3
TYPE 2 SHUTTLECRAFT	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK III
ACTIVE SENSOR SUITE	MK III LDX
PASSIVE SENSOR SUITE	MK III DSX
TRANSPORTERS	3 STD, 3 EVAC, 2 CARGO
LIFE SUPPORT	MK VI CT-45 SUITE

MISSION PROFILE	
MISSION TYPE	BATTLE CRUISER
MAXIMUM OPERATING RANGE	3 YEARS

Detroyat

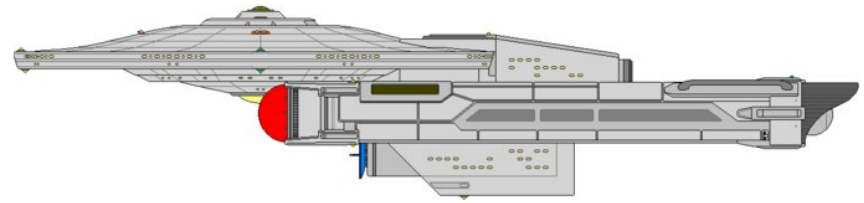
The *Detroyat* class, commissioned in 2238, was a type of destroyer that saw service in the Federation Starfleet during the 22nd century. Deceptively large for a destroyer classification, these vessels were built for speed and maneuverability rather than for their potential fighting capabilities and were Starfleet's most expensive class of vessels to construct to date. As a result, they were commissioned into the full-time fleet where their potential was realized.

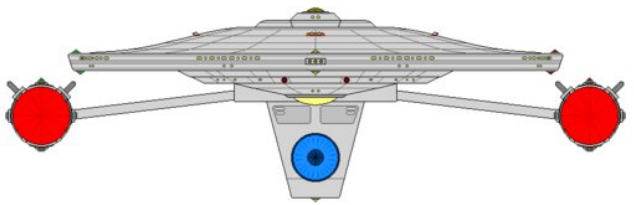
During their first service, the *Detroyat* destroyers, although not the strongest, but certainly one of the fastest in the fleet, proved to be extremely versatile and efficient vessels. By 2258, however, these vessels were used as escort vessels rather than as destroyers.

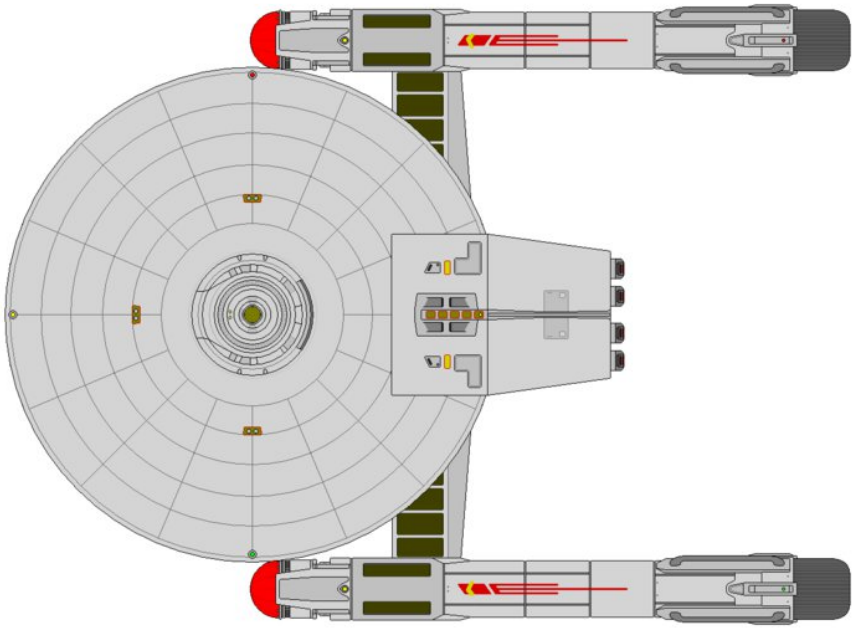
The ship's design intentionally leaves a lot of empty internal space to accommodate as-needed modifications, allowing for a great deal of versatility from ship to ship in this class. Though lacking in long-range offensive capabilities, the ship's fantastic maneuverability allows it to perform rapid and effective strikes on the much-less-maneuverable ships of its era.

At the onset of the Four Years War, Starfleet was tasked with building twenty new vessels with both upgraded weaponry and defensive shielding. The result was the Mark II variant, indistinguishable externally from the Mark I. It was eventually discovered that the *Detroyat* framework was incompatible with the new phaser weaponry that became available during the third year of the war. With that revelation, the proposed new batch of vessels were canceled after only eleven ships had been built. The final *Detroyat* was retired from active duty in 2265.

DETROYAT







VESSEL NAME		STATUS
USS BRECKENRIDGE	NCC-910	ACTIVE
USS DONAR	NCC-912	ACTIVE
USS MARYLAND	NCC-919	ACTIVE
USS IRWIN	NCC-923	ACTIVE

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	24
CREW	315

DIMENSIONS	
DEADWEIGHT	150,480 MT
LENGTH	258M
BREADTH	174M
HEIGHT	55M

ARMAMENT	
PHASERS	2 [F/P, F/S]
PHOTON TORPEDOES	2 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF3-C
NAVIGATIONAL DEFLECTOR	MK 3
TRACTOR BEAM EMITTER	MK 3

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK IV - TANDEM
IMPULSE DRIVE	IMPFIC3-C
REACTIVE CONTROL	RSC47B

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	1
TYPE 2 SHUTTLECRAFT	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK III
ACTIVE SENSOR SUITE	MK V XX
PASSIVE SENSOR SUITE	MK V DXV
TRANSPORTERS	3 STD, 2 EVAC, 2 CARGO
LIFE SUPPORT	MK IV CT-42 SUITE

MISSION PROFILE	
MISSION TYPE	DESTROYER
MAXIMUM OPERATING RANGE	2.5 YEARS

Ares

In 2240, as Starfleet continued on its mission of scientific exploration, the Orions began expanding their illicit and illegal activities while the Klingons became more and more brazen along the Neutral Zone and nearby regions. With the former, classes like the *Saladin* and *Baton Rouge* were more than enough to maintain security and perform interdiction operations. The latter, however, was a different story. The Klingons had just completed a major naval base in the Donatu system and were expanding their fleet at a breakneck pace, adding the fearsome D-6 class battlecruiser to their lineup. This, plus improvements the Klingons were making to their D-6 class, gave them a rather decisive tactical advantage that *Baton Rouge* was hard-pressed to defend against.

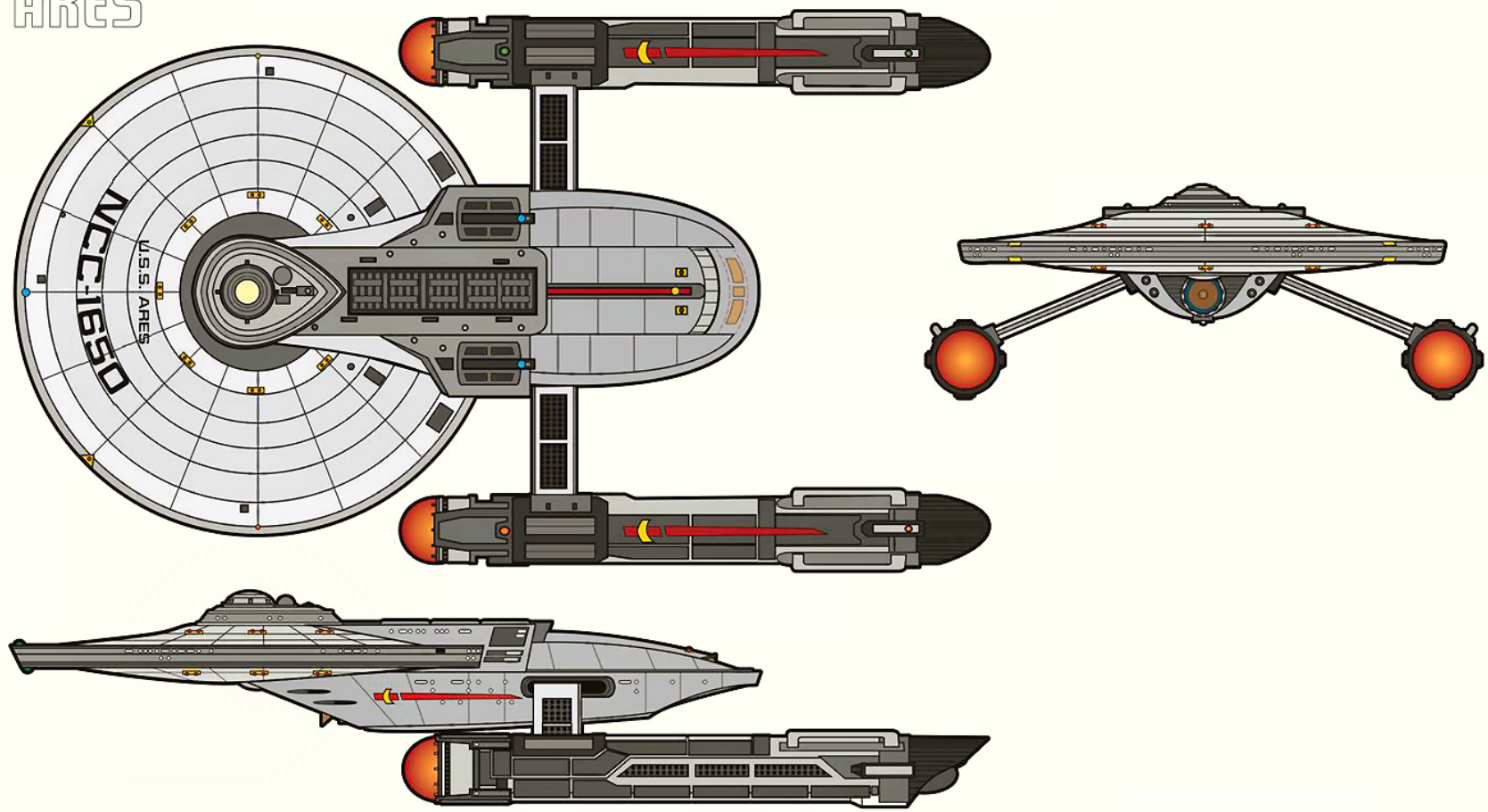
To complement the above classes and maintain tactical parity with the Klingons, Starfleet directed the ASDB to design and construct an additional class in 2240. The result of this latest development project was *Ares*, an assault cruiser that blended advanced technology with multi-mission adaptability that had been seldom seen thus far.

From a design standpoint, *Ares* maintained a double hull layout, though more compact than *Baton Rouge*. It dispensed with the connecting dorsal, instead integrating both the primary and secondary hulls, with the bridge module positioned atop a reinforced hull section that flowed aft to the impulse deck. As a cost-saving measure, the *Ares* incorporated the warp core and nacelles from the *Detroyat*.

Both hull sections were smooth and sleek, obvious products of evolutionary progress. The secondary hull in particular was a low-profile, minimalist affair with an advanced, integrated deflector dish forward and a large hangar bay at the stern. Extending out and slightly downward to port and starboard were the experimental PB-35 warp nacelles—externally the same as those on the *Detroyat* class, but featuring entirely new, reinforced compressor coils that were rated to accept a 40% plasma flow increase, translating into higher sustained speeds. Due to limited budgeting, supply shortages, and political mishandling, the *Ares* wasn't completed until eleven months before the war would end. However, under the command of Fleet Captain Garth of Izar, this single vessel would prove to be a vital asset in the most important engagement of the war—the final Battle of Axanar.

The *Ares*, the only one of her kind built, is now at the Starfleet Museum at Memory Alpha. Each year, to commemorate her victory at Axanar, she is slipped from her berth and taken to the outer edge of the system and back.

ARES



STANDARD COMPLEMENT	
OFFICERS [COMMAND]	50
CREW	300

DIMENSIONS	
DEADWEIGHT	148,800 MT
LENGTH	238M
BREADTH	127M
HEIGHT	49M

ARMAMENT	
PHASERS	12 [F, F/P, F/S, A]
PHOTON TORPEDOES	4 [3 F, 1 A]
DEFENSIVE DEFLECTOR SHIELDS	PFF9-A
NAVIGATIONAL DEFLECTOR	MK 4
TRACTOR BEAM EMITTER	MK 3

PROPULSION SYSTEMS	
WARP DRIVE	PB 35(X) - TANDEM
IMPULSE DRIVE	IMPFIC4 (X)
REACTIVE CONTROL	RSC48A

SUPPLEMENTAL CRAFT	
TYPE H SHUTTLECRAFT	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK III
ACTIVE SENSOR SUITE	MK VI (X)
PASSIVE SENSOR SUITE	MK V DXV
TRANSPORTERS	3 STD, 2 CARGO
LIFE SUPPORT	MK IV CT-42 SUITE

MISSION PROFILE	
MISSION TYPE	DESTROYER
MAXIMUM OPERATING RANGE	3 YEARS

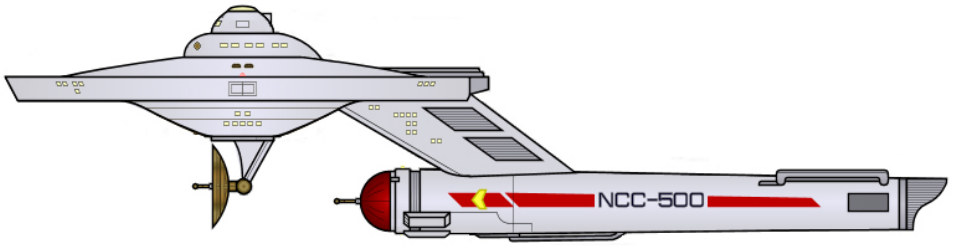
Saladin

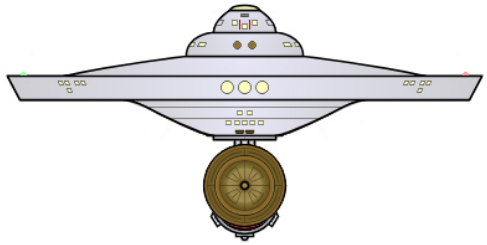
The *Saladin* was designed in 2236 as a smaller and less expensive stablemate to the *Constitution* class (which would not be commissioned until 2245), and remarkably was only marginally less successful. Though it carried cruiser armament, it lacked the power grid of a cruiser, making full use of its photon torpedoes impractical. While this ship lacked maneuverability, its large saucer section made it capable of taking considerable punishment without losing warp power. Both the saucer section and nacelle of the *Saladin* are identical to that of the *Constitution* class, although the configuration could hardly be more different.

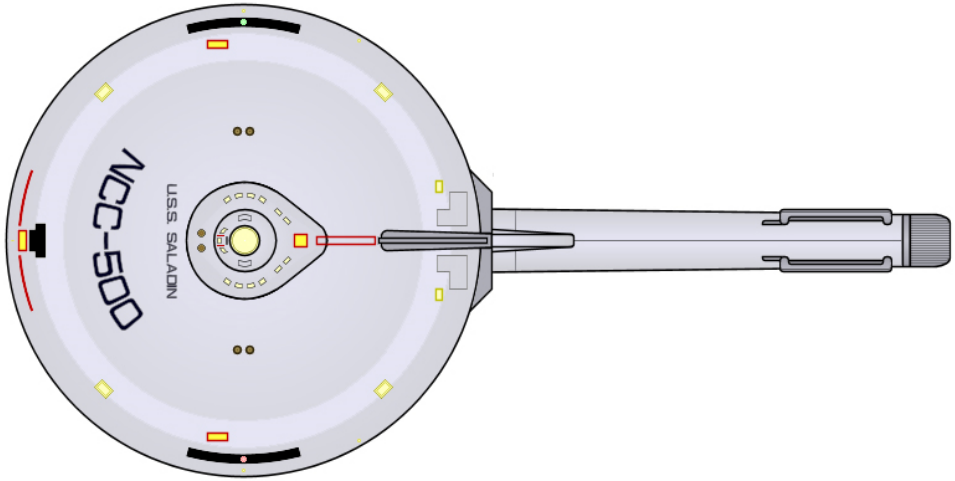
The *Saladin* was expected to carry out essentially the same research and exploration missions as the heavy cruiser class during peacetime. For this reason, it had the same laboratory facilities. Several refits were designed in an attempt to improve this class, but production virtually ceased in favor of the Mk II *Anton* class. A new, smaller, war destroyer was built several years later.

