Manchurian Space Forces OrBat

By Robert Montgomery

Manchurian Star Navy - 2300

Manchuria is one of the great rising world powers on Earth. She has a sizable space navy, but being a Tantalum poor power most of her ships are slow. Prior to and after the Central Asian War the Chinese Arm had major problems with pirates and the MSN was incapable of dealing with them effectively, until recent years.

In the Central Asian War she was pitted against France, Russia, and Japan. The war was going well for Manchuria on Earth, until the Japanese entered the war, but in space it was another story. The Manchurian Star Navy was forced into an interstellar guerrilla war, she could not fight the MSIF in a stand up battle as her ships were older designs and were clearly out-matched. By the end of the war the allies had captured or destroyed 1 Chein Lung DD, 4 Tunghu FF, and 6 Punyuang fighters. The French at one point succeeded in interdicting the entire Chinese arm, by seizing a couple of systems. Manchuria made a few daring raids, but they were more of an annoyance than a threat.

In the wake of the Central Asian War, Manchuria was faced with the poor shape of her Star Navy. The Manchurians began their restructuring by performing a second mid-life upgrade of the Chein Lung II class Patrol Destroyers and they designed a number of new ships to replace the Chein Lung and Tunghu's who were clearly past their prime. The first ship to enter service following the CAW was the Shih Huang-ti (Emperor) Class Heavy Cruiser; these ships introduced in 2290, are a wonderful addition to the MSN and have allowed the formation of 4 battlegroups centered on them. The second of the new ships were the Bejiang (City) Class Fleet Frigate also introduced in 2290, designed as a fast escort for the new Shih Huang-ti Heavy Cruisers. The third new ship to enter service was the Xinjiang (Province) Class Patrol Cruiser, these ships introduced in 2293 are designed to replace the Chein Lung class DD, this ship is very good and on a ton for ton basis it is equal to any ship. The fourth and newest design is the Lungchen class Patrol Frigate, this ship is a replacement for the Tunghu Patrol Frigate. Service life extension upgrades were designed for the Tunghu PF, the venerable Punyuang fighter, the Fantan, and Glowworm missiles.

Determined not to enter a conflict out-matched again, the MSN studied every battle report and recording they could lay their hands on. The result is as the Manchurian Star Navy enters the 24th century a new and stronger fleet is being designed, rumor of a new Battlecruiser class have been floating around space naval circles for months.

Manchuria is currently using a large number of US and German designed weapons, these nations while not allied with the Manchurians use the Manchurian animosity towards France as leverage. France has filed a complaint with the Manchurian government for the illegal coping of the LL-2 submunitions dispenser and its warheads.

Manchuria has stepped up her efforts to mine the small Tantalum discovery on Chengdu. This deposit while small compared to most star faring nations; it will result in a 20% increase in Manchuria's Tantalum.

The Manchurian Star Navy is divided into Fleets and Planetary Defense Squadrons.

Fleet	Base of Operations	Ships	Class
1st Fleet	Sol	Emperor Meiji CA	Emperor Class Heavy Cruiser
		Tiajin DD	Bejiang Class
		K'ang-his DD	
		Qinghai DD	
		Shenyang DD	
		Bejiang DD	
		Ha'erbin FF	
		Shijiaxhuang DD	
		Jinan Changduan DD	
		Urumqi CVE	
		Turfan CVE	
		Dandong PF	
		Changchun PF	
		12 Punyuang II's	
		4 Punyuang (Earth Base	ed)
		Chein-tsu Freighter	
		Bai-Long Freighter	
2 nd Fleet	Epsilon Indi (Chengdu)	Emperor Shih Huang-ti	CA
		Kunming DD	
		Jian DD	

Gansu DD

Heilonhjiang DD

Xiaguan PF

3rd Fleet Delta Pavonis

Emperor Daoguang CA

(Cold Mountain)

Pingxing DD Xichang DD Liaoning DD Jilin DD

Maoming PF

4th Fleet Tirane (Tunghu)

Emperor Jiaqing CA

Jiujiang DD Yingtan DD Heilong PF Qingdao PF

1st Planetary Defense Squadron

Tau Ceti (Kwangtung) Sipeng PF

Yiben PF 4 Punyuang's

2nd Planetary Defense Squadron

Zeta Tuscanae (Syuhlahm) Fushan PF

Shoaguan PF

4 Punyuang's

3rd Planetary Defense Squadron

Hunjiang Outpost Anshan PF

Nanchang PF 4 Punyuang's

4th Planetary Defense Squadron

Epsilon Eridani (Dukou) Hailor FF

5th Planetary Defense Squadron

DM+1 4774 Outpost Lungchen FF

6th Planetary Defense Squadron

Serurier Outpost Lupeh FF

Emperor Shih Huang-ti Class Heavy Cruiser

By 2300 the Emperor class has 4 ships in her class built with 1 other laid down; they are the Emperor Shih Huang-ti, Emperor Daoguang, Emperor Jiaqing, Emperor Meiji, and the Emperor Guangxu (2302). This ship was designed in the wake of the Central Asian War and represents the finest of Manchurian naval design of that period.

