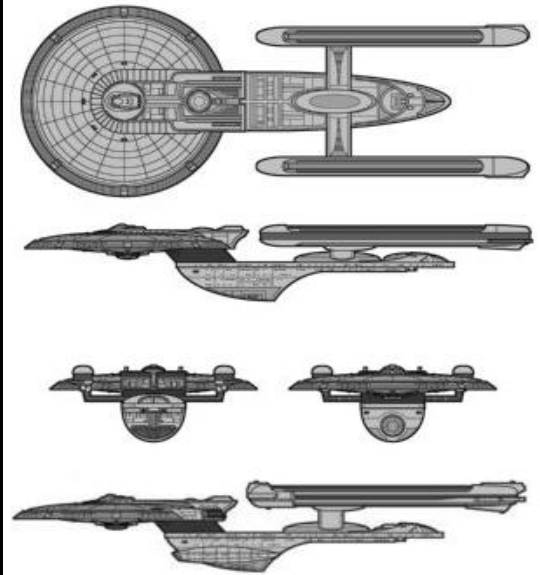




## Excelsior Class Explorer



<u>Classification:</u>	XIV	XIV	XIV	XIV	XIV
<u>Class:</u>	Mk II	Mk III	Mk IV	Mk V	Mk V
<u>Model:</u>	2288-2296	2293-2337	2302-2358	2340	2365
<u>Class Commission Date:</u>					
<u>Number Proposed:</u>					
<u>Constructed:</u>					
<u>Lost:</u>					
<u>Destroyed:</u>					
<u>Scrapped:</u>					
<u>Training:</u>					
<u>Captured:</u>					
<u>Sold:</u>					
<u>Superstructure:</u>	55	60	60	54	54
<u>Damage Chart:</u>					
<u>Dimensions:</u>					
<u>Length:</u>					
<u>Width:</u>					
<u>Height:</u>					
<u>Displacement:</u>	260060 mt	271425 mt	278105 mt	278565 mt	265562 mt
<u>Cargo Specs:</u>					
<u>Total SCU:</u>	457	467	474	483	464
<u>Cargo Capacity:</u>	22850 mt	23350 mt	23700 mt	24150 mt	23200 mt
<u>Computer Type:</u>	M-8	M-8	M-8	M-9	M-9
<u>Landing Capacity:</u>					
<u>Cloaking Device:</u>					
<u>Power to Engage:</u>					
<u>Transporters:</u>					
<u>6-person:</u>	7	7	7	7	7
<u>20-person Combat:</u>					
<u>22-person Emergency:</u>	7	7	7	7	7
<u>cargo:</u>	15	16	16	16	16
<u>Laboratories:</u>	46	47	47	47	46
<u>Brigs:</u>	21	22	22	22	21
<u>Replicators:</u>					
<u>Shuttlecraft:</u>					
<u>Light Shuttle:</u>					
<u>Standard Shuttle:</u>	13	13	13	13	13
<u>Ships Complement:</u>	813	831	844	862	826
<u>Officers:</u>	203	208	211	215	207
<u>Enlisted:</u>	610	623	633	646	620
<u>Troops:</u>					
<u>Passengers:</u>	20	20	20	20	20
<u>ENGINEERING:</u>					
<u>Total Power Available:</u>	116	116	124	128	158
<u>Movement Point Ratio:</u>	6/1	6/1	7/1	6/1	6/1
<u>Warp Engine Type:</u>	FWJ-1	FWJ-1	FWJ-2	FWO-2	FWY-3
<u>Number:</u>	2	2	2	2	2
<u>Power Units:</u>	38	38	42	44	55
<u>Stress Chart:</u>	E/G	E/G	F/H	G/I	F/H
<u>Optimum Speed:</u>	7.8	7.8	7.8	5.2	5.9
<u>Max Safe Cruising:</u>	12.0	12.0	12.0	8.0	9
<u>Emergency Speed:</u>	15.9	15.3	14.9	9.9	11.69
<u>Impulse Engine Type:</u>	FIG-3	FIG-3	FIG-3	FIG-3	FIK-10
<u>Power Units:</u>	40	40	40	40	48
<u>WEAPONS/DEFENSE</u>					
<u>Beam Weapon:</u>	FH-11	FH-11	FH-11	FH-21	FH-21
<u>Firing Arcs:</u>	2f/p, 2f, 2f/s, 4a	2f/p, 2f, 2f/s	2f/p, 2f, 2f/s, 4a	2f/p, 2f, 2f/s, 2a	2f/p, 2f, 2f/s
<u>Firing Chart:</u>	Y	Y	Y	X	X
<u>Maximum Power:</u>	10	10	10	18	18
<u>Damage Modifiers</u>					
+3	(1-10)	(1-10)	(1-10)	N/A	N/A
+2	(11-17)	(11-17)	(11-17)	(1-12)	(1-12)
+1	(18-24)	(18-24)	(18-24)	(13-20)	(13-20)
<u>Beam Weapon:</u>	None	FH-14	None	None	None
<u>Firing Arcs:</u>		2f/p, 2f/s, 4a			
<u>Firing Chart:</u>		T			
<u>Maximum Power:</u>		12			
<u>Damage Modifiers</u>					
+4		N/A			
+3		N/A			
+2		(1-10)			
+1		(11-18)			
<u>Torpedo Type:</u>	FP-4	FP-4	FP-9	FP-9	LYFP-AX1
<u>Firing Arcs:</u>	2f/p 1f, 2f/s, 1a	2f/p, 2f, 2f/s	2f/p, 2f, 2f/s	2f/p, 2f, 2f/s	8f, 4a
<u>Firing Chart:</u>	S	S	R	R	R
<u>Power To Arm:</u>	1	1	1	1	1
<u>Damage:</u>	20	20	28	28	12
<u>Stock:</u>	540	540	540	540	1080
<u>Shields:</u>					
<u>Shield Type:</u>	FSS	FSQ	FSQ	FSR	FSV
<u>Shield Point Ratio:</u>	1/4	1/4	1/4	1/3	1/4
<u>Maximum Shield:</u>	20	30	30	40	56
<u>Combat Efficiency</u>					
D-	467.1	582.3	559.0	635.9	710.0
WDF-	256.7	277.8	269.8	258.7	365.2
	182.0	209.6	207.2	245.8	194.4
<u>Procurement Cost-</u>	1707 MCr	1839 MCr	1855 MCr	1973 MCr	2903 MCr