The class is one of the relatively few Starfleet designs to employ a single nacelle configuration. The *Saladin* is a more militarized version of her sister class, the *Hermes* class. The *Hermes* is a scout and therefore carries only two phaser banks; the *Saladin* is a destroyer and is armed with three phaser emplacements (with two emitters each) and two photon torpedo tubes. This ship is outfitted for a five-year range at light-speed before overhaul is required. The first vessels of this class were authorized in appropriations, with additional subclasses later authorized using the new FWE-1 nacelle.

SALADIN







VESSEL NAME		STATUS
USS DULUTH	NCC-1819	ACTIVE
USS SPARTA	NCC-1820	ACTIVE
USS TAMERLANE	NCC-807	ACTIVE
USS WELLINGTON	NCC-810	INACTIVE - RESERVE
USS AHRIMAN	NCC-815	INACTIVE - DRYDOCKED
USS ALLEN	NCC-817	ACTIVE
USS POMPEY	NCC-820	ACTIVE
USS HATHOR	NCC-822	ACTIVE
USS ARES	NCC-830	MISSING
USS EL CID	NCC-832	ACTIVE
USS IVAN	NCC-833	MISSING
USS SCIPIO	NCC-840	ACTIVE
USS FORD	NCC-844	MISSING

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	15
CREW	205

DIMENSIONS	
DEADWEIGHT	125,000 MT
LENGTH	242M
BREADTH	127M
HEIGHT	60M

ARMAMENT	
PHASERS	2 [F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF2-B
NAVIGATIONAL DEFLECTOR	MK 3
TRACTOR BEAM EMITTER	MK 2

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK III - SINGLE
IMPULSE DRIVE	IMP84-B
REACTIVE CONTROL	RSC44C

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK III
ACTIVE SENSOR SUITE	MK III CX
PASSIVE SENSOR SUITE	MK III CXL
TRANSPORTERS	2 STD, 2 EVAC, 1 CARGO
LIFE SUPPORT	MK III CT-54 SUITE

MISSION PROFILE	
MISSION TYPE	DESTROYER
MAXIMUM OPERATING RANGE	3 YEARS

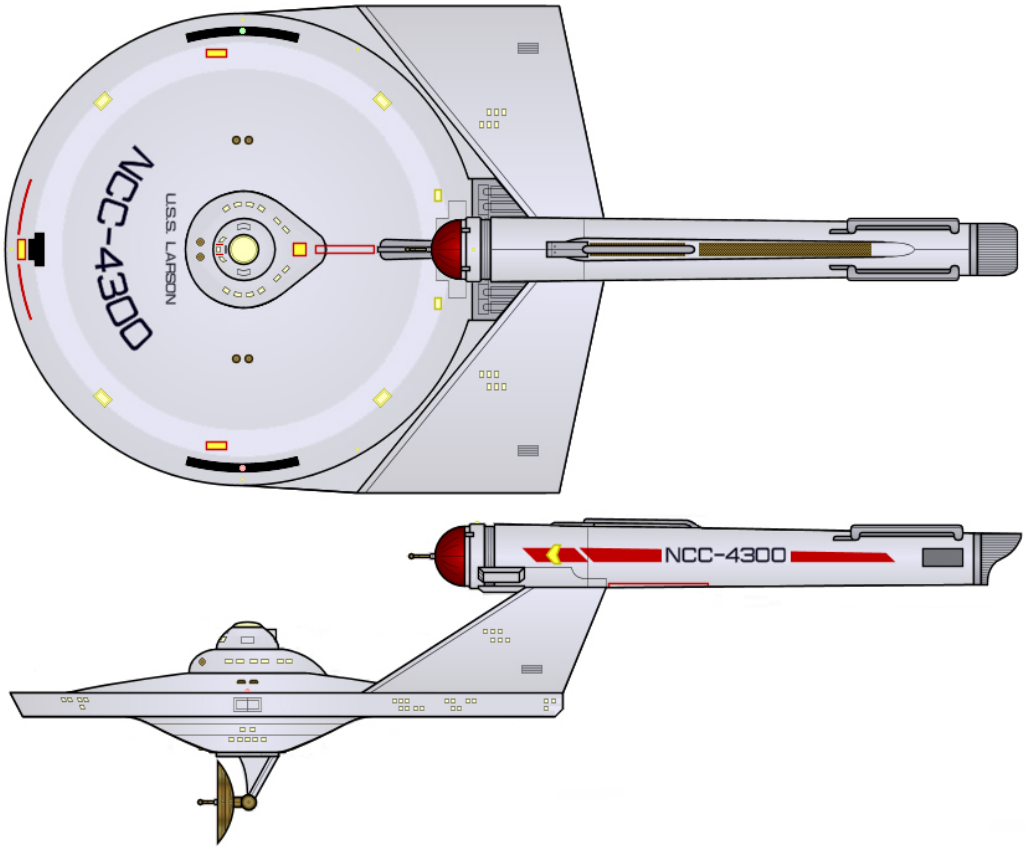
Larson

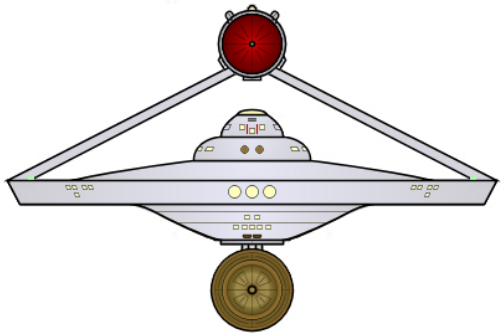
The *Larson*-class destroyers, which first entered service in January 2237, were designed at the same time as the *Nelson*-class scouts and *Constitution*-class cruisers, and shared many design traits with these classes. An efficient class that performed its function well, it was intended to perform the same tasks as other dual-function vessels, namely research and defense. Even so, most of the existing *Larson*-class ships still in service in 2276 were employed by Starfleet's Military Operations Command, with several serving in Galaxy Exploration Command.

Destroyers, such as the *Larson* class, were frequently employed on patrol duties along the frontier areas; in time of war or other emergencies, destroyers could be assigned to escort convoys or be used as scouts by squadrons or small fleets, and the *Larson* class served with distinction during the Four Years War. With its array of weapons, it was a fine combat vessel, though not as powerful as a cruiser or larger ship.

The *Larson* class remained unchanged from its introduction in 2246 until the introduction of the Mark II configuration in April 2255, when the FH-2 phaser banks were replaced with more powerful FH-4 phasers, and an additional photon torpedo launcher was installed; all Mark I ships were refitted to the Mark II configuration by September 2259. Several other interior modifications were later made, but the combat performance of the class remained essentially unchanged until the introduction of the Mark VI configuration.

LARSON





VESSEL NAME		STATUS
USS ANZIO	NCC-4303	ACTIVE
USS DRACUS CENTAURI	NCC-4306	MISSING - UNKNOWN
USS PORTSMOUTH	NCC-4317	ACTIVE
USS GETTYSBURG	NCC-4320	ACTIVE
USS TORGAU	NCC-4322	ACTIVE - TRAINING
USS JUTLAND	NCC-4329	ACTIVE
USS THERMOPYLAE	NCC-4332	ACTIVE
USS MARATHON	NCC-4344	ACTIVE
USS WATERLOO	NCC-4346	ACTIVE
USS BANNOCKBURN	NCC-4360	ACTIVE

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	20
CREW	195

DIMENSIONS	
DEADWEIGHT	83,900 MT
LENGTH	269M
BREADTH	134M
HEIGHT	62M

ARMAMENT	
PHASERS	2 [F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF2-A
NAVIGATIONAL DEFLECTOR	MK 4D
TRACTOR BEAM EMITTER	MK 6A

PROPULSION SYSTEMS	
WARP DRIVE	PB-30 MK III - TANDEM
IMPULSE DRIVE	IMP60-B
REACTIVE CONTROL	RSC40A

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	1
TYPE 2 SHUTTLECRAFT	1

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK III
ACTIVE SENSOR SUITE	MK II X
PASSIVE SENSOR SUITE	MK V CC
TRANSPORTERS	2 STD, 1 EVAC, 2 CARGO
LIFE SUPPORT	MK II CT-51 SUITE

MISSION PROFILE	
MISSION TYPE	DESTROYER / ESCORT
MAXIMUM OPERATING RANGE	2 YEARS

Loknar

The *Loknar*–class frigate was first commissioned during "The Great Awakening" (2230-2240), a period of expansion by the United Federation of Planets in the mid-23rd century. A number of research and exploration classes were designed and built to enable Starfleet's efforts to solidify an enlarged and growing Federation.

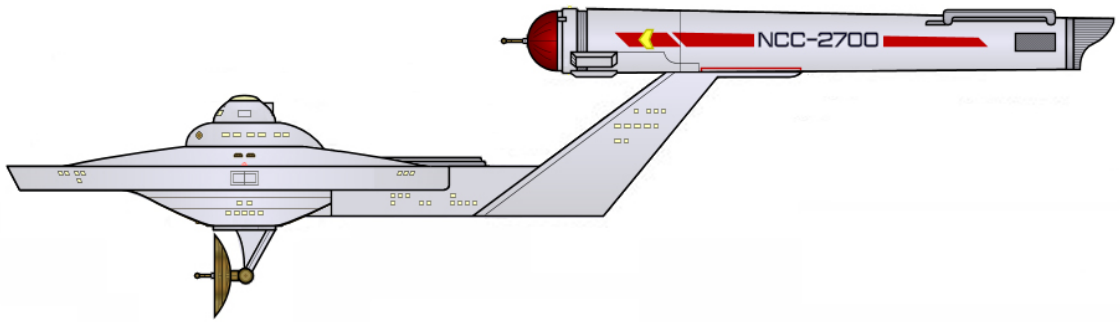
Soon after the Federation Council's Appropriations Committee granted funding to Starfleet to construct fleets to expand and patrol the Federation's borders, Andorian factions began pushing for warship construction, believing that, during that new phase of expansion, the Federation might come upon a race as hostile as the Romulans or Klingons, leading to another war for which the Federation would be unprepared. Convinced by the argument, Starfleet began a limited buildup of warships. Several shipbuilding facilities were constructed by Andorian firms to design and manufacture these vessels, notably Utopia Planitia Fleetyards on Mars and the Salazaar Shipyard, the largest and most productive in the Federation.

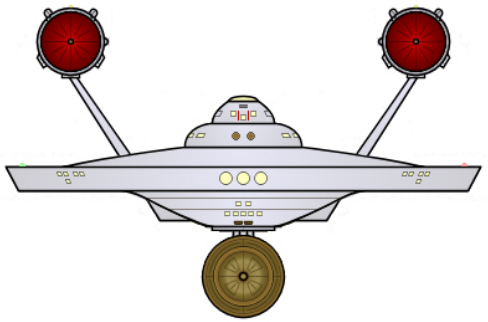
First commissioned in October 2237, the *Loknar*-class frigate was considered a "muscle" ship due to its four-phase cannons and single torpedo launcher, making it equal to all but the largest Klingon vessels and more powerful than any known ship in the Romulan fleet; its shields were more efficient than any used by a hostile power.

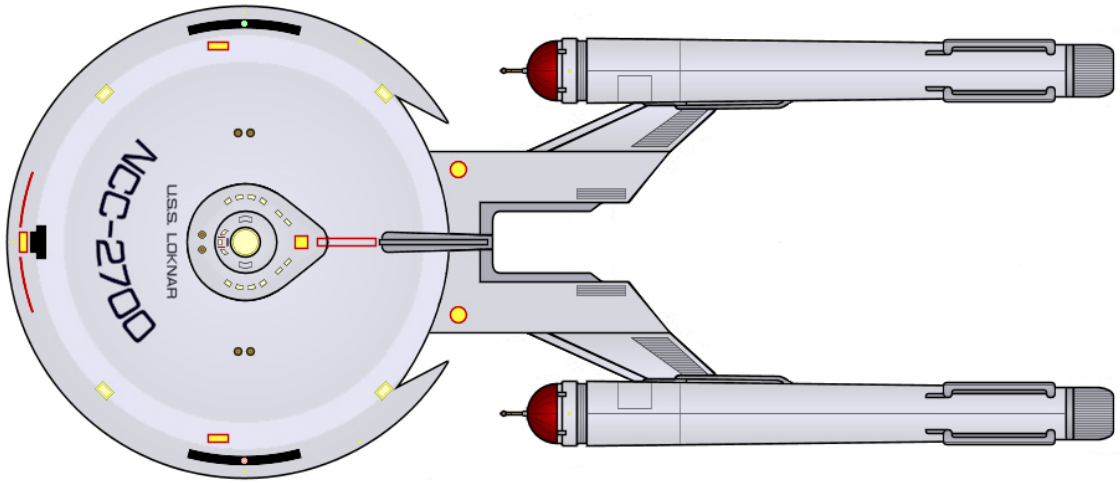
During the Four Years War, the *Loknar* class saw more action than any other class in Starfleet. Although it performed successfully during the war, the Andorian designers nevertheless felt the class could be improved upon. The FWE-1 warp drive system was replaced by the FWE-2, which was still being tested, resulting in a 60% increase in power and performance. The first Mark II vessel, the USS *Lactra*, was commissioned in January 2259, two years before the FWE-2 engines were implemented on any other class in the fleet. The Mark II also incorporated eight FH-4 phasers and four torpedo launchers, making the class more powerful than anything in the Klingon fleet, save for the *Riskadh* class, known as the D-10 to Starfleet. Additionally, the Mark II mounted an upgraded binary shield generator, giving 33% more protection for the same energy cost as the previous shield system.

The *Loknar* class, the most noted "pure" warship to emerge at their time, are still in service.

LOKNAR







VESSEL NAME		STATUS
USS MEXAS	NCC-2704	ACTIVE
USS ORISKANY	NCC-2709	ACTIVE
USS PROXIMA	NCC-2711	ACTIVE
USS LEOXA	NCC-2718	ACTIVE
USS JUSTICE	NCC-2720	ACTIVE
USS INGRAHAM	NCC-2722	LOST - UNKNOWN
USS BUNKER HILL	NCC-2730	ACTIVE
USS BAINBRIDGE	NCC-2740	ACTIVE
USS ASHTON	NCC-2742	ACTIVE - CLASSIFIED

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	10
CREW	128

DIMENSIONS	
DEADWEIGHT	150,480 MT
LENGTH	290M
BREADTH	127M
HEIGHT	56M

ARMAMENT	
PHASERS	3 [F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF1-A
NAVIGATIONAL DEFLECTOR	MK 3
TRACTOR BEAM EMITTER	MK 2

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK IV - TANDEM
IMPULSE DRIVE	IMPFIC3-C
REACTIVE CONTROL	RSC40A

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	1
TYPE 2 SHUTTLECRAFT	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK II
ACTIVE SENSOR SUITE	MK III XIX
PASSIVE SENSOR SUITE	MK IV D
TRANSPORTERS	2 STD, 2 EVAC, 1 CARGO
LIFE SUPPORT	MK III CT-32 SUITE