These ships use Chein Lung hulls as they are retired, the hull is stripped, and refurbished, then the new Emperor components are installed, this lowers the cost of these ships by two counts the hull is very inexpensive and the Tantalum from the Chein Lung is recycled for the next Emperor. For every Emperor laid down one Chein Lung is retired.

Performance

Warp: 1.37 Mass: 16141.25 tons Power Plant: 150mw Fusion Stutterwarp: 10mw Old Military

Fuel: 728 tons (10 refills for small craft) Crew: 250 (20 Bridge, 7 Flag, 46 TAC, 36 Engineering, 4 Small Craft pilots, 3 Small Craft Techs, 126 Marines, 8 Medical)

Cargo: 887 cubic meters Life Support: 400 days, Comfort: 0 Cost: 127.276 MLv w/o Small Craft, Drones, or Missiles

Ship Status Sheet

Move: 3 Radiated: 4(7) Radial Reflected: 9 Lateral Reflected: 10

Radial Profile: +0 Lateral Profile: +1 Screen: 6 Armour: 4

Targeting Computer: +1

Sensors

Active 13 w/redundant, Passive 10 w/redundant, Navigation, Deep System, and Gravitational

Weapons

Jack Turrets 1-3: Facing 1,5,6 EA-1000 Double x2 dam +1 to hit

Jack Turrets 4: Facing 1,5,6 Allen BMZ PBWS Double x3 dam -2 to hit

Jack Turrets 5: Facing 1,5,6 Allen BMZ PBWS x3 dam -2 to hit

Jack Turrets 6-8: Facing 1,5,6 EA-122 Double x1 dam +1 to hit

Jack Turrets 9-11: Facing 1,2,3 EA-1000 Double x2 dam +1 to hit

Jack Turrets 12: Facing 1,2,3 Allen BMZ PBWS Double x3 dam -2 to hit

Jack Turrets 13: Facing 1,2,3 Allen BMZ PBWS x3 dam -2 to hit

Jack Turrets 14-16: Facing 1,2,3 EA-122 Double x1 dam +1 to hit

Jack Turrets 17-18: Facing 2,3,4 EA-1000 Double x2 dam +1 to hit

Jack Turrets 19: Facing 2,3,4 Allen BMZ PBWS x3 dam -2 to hit

Jack Turrets 20-21: Facing 2,3,4 EA-122 Double x1 dam +1 to hit

Jack Turrets 22-23: Facing 4,5,6 EA-1000 Double x2 dam +1 to hit

Jack Turrets 24: Facing 4,5,6 Allen BMZ PBWS x3 dam -2 to hit

Jack Turrets 25-26: Facing 4,5,6 EA-122 Double x1 dam +1 to hit

Jack Turrets 27-28: Facing 1,2,6 EA-1000 Double x2 dam +1 to hit

Jack Turrets 29: Facing 1,2,6 Allen BMZ PBWS x3 dam -2 to hit

Jack Turrets 30-31: Facing 1,2,6 EA-122 Double x1 dam +1 to hit

3xLL-2 submunition dispensers (5 shots for each)

4xLhh-637 submunition dispensers (4 shots for each)

4 Missiles bays with 5xFantan II missiles in each (total 20)

30xTTA's

2x Type 16 class Assault Shuttle mounted externally

1xJA-77M sensor drone in 1 bay

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, 3xEngineering, 3xComputer

TAC: Active Sensors, Passive Sensors, 30xFire Control, 2xFlight Control, 10xRemote Operators

Hull Hits: 552 using CRF (1176)

Power Plant Hits: 100

Damage Control: 6 teams (18)

Chein Lung Class III Patrol Destroyer

The Chein Lung class was built in large numbers, but only 7 still serve in the MSN, they are the K'ang-hsi, Kunming, Jiujiang, Pingxiang, Xiamen, Yingtan, and the Jian.

The Chein Lung III class patrol destroyer was upgraded following the CAW to this standard. The Chein Lung II has long been the heavy punch of the MSN for nearly two decades, this ship will be relegated to convoy escort and antipiracy duties as the Xinjiang class relieves it from fleet duty.