### NOTES:

In the mid 2200's, the Anton, Nelson and Constitution class vessels represented the backbone of the United Federation of Planets exploratory fleets, with the Anton serving in a multitude of roles from Deep-space picket duty along the Klingon and Romulan Neutral Zones, Police patrols near Rigel and as Hospital Ships throughout the Federation. With the Anton class supplanting the Nelson as a surveyor and deep-space scientific platform, the Constitution class was the true ship-of-the-line for the Starfleet. However, the Constitution class was showing its age in engagements and endurance as the threat to Federation safety from the Klingon Empire increased. Starfleet needed a vessel that would not only compliment the Anton class, but also supplant the highly successful Constitution class. Further, this vessel had to have a longer on-station time than the Constitution class, more firepower, and most of all, be faster than the ship it was replacing. These were no small tasks to be met, but necessities from which Starfleet Command never wavered. The Excelsior class project began in 2258 with a call to the major fleet development centers across the Federation. And it would take the San Francisco Fleet Yards (Location of the Constitution Class development and construction) Nearly 10 years to devise a spaceframe design that would meet all of Starfleet's specifications save for the need for higher sustainable speeds.

Starfleet approved of the design, and commissioned a single vessel to be constructed. SFC still skeptical given the complete lack of M/ARA system for the vessel. Starfleet awarded the venerable Newport News Engineering Consortium, based out of Newport News, Rhode Island sector, the engineering contract with the unenviable task of designing a M/ARA system that would outperform and outlast the Constitution Class warp engines. The NNEC had designed the Nelson Class M/ARA configuration, which was at the time of its launching, the most efficient if not the fastest power plant in use by Starfleet. This configuration, however, was supplanted by the Constitution Class (and later the Constitution-Refit) M/ARA drive system.