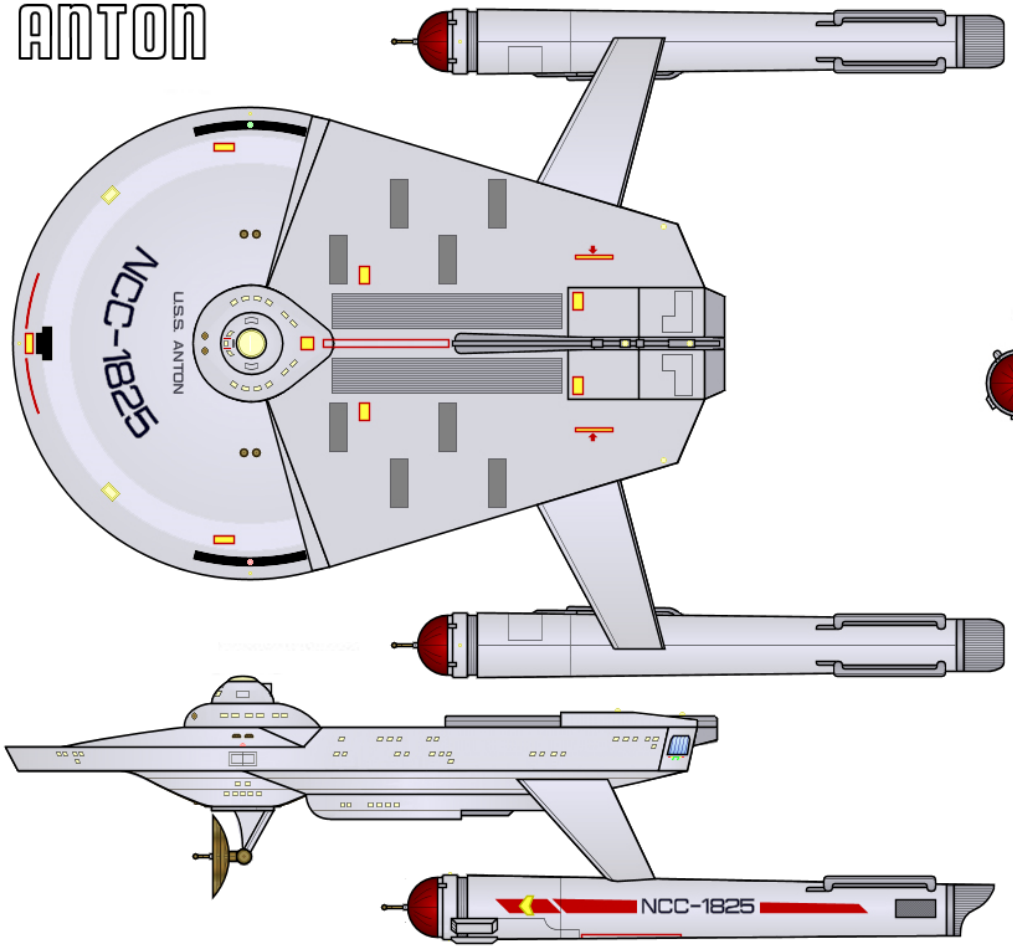
MISSION PROFILE	
MISSION TYPE	HEAVY FRIGATE
MAXIMUM OPERATING RANGE	2.5 YEARS

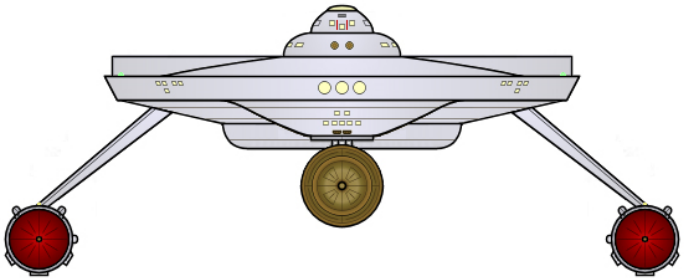
Anton

The *Anton* was a light cruiser, first launched in the mid-2230s and intended to supplement the not-yet-commissioned *Constitution*-class heavy cruisers. The *Antons* were envisioned the primary defenders of *Constitution*-based battle groups. However, the new ships were found to be lacking in certain key respects; most notably they were incapable of operating away from base for extended periods of time. This rendered the Mk I *Anton* nearly useless in an exploration role. As a consequence, only six *Anton* hulls were built before the Mk II model was commissioned. In 2245, the original batch of six was upgraded to the new model, with FH-1 phasers replacing the older FL-5 lasers and (in 2251) the accelerator cannons replaced with new photon torpedo technology (which the class pioneered). The Mark II performed beautifully, and were further upgraded to Mk III specification in 2265. Later, the class would be extensively overhauled, emerging from the Starfleet shipyards in the mid-2270s as the venerable *Miranda* class.

In 2236, increased Klingon military activity was causing Starfleet to reevaluate ship-building priorities. The *Loknar*-class frigate was deemed to be too light to fill a main combat role, so plans were drawn up for a larger frigate. In response, two new designs were worked on simultaneously; one was created by modifying one of the existing *Anton*-class hulls, and the other was built from a started but never completed hull and finished along similar lines. After considerable design changes, these became the *Surya* and *Coventry* classes. No *Antons* (in their original configuration) remain on the Starfleet registry.

ANTON





VESSEL NAME		STATUS
USS RELIANT	NCC-1864	ACTIVE
USS ANTON	NCC-1863	ACTIVE
USS COWPENS	NCC-1862	ACTIVE
USS FRANKFURT	NCC-1861	ACTIVE
USS NICHOLAS	NCC-1860	INACTIVE - RESERVE
USS PERSEUS	NCC-1859	ACTIVE
USS PINAFORE	NCC-1858	ACTIVE
USS PURDY	NCC-1857	ACTIVE
USS RENOWN	NCC-1856	ACTIVE
USS SUTHERLAND	NCC-1855	ACTIVE
USS LUXOR	NCC-1854	ACTIVE
USS CONDOR	NCC-1855	ACTIVE
USS INVINCIBLE	NCC-1890	ACTIVE

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	40
CREW	290

DIMENSIONS	
DEADWEIGHT	155,500 MT
LENGTH	224M
BREADTH	145M
HEIGHT	51M

ARMAMENT	
PHASERS	2 [F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF4-B
NAVIGATIONAL DEFLECTOR	MK 4B
TRACTOR BEAM EMITTER	MK 2D

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK III - TANDEM
IMPULSE DRIVE	IMP83-D
REACTIVE CONTROL	RSC46E

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	2
TYPE 2 SHUTTLECRAFT	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK III
ACTIVE SENSOR SUITE	MK III LX
PASSIVE SENSOR SUITE	MK IV LDL
TRANSPORTERS	3 STD, 2 EVAC, 3 CARGO
LIFE SUPPORT	MK III CT-47 SUITE

MISSION PROFILE	
MISSION TYPE	RESEARCH CRUISER
MAXIMUM OPERATING RANGE	3 YEARS

Bonhomme Richard

A vessel of distinction, the *Bonhomme Richard* class of heavy cruiser is considered one of only a few designs based directly on the most notable and successful class of Federation starship, the *Constitution* class. The *Bonhomme Richard* was originally envisioned as an advanced version of the *Constitution*, but was actually launched two years before the *Constitution* class. The reason for this was simplified internal layouts, reduced scientific requirements, and ability to use existing materials (like warp nacelles) that the *Constitution*s were incapable of utilizing because of their higher power requirements. The *Bonhomme Richard* was soon referred to as a new class of vessel, and design changes were incorporated into all subsequent vessels.

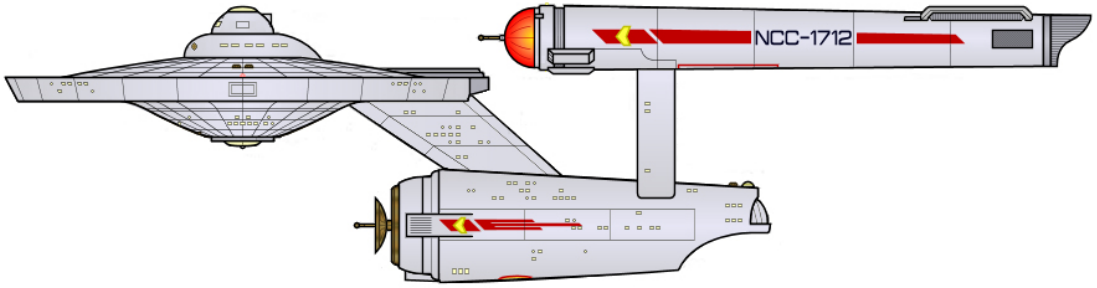
The Mk I was considered the perfect combination of power and flexibility. The Mk I, like the Mk I *Constitution* would be, was armed with heavy lasers and twin accelerator cannons, and was nearly identical to the Mk I *Constitution* in combat capabilities. The *Bonhomme Richard* did have a larger crew and more laboratories, and plans to convert the *Constitution* class to the *Bonhomme Richard* specifications were quickly approved.

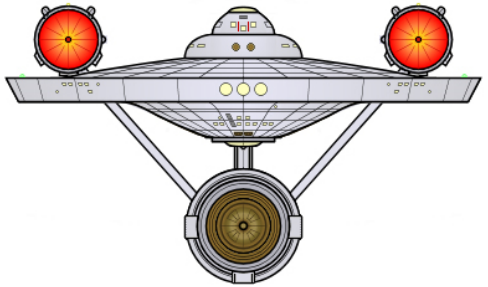
In 2244, armed with powerful FH-1 phasers, many of the Mk II *Bonhomme Richard* class were immediately sent to explore the boundaries of the Federation. They could remain in deep space for nearly four years, despite a large crew. The Mk II also incorporated the experimental "Saber" combat control system, which was soon standard equipment on many frontline vessels. She was also equipped with the MK 12 version of the now-standard FP-1, which required a smaller torpedo tube and less primary energy to fire than earlier attempts at automation of photon systems.

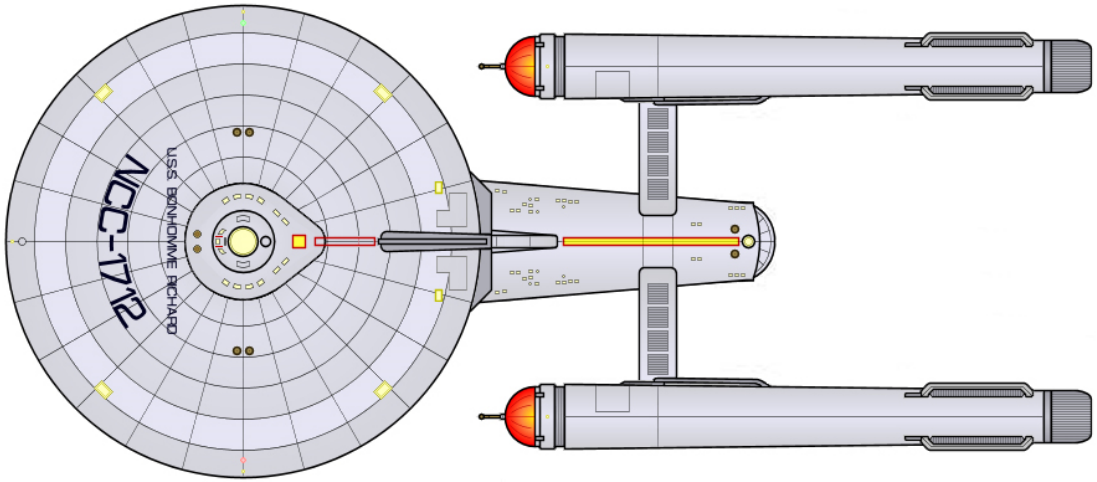
The Mk III (2260) used the newly developed "Wolf" model 2 FP-4. The Mk III continued to serve until 2265, when the Mk IV was launched. The Mk IV continued to use the Wolf FP-5 system, but increased the phaser system to the Lockheed 447/54 model of the FH-10 system. The Lockheed system provided more power than the *Constitution*'s FH-3s and were easier to maintain. The *Bonhomme Richard* class continued to serve until the premature launch of the refitted USS *Enterprise* in 2271. By this time, the *Bonhomme Richard* and other heavy cruisers had been outclassed by smaller combat craft, and were soon being mothballed.

The *Bonhomme Richard*s were produced at various shipyards around the Federation. Of the twenty-one built, only three were lost, and only one with all hands. By 2276, four ships (*Bonhomme Richard*, *Bunker Hill*, *Port Royal*, and the *Yamato*) had been upgraded to *Enterprise* class specifications, with five more slated for conversion by 2285.

BONHOMME RICHARD







VESSEL NAME		STATUS
USS BONHOMME RICHARD	NCC-1712	ACTIVE
USS ANTIETAM	NCC-1713	ACTIVE
USS FORMIDABLE	NCC-1714	ACTIVE
USS INDIA	NCC-1715	INACTIVE - RESERVE
USS MANARK	NCC-1716	INACTIVE - DRYDOCKED
USS SOUTH DAKOTA	NCC-1717	ACTIVE
USS KOM AERIE	NCC-1718	ACTIVE
USS AMBASSADOR	NCC-1719	ACTIVE
USS CYGNUS	NCC-1720	MISSING
USS YAMATO	NCC-1721	ACTIVE

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	41
CREW	357

DIMENSIONS	
DEADWEIGHT	185,000 MT
LENGTH	287M
BREADTH	127M
HEIGHT	75M

ARMAMENT	
PHASERS	2 [F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF2-A
NAVIGATIONAL DEFLECTOR	MK 4
TRACTOR BEAM EMITTER	MK 3

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK III - TANDEM
IMPULSE DRIVE	IMP86-A
REACTIVE CONTROL	RSC45B

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	2
TYPE 2 SHUTTLECRAFT	2

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK II
ACTIVE SENSOR SUITE	MK III LX
PASSIVE SENSOR SUITE	MK III DXL
TRANSPORTERS	3 STD, 2 EVAC, 2 CARGO
LIFE SUPPORT	MK VI CT-44 SUITE

MISSION PROFILE	
MISSION TYPE	COMMAND CRUISER
MAXIMUM OPERATING RANGE	4 YEARS

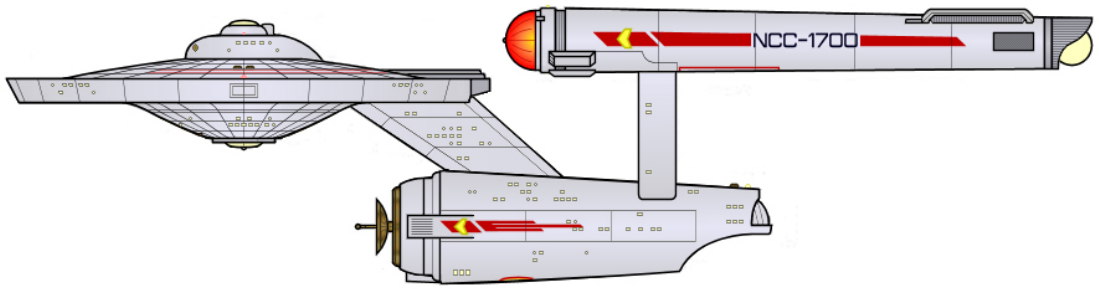
Constitution

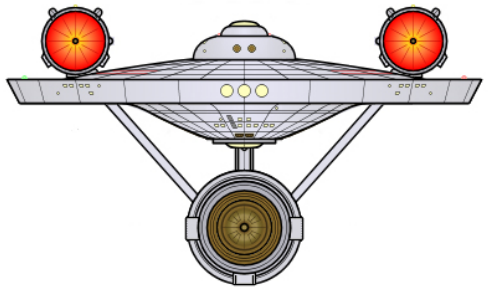
Construction on the *Constitution*-class cruiser began at the San Francisco Fleetyards in September 2239, and the class first entered service in 2245. The most renowned vessels of their time, *Constitution*-class cruisers performed their duties to perfection for several decades. An integral part of Starfleet's buildup during "The Great Awakening," the class also distinguished itself during the Four Years War.

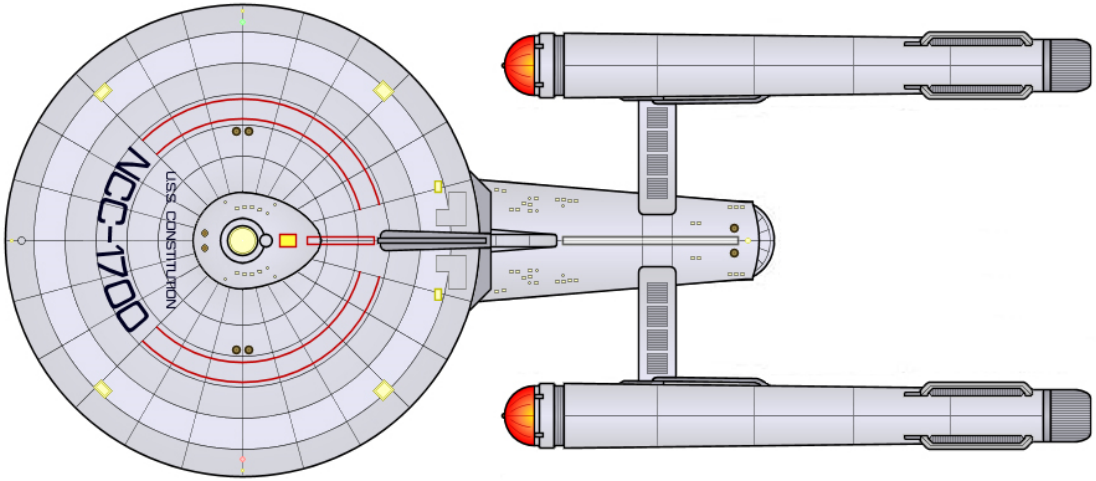
Originally, the class was intended to be much smaller, but a shift in design philosophies and the result of decades of research showed that a larger design could be feasible. The original construction contract called for thirteen vessels to be built, which would serve as cruisers with complete research facilities, capable of operating on five-year research and exploration missions. The prototype USS *Constitution* was followed by a new ship each month thereafter: the USS *Enterprise* in February, the USS *Constellation* in March, the USS *Intrepid* in April, the USS *Republic* in May, and the USS *Farragut* in June. These first five vessels spent the next two years undergoing shakedown trials, while the remaining seven vessels of the initial authorization were built and commissioned over the next five years, ending with the USS *Defiant* in November of 2253.

When the Four Years War broke out in 2250, four *Constitution*-class vessels saw combat; each distinguished itself in battle on multiple occasions, garnering the nickname "The Queens of Starfleet" for the class. After-action reports continued to show the class to be superior to any other in the fleet. Due to their cost, and more than a few other mitigating factors, the *Constitution* class was removed from frontline duties and placed in a "research only" role toward the latter half of the war. In 2263, Starfleet Command ordered the production of more vessels of the class, and funding for the expansion of the class was finally authorized by the Starfleet Appropriations Bill of 2265. By 2276, the oldest five vessels of the class had been upgraded to *Enterprise* class specification. By 2285, no less than ten more will undergo the conversion.

CONSTITUTION







VESSEL NAME		STATUS
USS CONSTITUTION	NCC-1700	ACTIVE
USS ENTERPRISE	NCC-1701	ACTIVE
USS CONSTELLATION	NCC-1017	ACTIVE
USS POTEMKIN	NCC-1657	ACTIVE
USS YORKTOWN	NCC-1717	ACTIVE

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	25
CREW	430

DIMENSIONS	
DEADWEIGHT	185,000 MT
LENGTH	286M
BREADTH	127M
HEIGHT	73M

ARMAMENT	
PHASERS	4 [F(2), F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF4-d
NAVIGATIONAL DEFLECTOR	MK 4
TRACTOR BEAM EMITTER	MK 4

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK V - TANDEM
IMPULSE DRIVE	IMP89-D
REACTIVE CONTROL	RSC48D

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	4
TYPE 2 SHUTTLECRAFT	3

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK V
ACTIVE SENSOR SUITE	MK V DX
PASSIVE SENSOR SUITE	MK IV XV
TRANSPORTERS	4 STD, 3 EVAC, 4 CARGO
LIFE SUPPORT	MK V CT-48 SUITE

MISSION PROFILE	
MISSION TYPE	HEAVY CRUISER
MAXIMUM OPERATING RANGE	5 YEARS

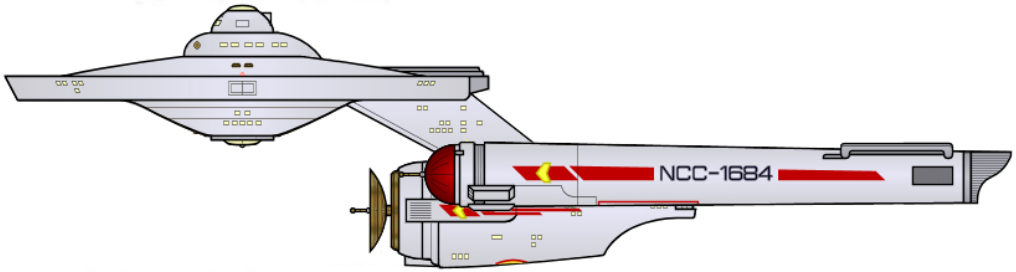
Heston

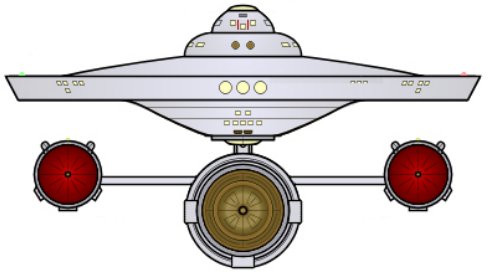
Launched in 2236, the *Heston*-class battle cruiser was based upon the design of the *Constitution* class. By 2245, the class had more weaponry and enhanced sensor range compared to the *Constitution*. The limits of technology at the time meant that dilithium-equipped engines capable of powering a class XII ship were not yet available, so these changes were only possible due to the adoption of a lighter and less powerful warp drive. The *Heston* class later served as the basis for the Federation class *Dreadnought*. The class was classified as a battle cruiser, as much of its science capability had to be sacrificed in the quest for maximum combat capability.

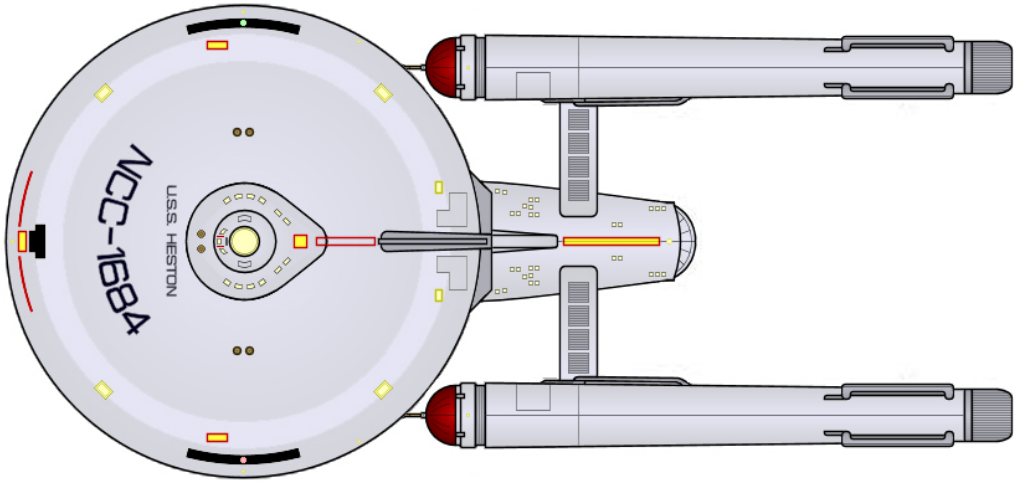
After the war, in 2260, the class was reevaluated due to a last-minute addendum to the proposed Starfleet budget. Thanks in no small part to several key members of the Federation Security council—eight of whom had served on these powerful vessels during the Four Years War—all eleven hulls were pulled from mothballs after only two years of storage, and the entire class was completely rebuilt from the keel up into the *Heston* Mk III (thus skipping the Mk II designation because of the enormity of the refit).

Only one vessel has been lost since their recommissioning. The remaining ten have been deployed along the Federation-Klingon border (4), the Romulan Neutral Zone (3), and in the Triangle region (3).

HESTON







VESSEL NAME		STATUS
USS BOGART	NCC-1105	ACTIVE
USS LANCASTER	NCC-1109	ACTIVE
USS MARVIN	NCC-1110	ACTIVE
USS EASTWOOD	NCC-1113	INACTIVE - RESERVE
USS STATHAM	NCC-1115	INACTIVE - DRYDOCKED

STANDARD COMPLEMENT	
OFFICERS [COMMAND]	52
CREW	415

DIMENSIONS	
DEADWEIGHT	195,200 MT
LENGTH	294M
BREADTH	131M
HEIGHT	74M

ARMAMENT	
PHASERS	4 [2 F, F/P, F/S]
PHOTON TORPEDOES	2 [F]
DEFENSIVE DEFLECTOR SHIELDS	PFF6-B
NAVIGATIONAL DEFLECTOR	MK 5
TRACTOR BEAM EMITTER	MK 4

PROPULSION SYSTEMS	
WARP DRIVE	PB-32 MK IV - TANDEM
IMPULSE DRIVE	IMP89-D
REACTIVE CONTROL	RSC48A

SUPPLEMENTAL CRAFT	
TYPE H TRAVEL POD	3
TYPE 2 SHUTTLECRAFT	3

SECONDARY SYSTEMS	
MAIN COMPUTER	DUOTRONIC MK VI
ACTIVE SENSOR SUITE	MK IV XX
PASSIVE SENSOR SUITE	MK V LD
TRANSPORTERS	4 STD, 3 EVAC, 4 CARGO
LIFE SUPPORT	MK VII CT-21 SUITE

MISSION PROFILE	
MISSION TYPE	COMMAND CRUISER
MAXIMUM OPERATING RANGE	4 YEARS



The Klingon Empire

The Klingon Empire

KLINGON PSYCHOLOGY

To outsiders, Klingon society remains largely a mystery, because many find incomprehensible a way of life that expresses itself as the continuous quest for power and conquest. Viewed psychologically, however, the historic Klingon mission of expansion results directly from several distinct motivations in the Klingon psyche. These elements are conflict, survival, success, and unity.

CONFLICT

At the heart of the Klingon way of life lies the fundamental concept of perpetual conflict. Klingons conceive of conflict in different ways, often simultaneously. The notion can apply to threats to personal safety, challenges to the safety of an extended group, racial conflict, competition of position within the social order, and even within one's own family line.

To a Klingon, conflict is a positive mode of expressing the desire for recognition and advancement and the individual's right to exist and prosper. Conflict not only identifies friend and foe, but also advances the fittest for the good of the social order. Finally, Klingons enjoy struggle for its own sake. The idea of conflict has also created what the Klingons call the "perpetual game," in which all Klingons participate from birth to grave. Based on the principle of eternal conflict, warriors advance themselves at the expense of weaker rivals. The game applies as much to rival powers as it does to Klingon individuals.

SURVIVAL

In a Klingon context, survival does not mean mere personal safety. When speaking of survival, a Klingon includes the safety of his family line. Whether an action is taken by an outsider or by a family member, it can deeply affect not only the individual, but his entire line as well. Such actions translate into gains or losses of political clout in relation to other families. Clearly, the Klingon's extended survival instinct includes responsibility for countless individuals.

SUCCESS

Common beliefs notwithstanding, the typical Klingon does not fight and die simply for the sheer sport of it. The Klingon tempers desire for conflict with pragmatism. He does not seek or kill for the same values and objectives as humans. Before deciding on a course of action, the Klingon considers three factors: loyalty to the empire, to his family, and to himself. Success, in the Klingon sense of the term, is anything that promotes an advantage in each one of the three categories. Although an individual's spur-of-the-moment decisions may seem to his personal benefit, considerations of family and state are never far removed.

When a Klingon has done his duty to the empire and to his own family line, he will then look exclusively to his own future. An ambitious Klingon earnestly desires to establish his own family line, not so much for wealth and influence but as a means of controlling his own destiny.

Curiously enough, there is a fatalism in Klingons, reflecting a belief that each individual is allotted a finite portion of luck to be used or forever lost. If a Klingon believes that "his time has come," he is likely to seize the moment, no matter the consequences.

UNITY

Unity is the fourth major element of Klingon psychology. All Klingons belong to something or someone: either to the empire, their emperor, their family line, their individual civilian or military commanders, or their own sense of duty. This sense of belonging is evident at every level of Klingon society. Some scientists believe that the earliest Klingon lords were landless workers who, over a period of time, became enslaved through a lack of mutual support. The Klingon phrase "the weak enslave themselves" probably originates with this notion of Klingon "kuve," (Others hold that the first kuve were rebellious line members who unsuccessfully revolted against the dictates of their emperor).

Although most Klingons belong to a specific group or

organization, they are also property of the state, to be used or discarded according to the empire's needs. In return, the typical Klingon can call upon a vast array of empire-wide resources when pursuing a goal that would also benefit the komerex (translated as "perpetual game").

The Klingon's notion of unity includes the fear of disunity: that is, the shame and disgrace of abandonment. As long as he commands respect, a Klingon receives unquestioning obedience from subordinates. Should he lose their respect through personal failure, a leader also runs the risk of losing his command and even his life.

Although the concept of unity produces a degree of discipline and regimentation seldom seen in other cultures, it also produces the Klingons' greatest flaw: a Klingon never feels completely autonomous. There are the ever-watchful eyes of fellow line members, subordinates, and superiors, as well as other Klingon individuals eager to advance their own aims at the expense of another. This produces an atmosphere of fear and paranoia. Daily routine is monitored, conversations are recorded, and every Klingon action is subject to critical analysis, all in the name of maintaining the unity of one's ship, one's command, one's line, or the komerex.

To outsiders, Klingons seem cold-blooded, capable of committing acts of senseless cruelty without remorse. Starfleet officers should avoid judging Klingon morality, however, and concentrate instead on what any Klingon is likely to do in an encounter. It is very dangerous to expect Klingons to behave according to our ethical or moral beliefs. In fact, interrogations of numerous Klingons have revealed that they consider only one thing to be immoral and therefore avoided: becoming vulnerable to others.

STARFLEET INTELLIGENCE REPORT

(EDITOR'S NOTE: the following is an excerpt from the introduction to The Klingon Mind, by Dr. Wade Hanselm of the Starfleet Psychological Warfare Division. Though the study was published just after the Four Years War, it is still considered one of the most insightful examinations of Klingon psychology.)

In recalling the horrors of the war just past, many people see the Klingons as non-individual beings who think and act as a unit. This view, however, dooms us to underestimate the subtleties of the Klingon mind. They are alien, and therefore we cannot judge them by human standards of behavior. Even so, Klingons exhibit a range of personality types as wide as that of Terran humans. It is just that the range has different parameters than our own.

As a race, Klingons are indeed hard, unforgiving, even cruel. Within the group, individuals vary in their expression of these traits. The gentlest of Klingons might seem harsh to a human, and the most naive of their race would likely seem secretive and suspicious. Within their own culture, though, the differences are recognizable and broad. There is no "average" Klingon any more than there is an "average" human.

During the Four Years War, Starfleet devoted intensive efforts to developing psychological warfare programs designed to intimidate the enemy. Then they realized that the intimidation so much a part of Klingon daily life is far more intense than any of us could devise. The Klingons understand intimidation on an internal level that humans will never experience, so it is a useless weapon against them.

On the other hand, Klingons as a group do not understand the concept of cooperation as humans do. because it is not a part of their survival behavior. Klingons cooperate only when forced, while humans cooperate almost by instinct, because millions of years of successful evolution have structured such the behavior. Humans thrive on diversity.

The Klingons, however, deny diversity as a virtue. In the end, it is this ability of humans and other Federation races (most notably the Vulcans) to accommodate the goals of others that has brought the greatest success in psychological warfare. The Klingons believe that their greater strength gives them the right to subjugate other races—even that this right binds servant and master together. Federation efforts to subvert Klingon servitor races proved so effective simply because the Klingons never considered the possibility that beings who had surrendered their freedom would ever again rise in resistance.

Though the UFP created no major upsets of Klingon rule purely through subversion, when servant races were encouraged to form underground resistance movements, the resulting chaos often crippled Klingon supply efforts in the war zone.

An understanding of the difference between the Klingon and human psychological ranges also proved useful in developing combat strategies. For example, "cautious" Klingons do exist, but what a Klingon considers cautious would look rash to a "careful" human. That is why Klingon commanders can be goaded into making bold moves that turn out to be foolish blunders once they learn the true strength of their foe. Remember, though, that Klingons do not believe it is vain to seek glory. In the Klingon culture, one must perform "virtuous" deeds publicly or the effort is usually wasted.

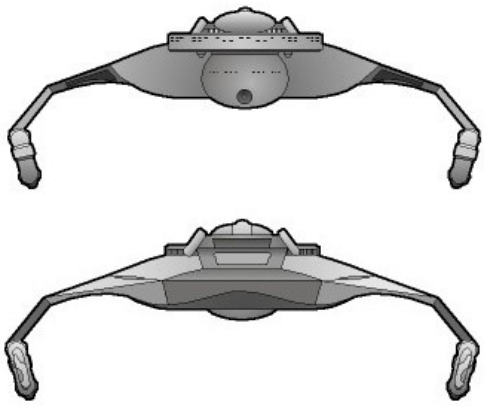


D-6 on patrol near the planet Toria, 2259.