The NNEC had a young engineer by the name of Doctor Yoshi Tokogawa, phd Warp Dynamics (who would later leave NNEC and found his own engineering firm, Yoyodyne Propulsion Systems), who ran with the popular theory of the day that speeds beyond Warp Ten were possible (Entering what was then dubbed Transwarp Speeds) Theorized that it was not only probable that the NNEC could develop such a drive, he was positive that such a device could be deployed. His team worked for nearly 8 years, hypothesizing, testing, and retesting their drive system, but until it was actually deployed in a vessel for testing that anyone could be sure that the drive worked. The math proved that Transwarp existed, but so far, experimental probe drives either ran out of fuel or failed to break Warp 10 with their current drive system as the test vehicles lacked the subspace field characteristics of an actual starship.



## Excelsior Class Explorer



The vessel had been in development for close to 14 years at that point, with millions of man-hours sunk in the development of a ship that had not seen the outside of a spacedock. By the end of 2272, however, the new, highly confidential and controversial drive system was gamma welded into the space frame. Two Impulse Reactors by the two new Scarbak Mk IV Impulse Drives, designed specifically for the Excelsior Class, were also added to the space frame, with only the most basic of internal compartmentalization completed, the frame, now assigned the registry NX-2000 and going with the project name *Excelsior*. Left the San Francisco Fleet Yards Orbital Facility for speed trials between the Sol system and Vulcan. The Excelsior was escorted by two Anton class starships, the USS *Archangelisk* and the USS *Sevastopol* on her maiden voyage to protect and to record the proceedings to verify the speed and efficiency of the new drives.

Initial testing was exciting, as the *Excelsior* outpaced her escorts and reached maximum speeds of Warp 9.4, and sustained a comfortable cruising speed of Warp 8. Moreover, her fuel consumption was well below the average curve, even when taking into account the additional mass a fully completed frame would add to the fuel usage rate calculations. While the Excelsior was never pushed hard enough to reach Warp 10, readouts aboard both the test vessel and the pace ships indicated that it was well within the realm of possibility. Starfleet deemed the test a success and ordered the Excelsior home to Sol for final hull completion and compartmentalization.

By the end of 2282, the USS *Excelsior*, NX-2000 was assigned to the command of Captain James Styles, and ordered out of San Francisco Fleet Yards orbital facility to Spacedock, Sol, where she would take on her crew, resupply, and begin her trial runs. Given the complexity and experimental nature of the newly dubbed "Transwarp Drive", the Engineering Department was headed up by newly promoted Captain Montgomery Scott, recently transferred over from the decommissioned USS *Enterprise*. Considered by many to be the best engineer in Starfleet, he was the logical and best choice to serve aboard the Excelsior.

Before the Excelsior could put out for her final shakedown cruise, Admiral Kirk and company stole the USS *Enterprise*, with the assistance of Captain Scott. As the *Enterprise* sped away from Spacedock, it seemed a natural chance for Starfleet Command to see what exactly the *Excelsior* could do and to prove the naysayers once and for all that the *Excelsior* was the next evolution in both space frame and propulsion design. When the ship failed to achieve Warp 1 and pursue the stolen *Enterprise*, SFC was dumbstruck. The Great Experiment had failed.

After action reports indicated that Captain Scott had succeeded in sabotaging completely and totally the Transwarp Drive by simply removing three duotronic processor support chips. The complexity of Dr. Tokogawa's design was its downfall and the Excelsior class returned to spacedock under Impulse power, and the NX-2000 returned to drydock to have its M/ARA drive removed and replaced with a more conventional NNEC Generation 5 M/ARA warp drive.

The new Generation 5 Warp Core would still propel the *Excelsior* space frame to a maximum speed of Warp 9.2, but only had endurance at that rate of roughly 10 minutes. Her fuel supply was consumed at a nearly identical rate as the Constitution class, and she required nearly the same amount of engineering care and training as the Constitution class.