Most humans believe that good and evil are absolute terms, with another behavior on a spectrum somewhere between them. Being eminently pragmatic, Klingons do not believe in these absolutes. What advances the individual (or the empire) is good. What diminishes the individual is evil. This does not deny the Klingons' capacity to sacrifice for the ideals they revere. Admiral Komerex, for example, betrayed his empire not because he thought war with the Federation was wrong. but because he believed the conflict was harming the empire, his troops, and, by extension, himself. He cared less for what would happen to him after the war than for the loss of status he and all Klingons would suffer if the empire was decimated by continuing the war.

The Klingons are conquerors by nature, which makes them view conquest as a virtue in itself. The subtler minds among them recognize that there are different forms of conquest. One Klingon might only be satisfied when he had slain an enemy, burned his lands, slaughtered his line, and pillaged his belongings. Another might find it more satisfying to leave an enemy's life, lands, line, and belongings alone, and to collect his honor instead. Still another might seek to use his enemy to gain higher status, but always seeing to it that his rival knew that he had been used as a stepping stone. All three approaches are typically Klingon, though they are as different as any three human reactions to a stressful situation. Under stress, humans seek to escape. Klingons in stress situations seek to dominate. This fundamental difference in psychology is at the core of successfully predicting Klingon reactions, which is the heart of psychological warfare.

Very few Klingons die of old age, especially in the military. Death in battle (or at least in hazardous service) is more common, and most Klingons consider it more honorable. It is common for aging Klingons to request more hazardous duty, hoping to gain either quick glory and reward or an honorable end before their physical faculties fail them. Such requests are nearly always granted. An honorable death is the privilege of every Klingon— the only privilege that the Empire grants with no strings attached.



Klingon Fleet Doctrine

All Klingon tactical publications break fleet operations down into four main levels: Single Ship Operations, Squadron Operations, Battle Group Operations, and War Operations. Before studying Klingon tactics, it is necessary to have a working understanding of the differences between these types of operations. *Basic Naval Units*, a Klingon cadet training publication written by Captain Kizanti and obtained in secret by Federation codebreakers during the last few months of the Four Years War, offers the best descriptions of these groups. It is quoted at length below.

SINGLE SHIP OPERATIONS

Simply what the name implies. A single ship is often sent out to explore a new section of space. This often occurs when the commander of the ship in question is considered a threat by someone high up in the Klingon power structure. This can also refer to an unescorted raid or an important courier mission. The only hard, fast rule is that only one ship is involved.

SQUADRON OPERATIONS

This refers to a mission undertaken by a squadron. In Klingon naval jargon, a squadron is a group of three ships (five if the ships in question are gunboats or escorts) that operates as a unit. It is usually commanded by a captain who holds the title "squadron leader." This concept is examined in depth later.

BATTLE GROUP OPERATIONS

Battle group is a group of squadrons placed under a unified command, usually that of an admiral. The minimum of squadrons necessary to make up a battle group is two, and the maximum is three. A battle group can contain from six to nine ships (ten to fifteen in the case of gunboats or escorts).

WAR OPERATIONS

This is the most rare Klingon formation. It is a massing of battle groups (there is no upper limit) under the command of either three admirals or two thought admirals. This massing is only used during a declared interstellar war, and has not been seen since the Four Years War.

SINGLE SHIP OPERATIONS

Single ship operations are quite common in the Imperial Navy, but not as common as they are in Starfleet. In most cases a cruiser (the famous D-7 class is a favorite, although the D-20 is also popular on the Romulan border) or a frigate (the L-9 is a popular choice) is detached from an existing squadron and sent out on a raid. The flagship is almost never detached in this case. These ships are often declared privateers in an effort to remove any ties to the empire. This sort of single ship raiding is more common on the Romulan-Klingon border than it is on the Federation borders, due mainly to the Organian Treaty and the fact that the Klingons can usually hire Orion pirates to do their dirty work near the Federation.

A second type of single ship operation has become more common since the purported Klingon-Romulan Teleological Exchange of Stardate 2270, which gave the Klingons the cloaking device. Since that time the Klingons have been sending small scout-type ships into UFP space on an assortment of missions. This sort of operation, for obvious reasons, is not covered in any of the Klingon manuals captured at this time, but it is safe to assume that such missions are espionage-oriented.

A final, almost traditional single-ship mission is that of the scout ship. Like their Federation counterparts, Klingon scout and survey ships often venture deep into unknown space alone. These are considered high-risk missions, and the rate of returning ships versus outgoing ships is low.

There are no established tactical doctrines for single-ship operations. In his definitive work, *The Mailed Fist: Warfare in Space*, Klingon Fleet Admiral Kostantin states that individual ship actions must be left to the skill of the

captain involved. "It is this one's opinion that raiding missions can and should be used to screen captains, so that the skilled may continue and the scum be eliminated." This statement shows that the Klingon High Command considers such operations to be tests of a captain's skill. As such it is safe to say that they will always be part of the Imperial Navy.

SQUADRON OPERATIONS

Squadron operations are very common in the Imperial Navy, and have been covered by Klingon tacticians in great detail. As mentioned earlier, a squadron consists of three (or five) ships under a unified command. Unlike those in Starfleet, Klingon squadrons are named after their commander: "Kolar's Squadron," for example. Depending on the scope of an assigned mission, it is possible for a squadron to have a fleet tender (S-4 or S-5 class ship) assigned to it. This only takes place on extended independent operations (see below).

The composition of an individual squadron varies, but there are some basic ground rules. One of the most common, and famous, groupings involves three D-7 cruiser variants. This has proven to be one of the most flexible groupings in the Klingon Navy, especially since the addition of the D-7M to the Klingon inventory. As a general rule, cruisers tend to be placed in squadrons together, with the exception of the D-10 class vessels. These ships, in addition to the L-6, L-9, and L-42 class frigates, are usually placed in a squadron with two destroyer-class ships (the D-2, D-14, and D-18 classes are popular) as escorts. A squadron centered around either a D-10 or one of the frigates is a very powerful fighting force. Gunboats and smaller ships operate in squadrons of five ships. It is worth noting that scout-class ships will occasionally form squadrons, but *never* battle groups.

To give Starfleet officers an idea of a typical squadron, let us look at one of the Klingons' best; Kolar's Squadron, currently stationed on the Orion border. Kolar's Squadron is made up of D-7 cruiser-class ships: a D-7M (the flagship), a D-7A, and a D-7G. Since Kolar's Squadron is intended to be capable of mounting independent patrols, it has an S-5 class tender attached to it. An example of a heavier squadron is Kaz's Squadron, which is centered around a D-10 heavy cruiser and has two D-18 destroyers attached for support. Kaz's Squadron operates mainly along the Romulan border.

Regardless of the composition of a squadron, they all operate in a similar fashion. Klingon squadrons travel in a formation known as k'azi, or the arrowhead. This is simply a wedge-shaped formation, like a triangle, with one ship at each of the three corners. Squadrons of gunboats or escorts usually travel in the arrowhead formation, but with additional ships on the sides. If a tender is accompanying a squadron, it is kept in the hollow center of the arrowhead. The ship at the point of the formation is usually the squadron flagship.

The tactics used by squadrons are often defined by their commanding officers in the moment, tempered only by the needs of the empire and tactical considerations (like being outnumbered). Klingon squadron leaders have



Late-model D-16, scanned near Tasor in 2266.

shown a strong preference for hit-and-run tactics. They like to swoop down on their enemies and strike without warning. To achieve this tactical surprise (which is highly praised in all Klingon tactical works), Klingon captains will go to great lengths. When ambushing convoys they like to hide their ships in asteroid belts, using remote sensor drones to keep track of their target.

If it is impossible (or not practical) to achieve sur-

prise, Klingon squadrons will often attack at once, forming a line abreast out of the arrowhead formation. Such an attack is very dangerous to most Starfleet ships, regardless of the class of the attacking Klingon ships, due to the massive firepower Klingon vessels have in forward positions. Certain ships, notably the D-16 destroyer, have shown a definite preference for the line abreast attack, as it gives them a chance to concentrate their massive missile firepower.

To the average squadron commander, Klingon warfare stresses movement. Thus, during battle, a Klingon squadron will spend a great deal of time trying to get behind their foes or in some way confuse them. If Klingon squadron leaders feel that they are being outmaneuvered, they will often attempt to disengage. To the Klingons this is not cowardly, but it is an attempt to save valuable resources for the empire. Such movement warfare is more common in the destroyer squadrons, since their light weapons load (compared to the cruisers) makes movement their best weapon.

The advent of the cloaking device has added a new dimension to Klingon squadron tactics. Ships that are equipped with this device are always posted together, and form their own squadrons. One of the most effective cloaked squadrons is Kilistz's Squadron, known throughout the Triangle for their jet-black D-14 destroyers, Cloaked squadrons, or invisible squadrons as the Klingons call them, will deploy to their patrol area, cloak, and wait in ambush for a predetermined amount of time. Then they will move on to their next area and repeat the process until their patrol cycle ends.

There is a final type of squadron operations that is rather unique to Klingon tactical doctrine. This is the concept of independent operations. In normal circumstances a squadron operates out of a base, be it a starbase or a defense outpost. On independent operations, the squadron is cut loose from all support and operates on its own. For these operations one or more tenders are added to the squadron to help maintain the ships. The crews are expected to forage for supplies; this usually involves convoy raiding. Most of the famous raiding expeditions undertaken by Imperial forces were done as independent operations.

In some cases a squadron sent on an independent operation is given a specific goal or mission. In this case, combat will usually be avoided until after the mission is carried out. This is one of the few cases when a Klingon ship will actually refuse combat regardless of the circumstances.

As might be expected, the most popular squadron for independent operations is the traditional D-7 grouping. In recent years, though, the L-9 squadrons have gained a reputation for successful combined operations that rivals that of the D-7.

It should be noted that Klingons do take prisoners, but only if it is practical or necessary. They will attack any ship, armed or not, that ventures into space claimed by the empire. They will also attack ships that are more powerful than their squadron, simply to prove that it can be done.

An additional note is required concerning the position/title of squadron leader in the Imperial Navy. While the squadron leader usually holds the rank of captain, he is the leader of his squadron. This is understood by Klingon officers, and the title "Squadron Leader" is used instead of "Captain" in this case.

BATTLE GROUP OPERATIONS

Battle group tactics are similar to squadron tactics. The firepower tends to be greater, especially if the battle group is commanded by an admiral in a battleship, but the general purpose remains the same. As mentioned above, a battle group is simply two to three squadrons placed under unified command, usually that of an admiral. The individual squadrons still exist, but they are now part of a numbered battle group. For example; Kolar's Squadron, Kaz's Squadron, and Kilistz's Squadron are unified under the command of Admiral Kutan as Battle Group One. In addition to the ships belonging to the individual squadrons, Battle Group One contains three tenders and the admiral's flagship, the *Emperor's Fist*. Such a battle group would only be formed during a crisis situation, and would not remain in existence long. It is worth noting that the three-squadron version is much more

common than the weaker version. Klingons believe in concentrating their striking power as much as possible.

Battle groups travel in a unique formation. Each squadron remains in an arrowhead, but these smaller arrowheads are combined to form what is known as a "grand arrowhead." In such a formation the strongest squadron is placed at the point, with the weaker squadrons forming the corners. In the hollow center of this formation is the flagship and any tenders assigned to the battle group. During combat the grand arrowhead, like the smaller version, is converted into a line abreast.

Battle group tactics stress shock over surprise, as the Klingon tacticians feel that such a large formation would have a hard time sneaking up on anyone. When a Klingon battle group goes into combat, each squadron tries to locate the opposing flagship and destroy it. In some cases a single squadron will be given this duty, while the other squadron(s) and the flagship engage the opposing ships.

Admiral Kutan, one of the Imperial Navy's newest tacticians, has evolved a new doctrine known as las'ti' chitan, literally "disunified command." According to this popular doctrine, the flagship and its attending admiral exercise control over the battle group only during non-combat situations. During combat, the separate squadrons act as individual units. This gives the Klingons some immunity from the problems that can result from the destruction of a flagship. It also conforms to the Klingon doctrine of mobile warfare, as it allows each squadron to act as it would in squadron combat. This disunified command approach often gives defending Starfleet officers the impression that they are being attacked by more ships than they really are.

If one of the squadrons in a battle group is an invisible squadron, things often proceed differently. Disunified command is *never* used in such a case; instead, an ambush is set. Any ships that are able to cloak (at least three) do so, and the rest of the battle group act as bait, attempting to lead any enemy ships into the cloaked ships' weapons arcs. Then the waiting ships uncloak and the fleeing vessels turn suddenly and open fire.

In addition to the usual battle group, the Klingons often use a very similar formation known as an assault group. This is similar to a battle group, except that one of the squadrons involved is always an assault squadron. This assault squadron is composed of anywhere from one to four assault ships of either the T-5 or T-12 class. The assault group is only used when a small planet is to be invaded or reinforced. It is a rare formation in the Imperial Navy, and is seldom seen near Federation borders.

Independent operations are seldom undertaken by battle groups for the simple reason that they are too large to be effective in such a function. The simple fact that battleships are often included in battle groups precludes their use on independent operations since a battleship represents too much of an investment to be risked in such a fashion. Experience has also shown Klingon tacticians that battle groups are too hard to support away from major repair facilities for the length of time an independent operation requires.

This is not to say that battle groups do not operate on their own. One of the prime requirements of a battle group is that it should be able to support itself in a combat environment for a reasonable length of time. In any case, the planners in the Imperial Klingon Navy have decided that the battle group is not suited for independent operations, and thus it is never seen on them. The reasons for this decision are more political than military, as a battle group is considered much too powerful to be trusted under independent command conditions.

It is worth noting here that it would be possible for the Klingons to form an invisible squadron. Given the number of ships in the Imperial Navy that are fitted with cloaking devices, such a formation would be quite powerful. Such a group might be organized as follows: IL-13D battleship, the flagship; Kinin's Squadron (2 D-7 cruisers and 1 D-7 cruiser); Kuln's Squadron (3 D-32 cruisers); and Kija's Squadron (1 K-22 scout and 2 D-14 destroyers). No tenders or assault ships would be attached, unless specially modified versions with cloaking devices became available. Please note that all the squadrons mentioned above do exist. It is possible that the Klingons have in fact used such a battle group. If it did exist, Battle Group Five (a designation commonly floated around the halls of Starfleet Intelligence) would be primarily a raiding unit.