Despite this, the spaceframe was still considered a success and after the final shakedown of the NX-2000, Starfleet ordered the construction of no less than 40 of the Excelsior Class in the first production contract. San Francisco, Antares IV, Tellar and Andor were all designated construction locations for the Excelsior Class, and by the time of her first redesign and refit, there were 28 Excelsior Class ships in service.

10 years and 28 ships later, some serious flaws were exposed in the original Excelsior design. Most notably, the Gen.5 Warp Core was fragile when compared to the overly complex but hardy Transwarp reactor. Further, the Scarbak Mark IV impulse engines were extremely inefficient at maneuvering the Excelsior Class at sublight speeds. The Constitution class was much more nimble, and the Excelsior class suffered in encounters as a result.

Again, the NNEC modified the basic design of the Excelsior space frame, addressing individually the specific problems with the current design. The resulting redesign addressed all concerns about the Excelsior class, and the Excelsior-Refit, like the Constitution-Refit 30 years earlier, doubled the utility of the vessel without sacrificing production time or costs.

Additional armor, along with placement of the impulse engines within the primary neck structure and saucer section gave the vessel additional combat maneuverability and survivability. Computer upgrades, along with tweaking of the existing M/ARA designs improved computer speeds by 2% and M/ARA efficiency by 5%.

Despite the limitations of the original design, Starfleet was quite happy with the existing space frame, issuing contracts to bring the total number of Excelsior class vessels up to 100, while the Excelsior-Refit class contract would place the number of vessels at 25 when the first contract with McKinley Station and San Francisco Fleet Yards was completed. However, with the advancement of impulse and warp technologies between the construction and deployment of the Excelsior and Excelsior-Refit class starships, it was determined that the Excelsior-Refit spaceframe was redundant. Therefore, Starfleet determined that the initial 25 starship production contract for the Excelsior-Refit would be the only contract, and the design was retired.

While the expected life span of the Excelsior class was listed at 50 years, the class has lasted twice that. Sturdy, accommodating to crew and passengers, the Excelsior class is perhaps the most widely recognized class of Starship in the Federation. The last refit of the Excelsior & Excelsior-Refit classes saw the addition of Type VIII Phaser Turrets, originally deployed with the Merced Class Frigate, and saw a complete overhaul of her warp and computer cores. However, this was deemed the last refit of the class, with Starfleet wishing to integrate more and more Ambassador and later Nebula class vessels into the roles that had traditionally been served by the Excelsior class. Despite the proliferation of Type IX and now Type X arrays, ASDB simulations have shown that the addition of these types of weapons onto an Excelsior hull means serious reductions in other shipboard services such as replicators, holodeck/holosuite operations, and other power consuming functions, due to the amount of power necessary to operate these phasers at rated specifications, along with the modification of internal spaces to support the new array type of phaser emitter, which take up much more space than their counterpart turret style phasers.

With Excelsior class ships serving as the bulk of the fleet in engagements against both the Borg and the Dominion, the vessels have seen a startling attrition rate. Nearly 60 percent of the active Excelsiors in the fleet were destroyed or decommissioned following fleet engagements against threat vessels. In combat missions, recommissioned and revamped Steamrunner class vessels replaced the Excelsior class, the Excelsior was relegated more and more to both the exploration and diplomatic arms of SFC until the end of the Dominion war. This is by no means an accurate portrayal of the importance the Excelsior and Excelsior-Refit played in combat operations, some refit Excelsior class vessels sporting newer automated, rapid-fire torpedo launchers which proved to be a match for the Cardassian Union's mainline warships. Despite these spot upgrades - which in the end were costly, time-consuming and did little to improve the combat survivability of the Starship beyond matching her on par with older Cardassian designs, she suffered heavy losses, as did many older Starfleet designs, against the Dominion fighters and battlecruisers.

While nearly 80 Excelsior class vessels remain in active service, Starfleet has officially retired the design and is keeping the remaining Excelsior class vessels in service until their estimated refit dates before decommissioning the vessels.