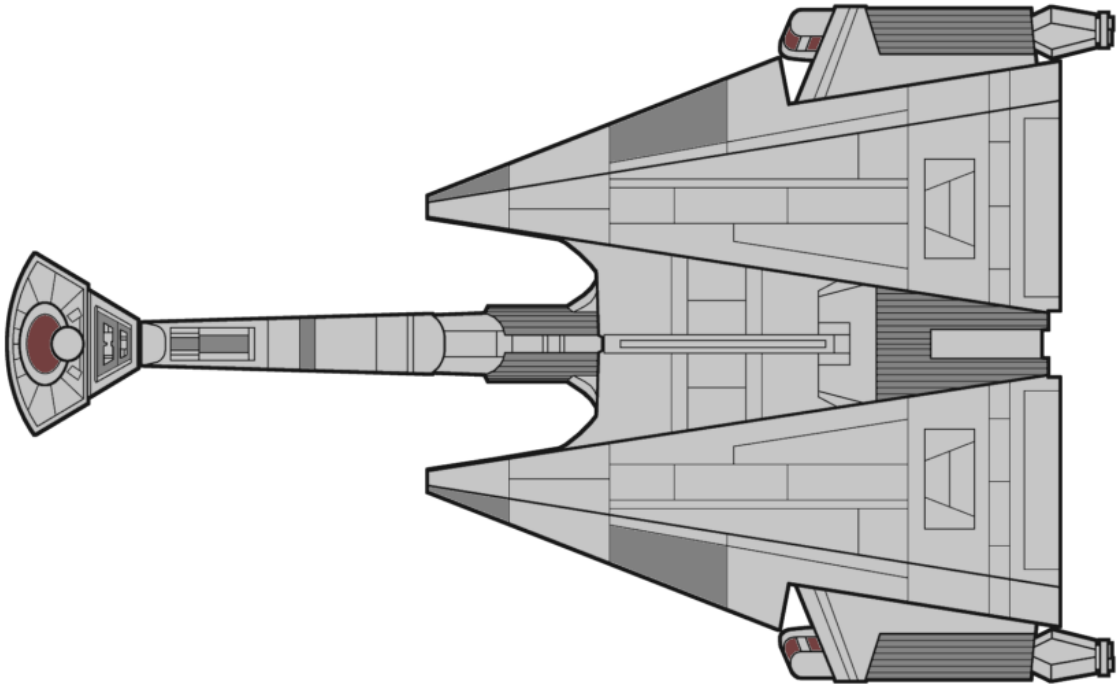
WAR OPERATIONS

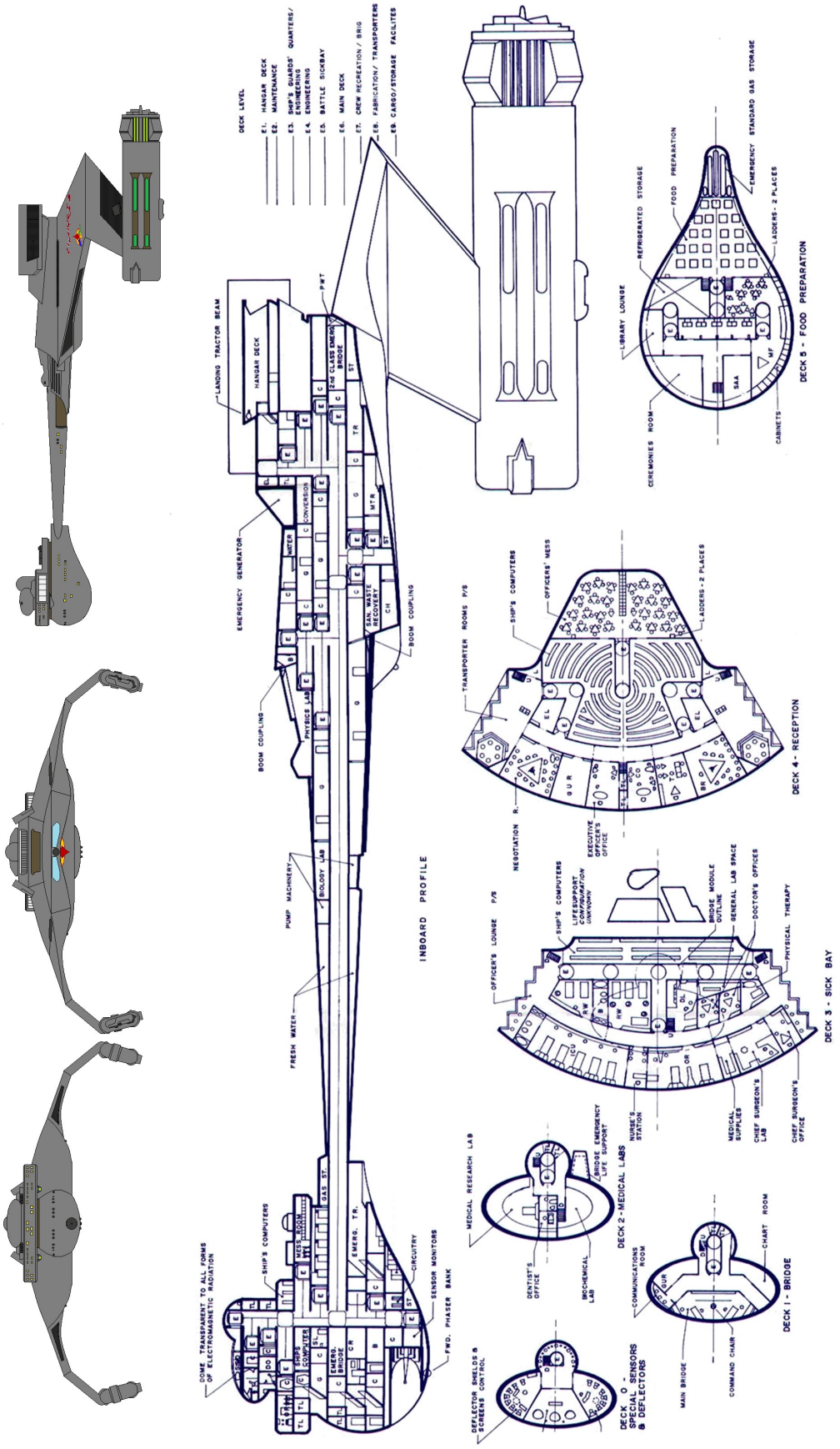
The final tactical unit used by the Klingon Navy is the war operations unit. This is one of the largest, and rarest, groupings in the Klingon Navy. It has not been seen by the Federation since the Four Years War.

A war fleet is composed of any number of (usually from four to eight) battle groups and assault groups. This entire force is placed under the command of either three admirals and two generals or two thought admirals and two generals. The generals are included in the chain of command for the simple reason that they command all the Imperial Marines on the assault ships, and they handle the land actions. A war fleet travels in a special box formation known as K'nan'oltaz, or the Emperor's Fortress. This box is formed by individual battle groups acting as the sides with the assault groups, the command squadron (two battleships—of either type—and one L42A or B frigate escort), and the support squadron (any tenders and mobile repair facilities) in the center of this fortress.

A war fleet forming up for combat is, according to Admiral Kutan, one of the most impressive sights in the universe. Though Admiral Kutan might be exaggerating, the sight of anywhere from thirty to one hundred fighting starships forming a battle line must be truly awesome. Since the war fleet is so rare, it is difficult to find any established guidelines for its use in combat. It can be assumed, though, that it acts like a large version of the battle group. It is unlikely that disunified command would be used with a force of this size. War fleets never engage in independent operations.

Given the size of the Klingon Empire, it is probable that there are other tactical doctrines in existence that the Federation is not yet aware of. The existence of another Klingon foe to coreward (revealed by findings of Operation Dixie) and the fact that certain classes of Klingon vessels (the D-20 class cruisers and the K-24 and K-27 class escorts being three good examples) are almost never encountered by Starfleet ships make this almost certain. Thus Starfleet officers must always be on their guard when facing Klingon vessels. It is a common saying among Starfleet captains that, when dealing with the Klingon Empire, it's always possible that your ship might be a test subject for a new Klingon tactical idea.




INBOARD PROFILE
DECK LEVEL
E1. HANGAR DECK
E2. MAINTENANCE
E3. SHIP'S GUARDS' QUARTERS/ ENGINEERING
E4. ENGINEERING
E5. BATTLE SICKBAY
E6. MAIN DECK
E7. CREW RECREATION/ BRIG
E8. FABRICATION/ TRANSPORTERS
E9. CARGO/STORAGE FACILITIES
LANDING TRACTOR BEAM
HANGAR DECK
EMERGENCY GENERATOR
BOOM COUPLING
PHYSICS LAB
PUMP MACHINERY
BIOLOGY LAB
FRESH WATER
SHIP'S COMPUTERS
DOME, TRANSPARENT TO ALL FORMS OF ELECTROMAGNETIC RADIATION
EMERG. BRIDGE
SHIPS COMPUTER
MESS ROOM
EMERG. TR.
CIRCUITRY
SENSOR MONITORS
FWD. PHASER BANK
DECK 0 - SPECIAL SENSORS & DEFLECTORS
DEFLECTOR SHIELDS & SCREENS CONTROL
DECK 1 - BRIDGE
MAIN BRIDGE
COMMAND CHAIR
COMMUNICATIONS ROOM
CHART ROOM
DECK 2 - MEDICAL LABS
MEDICAL RESEARCH LAB
DENTIST'S OFFICE
BIOCHEMICAL LAB
BRIDGE EMERGENCY LIFE SUPPORT
NURSE'S STATION
DECK 3 - SICK BAY
OFFICER'S LOUNGE
SHIP'S COMPUTERS
LIFESUPPORT CONSERVATION UNKNOWN
BRIDGE MODULE OUTLINE
GENERAL LAB SPACE
DOCTOR'S OFFICES
PHYSICAL THERAPY
MEDICAL SUPPLIES
CHIEF SURGEON'S LAB
CHIEF SURGEON'S OFFICE
DECK 4 - RECEPTION
TRANSPORTER ROOMS P/S
SHIP'S COMPUTERS
OFFICERS' MESS
LADDERS - 2 PLACES
NEGOTIATION R.
EXECUTIVE OFFICER'S OFFICE
DECK 5 - FOOD PREPARATION
LIBRARY LOUNGE
REFRIGERATED STORAGE
FOOD PREPARATION
EMERGENCY STANDARD GAS STORAGE
LADDERS - 2 PLACES
CEREMONIES ROOM
CABINETS

Selected Klingon Vessels

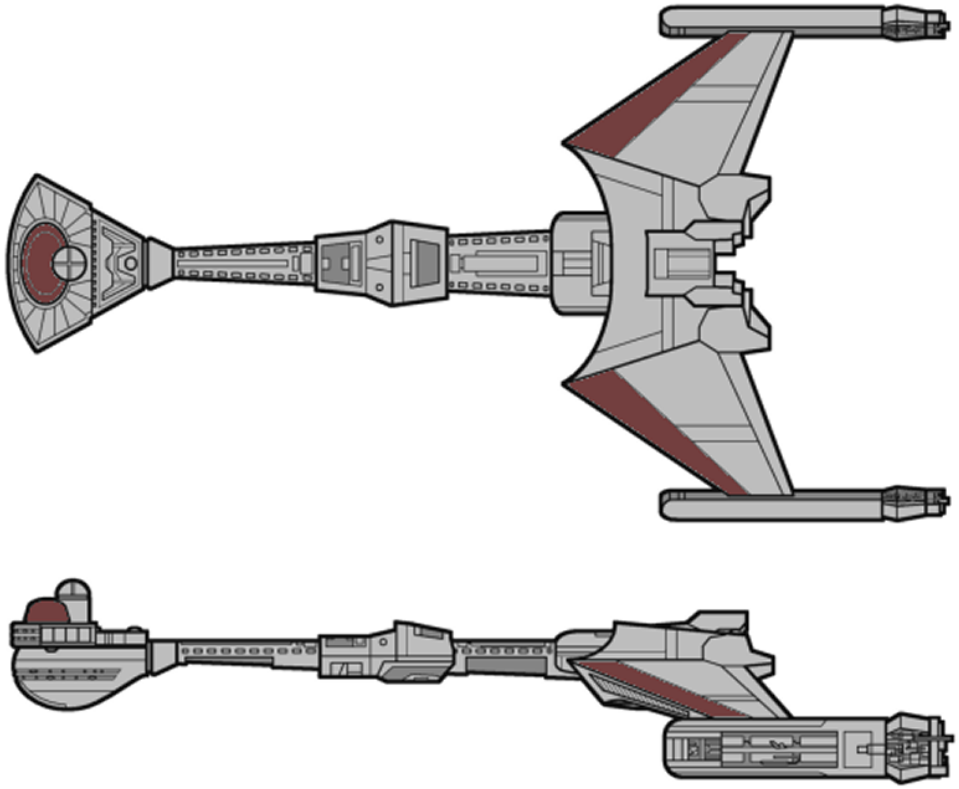
D-16 "Swiftwind"

The D-16, by far the most widely used destroyer in the Klingon Imperial Navy, is found in every region of Klingon space and in the Triangle. There are even reports of D-16 groups accompanying research efforts in the spinward areas.

Like other Klingon vessels, the D-16 has the command pod forward of the main hull, though the boom or neck is considerably smaller than on other designs. The thin neck has no storage compartments or uses other than to contain a horizontal turbolift. The pod has a jettison mechanism coupled with a small impulse drive system, but, unlike other self-contained pods, it contains no weapons. All the bridge crew quarters are located in the pod, as are food synthesizers and life-support systems.

The main hull of the D-16 is very large and spacious, featuring a very effective compartmented design to reduce decompressive explosion in case of penetration. The warp drives are mounted at the outer edge of the wings, giving the ship a gull-wing appearance and its nickname. The warp engines may be jettisoned in case of an overload, leaving the hull to operate with its impulse drive system located center-aft. Inside the hull, forward of the impulse drive, is the engineering section for the entire ship, occupying a roomy eight decks. Forward of engineering, in the center-forward area of the main hull just above the connecting point for the boom, is the impressive shuttlebay, containing space for twelve shuttlecraft, more than most major warships. The beam weapons are mounted on the underside of the main hull, with the forward-firing KD-5s at the corners and center of the hull and the aft-firing KD-14 centrally mounted; in later models, the KD-14 is mounted on the bottom of the torpedo bay.

D-16 "SWIFTWIND" CLASS DESTROYER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	10
CREW	170

DIMENSIONS	
DEADWEIGHT	70,800 MT
LENGTH	190M
BREADTH	100M
HEIGHT	28M

ARMAMENT	
DISRUPTORS	4 [F/P/S, A]
PHOTON TORPEDOES	NONE
DEFENSIVE DEFLECTOR SHIELDS	KGH-A
NAVIGATIONAL DEFLECTOR	TYPE A
TRACTOR BEAM EMITTER	TYPE C

PROPULSION SYSTEMS	
WARP DRIVE	KW-3 MK D - TANDEM
IMPULSE DRIVE	KIB-2
REACTIVE CONTROL	KRC-32-FFG

SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	1

SECONDARY SYSTEMS	
MAIN COMPUTER	KCC MK I
ACTIVE SENSOR SUITE	MK AF
PASSIVE SENSOR SUITE	MK DC
TRANSPORTERS	2 STD, 1 CARGO
LIFE SUPPORT	MK F

MISSION PROFILE	
MISSION TYPE	DESTROYER
MAXIMUM OPERATING RANGE	2 YEARS

D-4 "Predator"

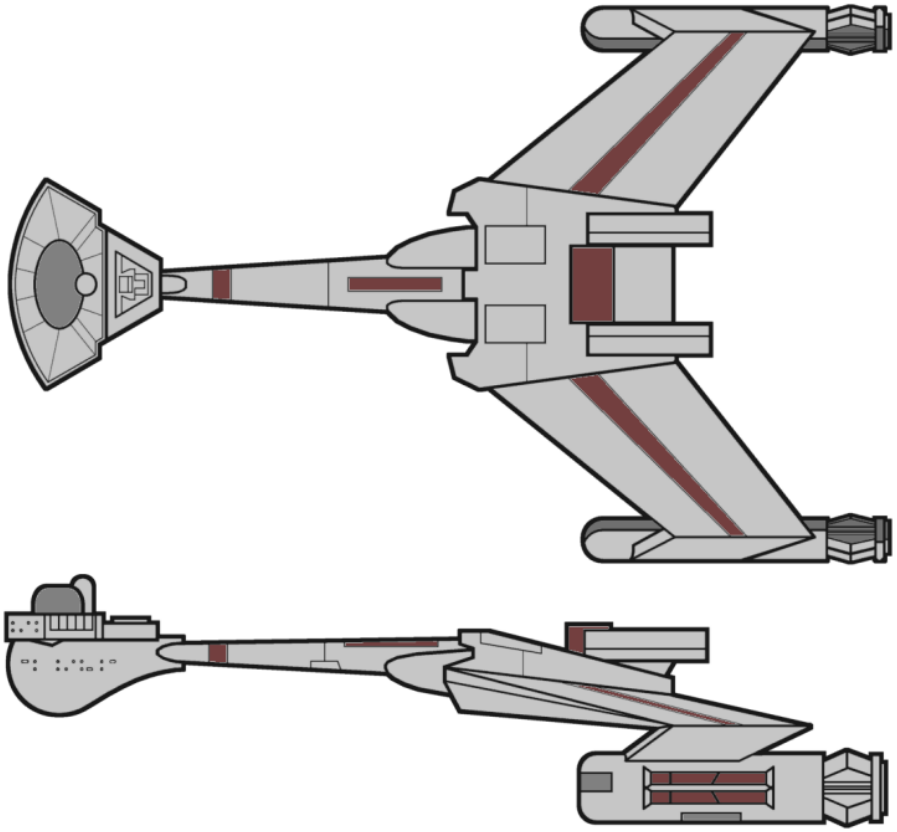
The D-4, predecessor to the famed D-7 class, pioneered the command pod forward design that has become the standard for most modern Klingon warships. The class was introduced on stardate 2230 with the commissioning of eight ships, which had been produced at the alarming rate of one per month at facilities operating as if under wartime production orders. This was a clear signal that the Klingons were either preparing for a war with either Romulan or Federation forces, or were involved in a conflict along an unknown border. Only recently, because of intelligence gained from Operation Dixie, has it come to light that the Klingons were in fact being attacked by an unknown enemy along their coreward border. During this conflict the D-4 saw extensive action and went through several different modifications, many of which were never brought into production. This conflict ended somewhere around 2240, slowing further development.

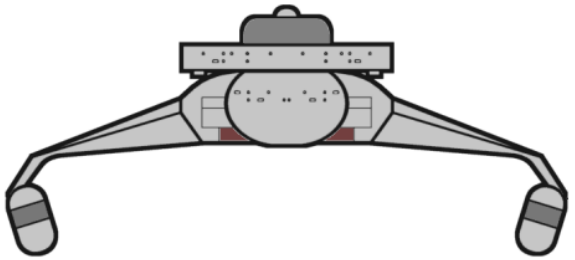
The D4 was filled to capacity with heavy weaponry and shielding, deuterium and antimatter fuels, and the largest, most powerful reactors in the Klingon inventory. However, the weight-power curves of the Klingon M/AM reactors were still relatively shallow, meaning that a given increase in reactor weight resulted in only a similar or lesser increase in reactor power output. In contrast, Federation M/AM reactors during this period were doubling in power output every fifteen years while remaining the same size or becoming smaller.

Although the D-4's dual-reactor configuration freed the M/AM reactor of the "responsibility" of providing all power for the warp drive, the weight and performance penalties of carrying two full-sized reactors were considerable. The D-4, with a maximum speed of warp 4.8, was certainly faster than the earlier D-3, but was still marginally slower than comparable fusion-powered Romulan vessels at maximum speed. Furthermore, because of its immense size, the D-4 maneuvered extremely poorly at warp and responded even more sluggishly at impulse speeds. Therefore, unless great advances were made in reactor efficiency, warp-field dynamics, or spaceframe strength, the Klingons could never hope to build ships that could hold their own in combat against the best of the Federation or even of the Romulan Empire.

Because of valid concerns that the ballooning size and weight of the weapons, reactors, and fuel would further compromise performance, the designers of the D-4 made the decision to compromise crew comfort and safety as well. Facilities and living spaces for the ships' large crews were severely limited, the thickness of reactor shielding was decreased, and backup systems were removed. As a result, service aboard D-4s was brutal and harsh, and crews occasionally mutinied rather than endure the squalid conditions for cruises lasting months or years. Several captains, often incompetent sons of Great Houses, are said to have been killed after venturing into their ship's stifling, fetid lower decks without armed bodyguards.

D-4 "PREDATOR" CLASS CRUISER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	15
CREW	280

DIMENSIONS	
DEADWEIGHT	82,500 MT
LENGTH	205M
BREADTH	130M
HEIGHT	45M

ARMAMENT	
DISRUPTORS	5 [F/P/S, A]
PHOTON TORPEDOES	NONE
DEFENSIVE DEFLECTOR SHIELDS	KGA-B
NAVIGATIONAL DEFLECTOR	TYPE A
TRACTOR BEAM EMITTER	TYPE B

PROPULSION SYSTEMS	
WARP DRIVE	KW-2 MK S - TANDEM
IMPULSE DRIVE	KIB-1
REACTIVE CONTROL	KRC-31-FFA

SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	1

SECONDARY SYSTEMS	
MAIN COMPUTER	KCC MK II
ACTIVE SENSOR SUITE	MK AD
PASSIVE SENSOR SUITE	MK KF
TRANSPORTERS	3 STD, 1 COMBAT, 1 CARGO
LIFE SUPPORT	MK C

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	3 YEARS

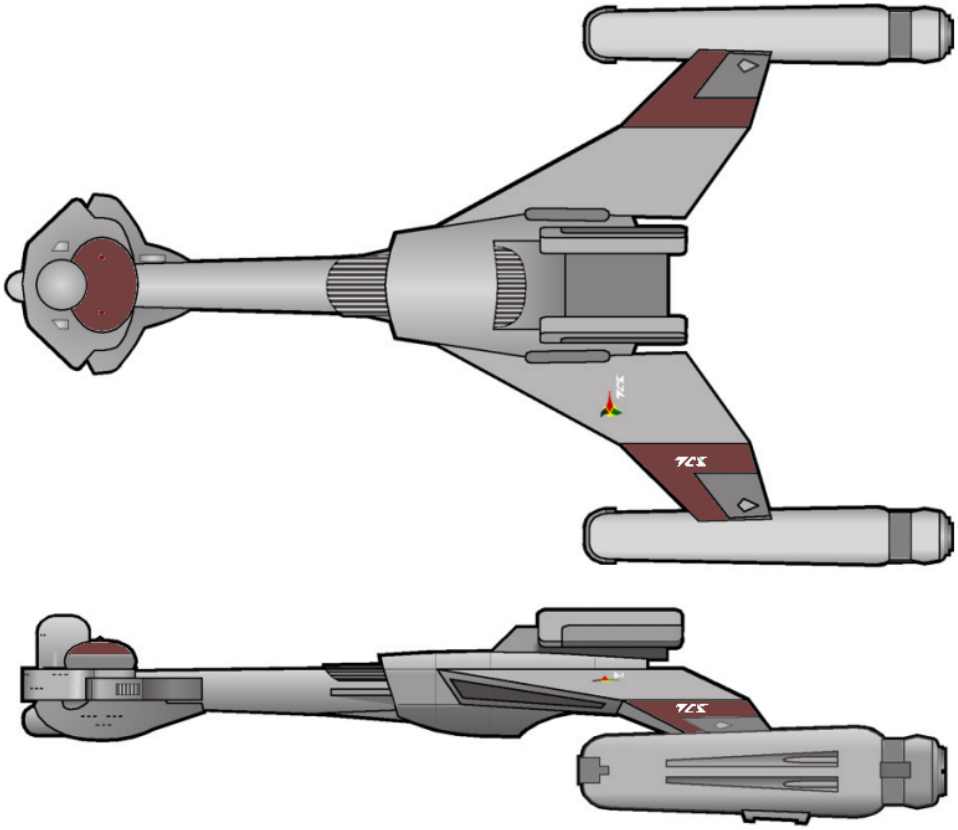
D-6 "Stalker"

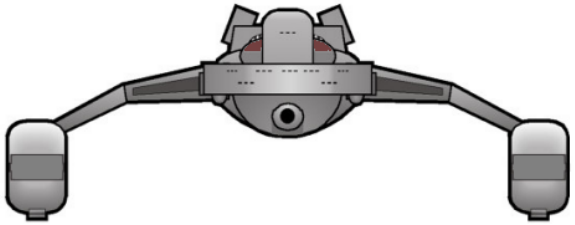
Design work on a new Klingon strike cruiser to support this new offensive doctrine was started in 2236. The resulting D-6 cruiser, which entered service in 2241, was a radical change from the preceding D-5 class, both internally and externally. All ship's systems were designed to provide extremely high levels of performance with little regard for long-term reliability. To reduce weight, the only warp reactor carried was a compact third-generation M/AM reactor of completely Klingon design that could sustain output at near-maximal levels for approximately 150 hours without shutdown. However, after operating at such levels for a total of 500 hours, overhaul in dry dock was required to prevent catastrophic malfunction. The relatively large nacelles (accounting for nearly half of total displacement) were able to handle extremely high levels of channeled power and achieve maximum speeds for days at a time. However, their warp coils had to be replaced after a stunningly short 250,000 Cochrane-hours. (In contrast, contemporary Federation nacelles were normally rated for at least 10 million Cochrane-hours.) Therefore, the warp coils would be entirely depleted by cruising at warp 7 for less than thirty days.

Other aspects of the ship also reflected its short-range strike role. Although the D-6 carried a fusion reactor, it was small and powered only the impulse drive, energetic shielding, and beam weaponry. The impulse drive was a high-capacity, high-consumption system which, again, was designed to provide extremely high thrust levels for short periods of time. Crew quarters and life-support machinery were decreased to the minimum necessary for strike missions lasting, at most, one or two months. The command head, which mounted a powerful disruptor cannon on its midline and smaller disruptors under the brim of the "hat," was separated from the engineering hull by a neck 60 m long but only 14 m wide. The 34-m-wide engineering hull itself was barely large enough to house the M/AM reactor, AM containment bottles, deuterium tanks, and the small fusion reactor. The engineering hull retained the deep rear-ventral fantail of the D-5. The wings supporting the warp nacelles were also of new "cranked" configuration that would be characteristic of later Klingon designs: the inner wings section had a slight upper-surface anhedral (13 degrees) but were swept back 62 degrees. In contrast, the outer wing sections were swept back only 46 degrees but were angled downward 28 degrees.

As soon as the design for the D-6 was finalized, large-scale production started at three Klingon shipyards, each controlled by a different Great House. By early 2241, some thirty D-6 cruisers had been constructed. The Klingon High Council was extremely pleased by the D-6's performance in trials: in its supercruise mode, the D-6 was able to sustain a speed of warp 7.6 and cross a five-light-year distance between neighboring star systems in less than five days. The D-6's maximum speed of warp 7.9 made it marginally faster than the Federation's fastest ships of the time.

D-6 "STALKER" CRUISER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	18
CREW	297

DIMENSIONS	
DEADWEIGHT	73,800 MT
LENGTH	228M
BREADTH	135M
HEIGHT	52M

ARMAMENT	
DISRUPTORS	3 [2F, 1/P/S,]
PHOTON TORPEDOES	NONE
DEFENSIVE DEFLECTOR SHIELDS	KGH-E
NAVIGATIONAL DEFLECTOR	TYPE D
TRACTOR BEAM EMITTER	TYPE C

PROPULSION SYSTEMS	
WARP DRIVE	KW-5 MK (X) - TANDEM
IMPULSE DRIVE	KIB-4
REACTIVE CONTROL	KRD-36-FDF

SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	1

SECONDARY SYSTEMS	
MAIN COMPUTER	KAD MK IV
ACTIVE SENSOR SUITE	MK BD
PASSIVE SENSOR SUITE	MK BS
TRANSPORTERS	3 STD, 1 CARGO
LIFE SUPPORT	MK G

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	2.5 YEARS

D-7 "Painbringer"

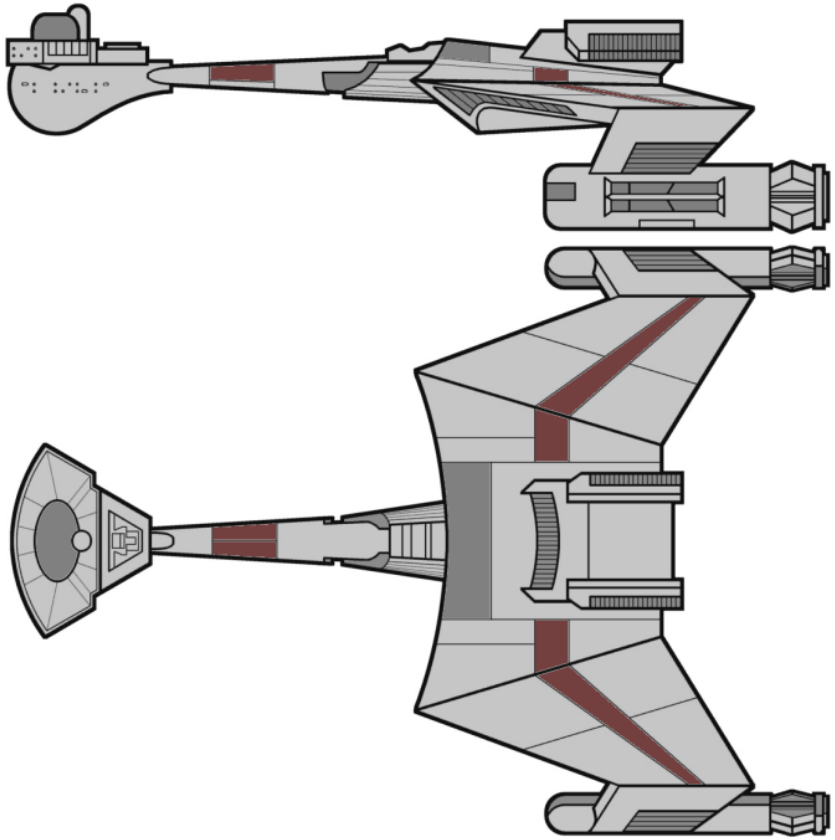
The D-7 is probably the most infamous cruiser ever to stalk the spacelanes. These ships are associated with death and destruction on a scale second to none. When first introduced, these vessels captured the minds and spirits of the Klingon commanders so fully that for many years they were the symbol of Klingon tyranny.

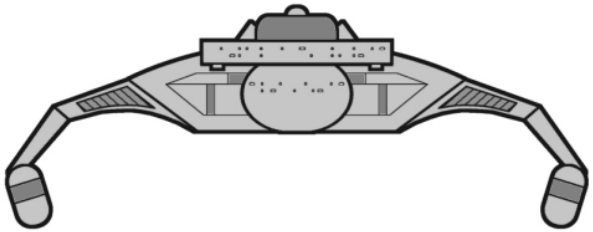
This design was developed from the earlier D-4 cruiser and incorporated all its most popular features. The command pod mounted forward on the boom assembly and the wing-like main hull were changed slightly in the design, but all the basic concepts were retained. In all models, the command pod can be jettisoned in case of emergency. A small micro-impulse drive system, mounted into the pod just for such emergencies, allows the pod to maneuver itself and travel short distances in hopes of rescue. A pod can maintain the life-support systems and operate the short-range sensors and weapons for up to one year. One of the main features of the pod is the disruptors mounted below the bridge: these weapons will give protection from hostiles and also allow for the self-destruction of the pod if capture is imminent.

The secondary bridge, weapons control, and all engineering facilities are located in the main hull. Separated from the command pod, this section of the vessel is capable of maintaining fully functional life-support, weapons, and engine systems for up to two years. Of course, this section is capable of warp speeds and will effect its own rescue much quicker than can the command pod. Within the engineering section of the main hull are the matter/antimatter mix chambers, little shielded, as servitor races man the engineering compartments of most Klingon vessels. All D-7 models are capable of jettisoning the warp engines in case of an uncontrolled mix in the matter/antimatter chamber. This would leave the ship with only the impulse engines for power. In most cases where warp engines have had to be ejected, the command pod has been separated first to ensure the captain will be safe.

In the center section of the main hull are compartments containing hypothermia capsules for the marines. The troops are kept in a frozen state until they are needed, which reduces the requirement for food and life support and thus prolongs the on-station time of the ship.