Disposition:		D Destroyed by hostile action or natural disaster	L Lost, whereabouts unknown	R5 Refit to Mk V
		DB Destroyed by the Borg at Wolf 359	R2 Refit to MKII	I Inactive or Reserve Fleet
		Sc Scrapped	R4 Refit to Mk IV	T Training-Command vessel
NCC-2000	<i>Excelsior</i>	I 2284, R2 2288, R4 2302, T 2358	NCC-42136 <i>Cairo</i>	IV 2304, R5 2342
NCC-2001	<i>Proxima</i>	II 2288, R4 2303, R5 2340	NCC-42285 <i>Charleston</i>	IV 2305, R5 2343, DB 2266
NCC-2002	<i>Columbia</i>	II 2288, R4 2304, L 2312	NCC-42296 <i>Hood</i>	IV 2306, R5 2344
NCC-2003	<i>Galactica</i>	II 2289, D 2301	NCC-42768 <i>Lakota</i>	IV 2307, R5 2345, I 2360
NCC-2004	<i>Retribution</i>	II 2289, R4 2305, R5 2341	NCC-42857 <i>Grissom</i>	IV 2308, L 2322
NCC-2005	<i>Ahwahnee</i>	II 2290, R4 2306, Sc 2328	NCC-42995 <i>Al-Batani</i>	IV 2309, R5 2346, DB 2266
NCC-2006	<i>Valorous</i>	II 2290, R4 2307, R5 2342	NCC-43118 <i>Carpathia</i>	IV 2310, R5 2247
NCC-2007	<i>Repulse</i>	II 2291, R4 2308, R5 2343	NCC-43278 <i>Livingston</i>	IV 2311, R5 2248, L 2250
NCC-2008	<i>Revenge</i>	II 2291, R4 2309, R5 2344	NCC-43305 <i>Valley Forge</i>	IV 2312, R5 2249
NCC-2009	<i>Roosevelt</i>	II 2292, R4 2310, L 2318	NCC-46200 <i>Blackeagle</i>	IV 2313, D 2319
NCC-1701-B	<i>Enterprise</i>	III 2293, Sc 2342	NCC-46263 <i>Fearless</i>	IV 2314, R5 2250
NCC-1647-B	<i>Farragut</i>	III 2293, DB 2266	NCC-47936 <i>Vasidrun</i>	IV 2315, R5 2251, D 2263
NCC-1702-A	<i>Potemkin</i>	III 2294, Sc 2344	NCC-50446 <i>Crazy Horse</i>	IV 2316, R5 2252, DB 2266
NCC-1707-B	<i>Intrepid</i>	III 2294, D 2332	NCC-57924 <i>Apache</i>	IV 2317, R5 2253, L 2262
NCC-13950	<i>Okinawa</i>	III 2295, DB 2266	NCC-58314 <i>Tyr</i>	IV 2318, R5 2254
NCC-13951	<i>Berlin</i>	III 2295, Sc 2346	NCC-62043 <i>Melbourne</i>	IV 2319, T 2350, I 2360, DB 2266
NCC-13952	<i>Lexington</i>	III 2296, D 2321	NCC-63185 <i>Sunchaser</i>	IV 2320, R5 2355
NCC-13953	<i>Fearless</i>	III 2296, L 2308	NCC-63744 <i>Bolsetu</i>	IV 2321, R5 2356
NCC-13954	<i>Tecumseh</i>	III 2297, Sc 2248	NCC-99071 <i>Aries</i>	IV 2322, R5 2357
NCC-13955	<i>Caldos</i>	III 2297, D 2316		
NCC-13956	<i>Livingston</i>	III 2298, D 2329		
NCC-38955	<i>Crockett</i>	III 2298, L 2309		
NCC-38997	<i>Malinche</i>	III 2299, T 2316, I 2347		
NCC-40512	<i>Gorkon</i>	III 2299, L 2341		
NCC-41069	<i>Kolno</i>	IV 2302, R5 2340, L 2357		
NCC-42111	<i>Frederickson</i>	IV 2303, R5 2341		