D-7A "PAINBRINGER" CLASS CRUISER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	16
CREW	390

DIMENSIONS	
DEADWEIGHT	185,000 MT
LENGTH	230M
BREADTH	172M
HEIGHT	78M

ARMAMENT	
DISRUPTORS	2 [F/P, F/S]
PHOTON TORPEDOES	1 [F]
DEFENSIVE DEFLECTOR SHIELDS	KGH-A
NAVIGATIONAL DEFLECTOR	TYPE B
TRACTOR BEAM EMITTER	TYPE R

PROPULSION SYSTEMS	
WARP DRIVE	KW-10 MK J - TANDEM
IMPULSE DRIVE	KI05-HJ3
REACTIVE CONTROL	KRC-32-FFG

SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	2

SECONDARY SYSTEMS	
MAIN COMPUTER	K'Tomoim MK II
ACTIVE SENSOR SUITE	MK JE
PASSIVE SENSOR SUITE	MK JD
TRANSPORTERS	2 STD, 2 EVAC, 2 CARGO
LIFE SUPPORT	MK R

MISSION PROFILE	
MISSION TYPE	MULTIPLE
MAXIMUM OPERATING RANGE	3 YEARS

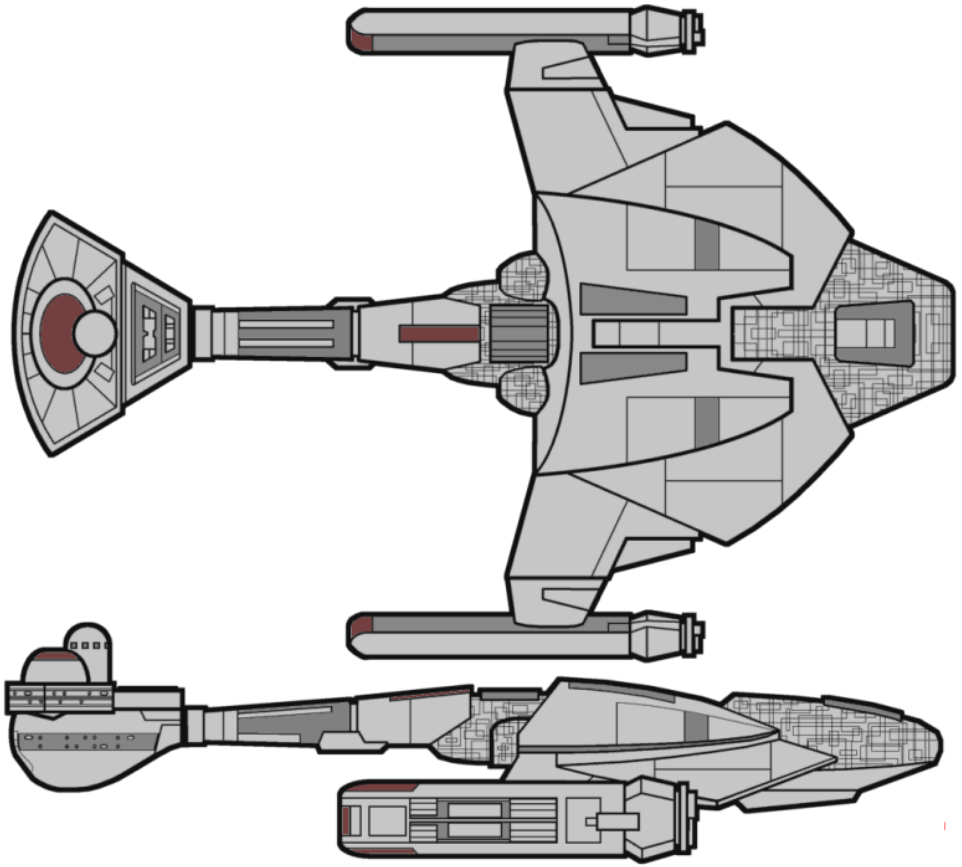
D-9 "Seeker"

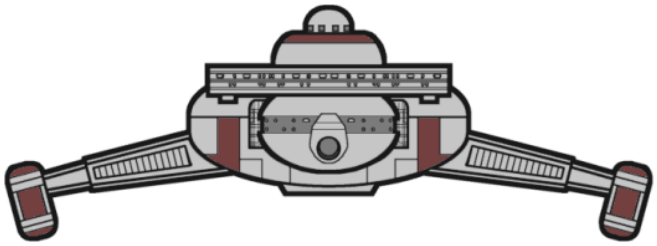
The D-9 cruiser was brought into service during the Four Years War to act as a research vessel. For years, the Klingon Empire had been halted in its attempts at expansion. To the rimward lay the Federation; toward the trailing arm were the Romulans; and it has been speculated that to the coreward lay some unknown power able to hold the Klingons in check. This left the spinward area, as yet not fully explored. Expansion into this void had been slow due to the great distances from the homeworld of Q'onos and the apparent lack of suitable worlds for conquest, but the desire to outflank the Federation altered that. The newly constructed D-9 cruiser was intended to lead this effort.

The D-9A prototype was considered to be undergunned and was dropped from production even before it had been commissioned. An up-gunned version, the D-9B with mainly defensive weaponry, was commissioned in 2255 and was immediately sent into the new expansion area. These ships and their accompanying scout ships were to map new areas and evaluate the cultural levels of any races encountered. The war with the Federation ended one year after the D-9Bs entered service, and the sense of urgency for the flanking expansion effort diminished. The flanking movement is portrayed in a Starfleet commanders' test known as Operation Armageddon.

Considered by most to be a failed design, it was reportedly still in service in the Triangle as of the late 2270s.

D-9 "SEEKER" CLASS CRUISER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	60
CREW	320

DIMENSIONS	
DEADWEIGHT	105,800 MT
LENGTH	160M
BREADTH	110M
HEIGHT	24M

ARMAMENT	
DISRUPTORS	4 [2F, 1/P/S,]
PHOTON TORPEDOES	NONE
DEFENSIVE DEFLECTOR SHIELDS	KGH-D
NAVIGATIONAL DEFLECTOR	TYPE A
TRACTOR BEAM EMITTER	TYPE B

PROPULSION SYSTEMS	
WARP DRIVE	KW-3 MK A - TANDEM
IMPULSE DRIVE	KIB-1
REACTIVE CONTROL	KRC-30-FFG

SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	1

SECONDARY SYSTEMS	
MAIN COMPUTER	KAC MK IV
ACTIVE SENSOR SUITE	MK AF
PASSIVE SENSOR SUITE	MK DB
TRANSPORTERS	3 STD, 2 CARGO
LIFE SUPPORT	MK F

MISSION PROFILE	
MISSION TYPE	CRUISER
MAXIMUM OPERATING RANGE	2.5 YEARS

D-10 "Riskadh"

On stardate 2254, the D-10 cruiser, the design of which was strongly influenced by the D-7, was commissioned into service. The Klingon Imperial Command hoped to counter Starfleet's *Constitution*-class cruisers with this new vessel. The Four Years War was in its second year, and the Klingons had learned some of their lessons well. The D-10 featured a sturdy superstructure and the most effective shields the empire had to offer. The fore- and aft-mounted disruptors were far superior to the Federation lasers, but were not as destructive as the Federation's accelerator cannons. As soon as production began, the D-10As were rapidly sent into the Four Years War, where they proved to be the most powerful and feared ships in the Klingon Imperial Navy.

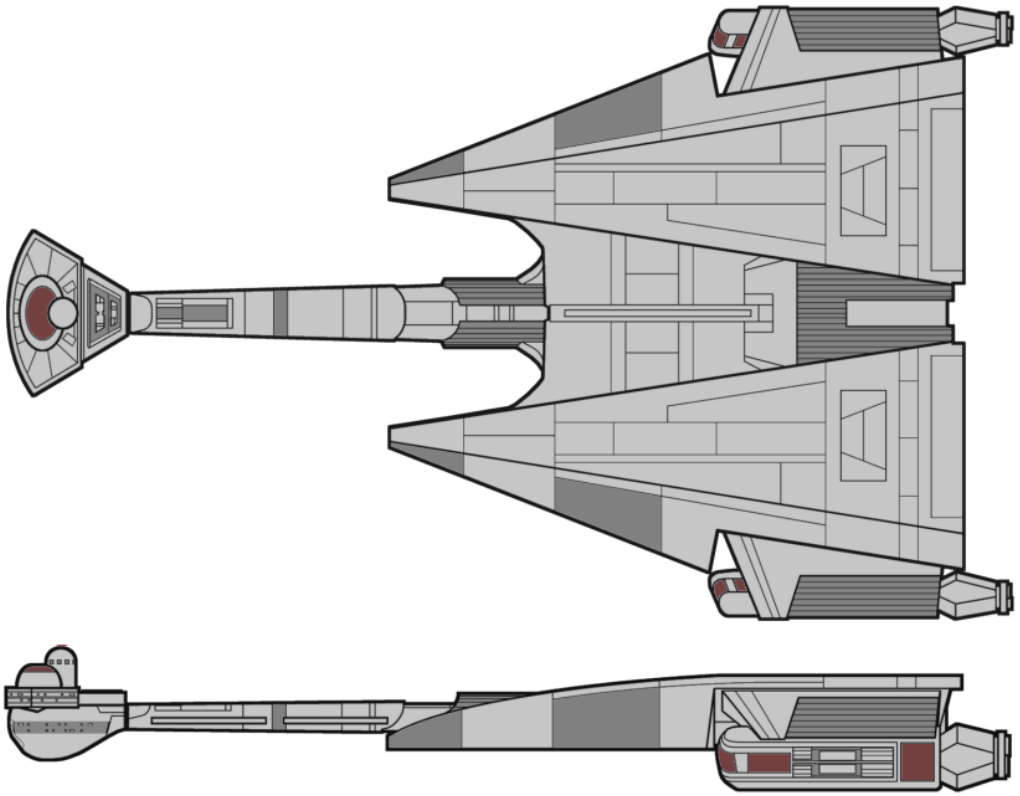
The D-10 used the same command pod as the D-7, thus eliminating the need for additional production facilities. Like the D-7's pod, that of the D-10 is capable of being jettisoned and has similar sublight maneuvering and life-support capabilities. In 2255, Starfleet captured a pod that had been jettisoned during the Battle of Kesse months earlier; the crew were alive and as well as could be expected.

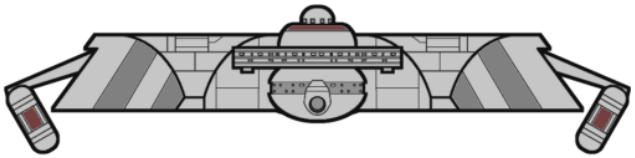
The main hull of the early D-10s contains the engineering section, shuttlebays, crew quarters, and assault troop hypothermia capsules; later models have no troop-carrying capabilities but instead have large research facilities. The warp engines are mounted on short pylons and are jettisonable. With the additional removal of the hypothermia capsules, the ship is capable of running on its impulse power alone for up to one year. The shuttle hangars are located on the upper wing surface of the main hull and are seen as two large doors. Directly aft of these doors are located the aft-firing disruptors; aft-firing photon torpedo tubes are located at the stern of the vessel just below the impulse exhaust port.

The D-10 is the only Klingon warship whose class name honors a Klingon family line: the Riskadh line, which died with its founder, Kahless the Unforgettable, the greatest of all emperors. D-10s are manufactured at the Taamar, Gnuu Re', Fonawl, Z'hai, and Mustaka facilities. The combined production rate is fourteen D-10Ds, twelve D-10Gs, and ten D-10Hs per year.

The model used a powerful warp engine, but mounted a fairly weak impulse system, the only real shortcoming of the vessel; the main engines allowed the ships to cruise at warp 6, with emergency speeds as high as warp 8. The weapons system consisted of six individually-mounted KD-6 disruptors and two aft-mounted KD-3s, giving the cruiser an offensive range capability 80,000 km greater than Federation warships.

D-10 "RISKADH" CLASS BATTLE CRUISER







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	30
CREW	485
TROOPS	320
DIMENSIONS	
DEADWEIGHT	104,800 MT
LENGTH	262M
BREADTH	157M
HEIGHT	30M

ARMAMENT	
DISRUPTORS	8 [F/P/S, A]
PHOTON TORPEDOES	1
DEFENSIVE DEFLECTOR SHIELDS	KGG-D
NAVIGATIONAL DEFLECTOR	TYPE C
TRACTOR BEAM EMITTER	TYPE D
PROPULSION SYSTEMS	
WARP DRIVE	KW-4 MK T - TANDEM
IMPULSE DRIVE	KIB-4
REACTIVE CONTROL	KRC-33-FFT

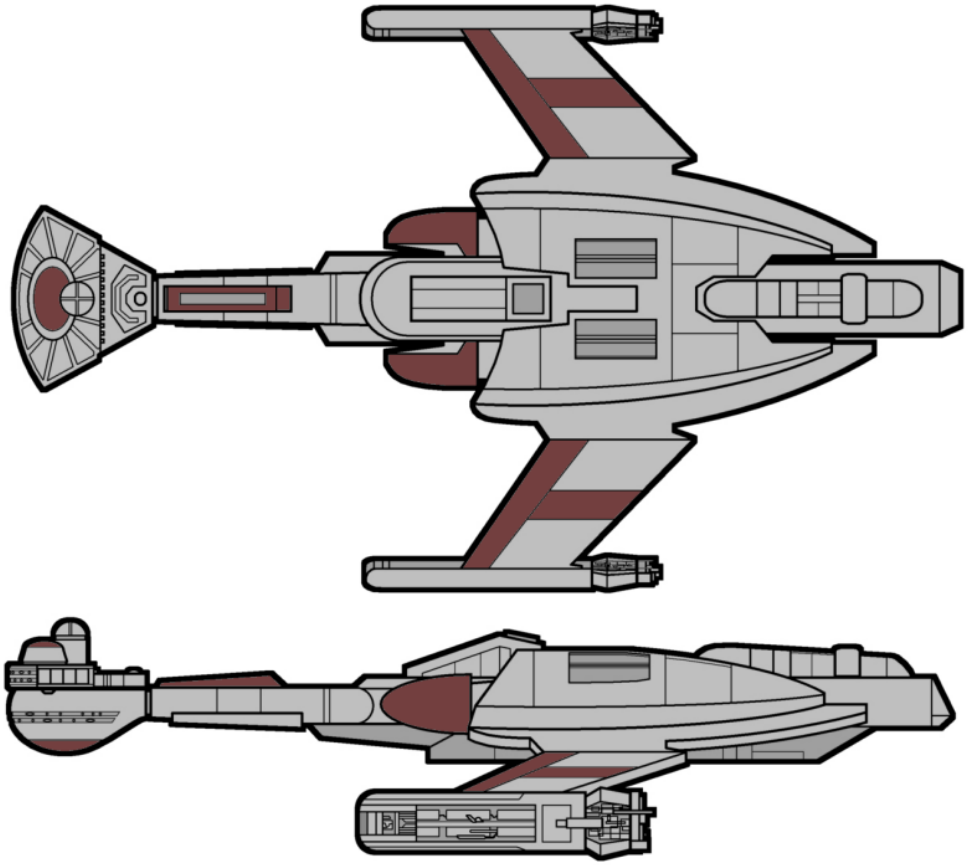
SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	4
SECONDARY SYSTEMS	
MAIN COMPUTER	KCC MK V
ACTIVE SENSOR SUITE	MK AZ
PASSIVE SENSOR SUITE	MK TY
TRANSPORTERS	4 STD, 6 COMBAT, 2 CARGO
LIFE SUPPORT	MK G

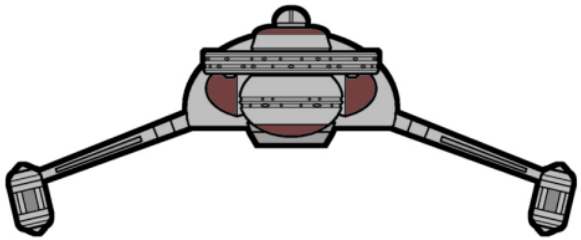
MISSION PROFILE	
MISSION TYPE	BATTLE CRUISER
MAXIMUM OPERATING RANGE	4 YEARS

T-3 "Mover"

The T-3 Mover was an attempt to design a spaceborne "landing craft" capable of hauling soldiers up to the planetary "beaches" and disgorging them onto the surface where battle awaited. Underpowered, undergunned, and slow, it was only effective when pitted against other assault ships, or the various monitors and cutters of the Federation and Romulan Empire. Pitted against larger cruisers and frigates, the T-3 was an easy target. They were always escorted by frigates and, later in the war, by heavy cruisers. As of 2276, no T-3s are in service, having been supplanted by superior designs and lack of funding to keep the older hulls from falling into disrepair.

T-3 "MOVER" ASSAULT SHIP







STANDARD COMPLEMENT	
OFFICERS [COMMAND]	62
TROOPS	800

DIMENSIONS	
DEADWEIGHT	73,800 MT
LENGTH	250M
BREADTH	150M
HEIGHT	50M

ARMAMENT	
DISRUPTORS	4 [3F, 1/P/S,]
PHOTON TORPEDOES	NONE
DEFENSIVE DEFLECTOR SHIELDS	KGH-D
NAVIGATIONAL DEFLECTOR	TYPE B
TRACTOR BEAM EMITTER	TYPE B

PROPULSION SYSTEMS	
WARP DRIVE	KW-4 MK B - TANDEM
IMPULSE DRIVE	KIB-3
REACTIVE CONTROL	KRD-35-FFG

SUPPLEMENTAL CRAFT	
TYPE B CONVEYANCE	1

SECONDARY SYSTEMS	
MAIN COMPUTER	KAC MK IV
ACTIVE SENSOR SUITE	MK AD
PASSIVE SENSOR SUITE	MK DB
TRANSPORTERS	6 STD, 6 TROOP, 2 CARGO
LIFE SUPPORT	MK F

MISSION PROFILE	
MISSION TYPE	TRANSPORT
MAXIMUM OPERATING RANGE	2 YEARS