The post-CAW upgrade included and improved main computer improving stutterwarp effiency, replacing the old 15mw MHD with 2 new American designed 10mw MHD's, installing improved targeting computers, replacing the old lasers with new EA-122 lasers, adding a magnetic sling for a JA-77M sensor drone, use of the Fantan II missile, improved sensors, and in the late 90's submunitions were added to increase the punch of the ship.

This ship is going to be retired over next decade or so, and an Emperor Heavy Cruiser and Xinyang Destroyer will replace each one retired.

(Writers notes: In order to accurately design these ships I had to reverse engineer the known Manchurian ships, and they don't jive. In order for the reflected signatures and profiles to work the hull of the Chein lung had to be made of L.P. Synthetic and have a volume of 17098 cubic meters, but this increased the weight of the ship to 14915 tons, about 4000 tons overweight, which almost the weight of the hull. If I make the ship 10932 tons as is stated in the Star Cruiser rules, all the stats are dead on to the original rules, but there are no hull materials that will match that weight and reflective properties, so the ship now weighs more.)

Performance

Warp: 1.41 Mass: 14700 tons Power Plant: 2x10mw MHD New Military Stutterwarp: 10mw Old Commercial

Fuel: 9000 tons Crew: 51 (12 Bridge, 14 TAC, 6 Engineering, 17 Marines, 2 Medical)

Cargo: 200 cubic meters Life Support: 60 days, Comfort: 0 Cost: 34.347MLv w/o Missiles

Ship Status Sheet

Move: 3 Radiated: 1(4)/2(5) w/both PP operational Radial Reflected: 7 Lateral Reflected: 8

Radial Profile: -1 Lateral Profile: +0 Screens: None Armour: 4

Targeting Computer: +1

Sensors

Active 10 w/redundant, Passive 10 w/redundant, Navigation, Deep System, and Gravitational

Weapons

Masked Turrets 1-2: Facing 1,2,7,8 EA-122 x1 dam +1 to hit Masked Turrets 3-4: Facing 1,2,3,8 EA-122 x1 dam +1 to hit Masked Turret 5-6: Facing 4,5,6,7 EA-122 x1 dam +1 to hit Masked Turrets 7-8: Facing 3,4,5,6 EA-122 x1 dam +1 to hit 2xLL-2 submunition dispensers (5 shots for each) 2xLhh-637 submunition dispensers (4 shots for each) 2 Missiles bays with 4xFantan II missiles in each (total 8) 1xJA-77M sensor drone mounted externally 8xTTA's

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, Engineering, Computer TAC: Active Sensors, Passive Sensors, 8xFire Control, 2xRemote Operators

Hull Hits: 168 (per SC) Power Plant Hits: 44 Damage Control: 1 team

Chein Lung Class II Patrol Destroyer

The Chein Lung class was built in large numbers, but only 5 Chein Lung II still exsist and these ships are mothballed awaiting scraping and reuse of their hull. The ships could in event of war reenter the MSN in short order. The ships are the Huayin, Jiangdong, Shaixing, Nantong, and the Changde.

(Writers notes: In order to accurately design these ships I had to reverse engineer the known Manchurian ships, and they don't jive. In order for the reflected signatures and profiles to work the hull of the Chein lung had to be made of L.P. Synthetic and have a volume of 17098 cubic meters, but this increased the weight of the ship to 14915 tons, about 4000 tons overweight, which almost the weight of the hull. If I make the ship 10932 tons as is stated in the Star Cruiser rules, all the stats are dead on to the original rules, but there are no hull materials that will match that weight and reflective properties, so the ship now weighs more.)

Performance

Warp: 1.27 Mass: 14915.6 tons Power Plant: 15mw MHD Old Military Stutterwarp: 10mw Old Commercial

Fuel: 9000 tons Crew: 51 (12 Bridge, 14 TAC, 3 Engineering, 20 Marines, 2 Medical)

Cargo: 172.81 cubic meters Life Support: 42 days, Comfort: 0 Cost: 45.15MLv w/o Missiles

Ship Status Sheet

Move: 3, (2 if firing weapons) Radiated: 2(5) Radial Reflected: 6 Lateral Reflected: 8

Radial Profile: -1 Lateral Profile: +0 Screens: None Armour: 4

Sensors

Active 10, Passive 6, Navigation, Deep System, and Gravitational

Turrets 1-2: Facing 1,2,7,8 and has a LL-98 copy x1 dam Turrets 3-4: Facing 1,2,3,8 and has a LL-98 copy x1 dam Turret 5-6: Facing 4,5,6,7 and has a LL-98 copy x1 dam Turrets 7-8: Facing 3,4,5,6 and has a LL-98 copy x1 dam 2 Missiles bays with 4xFantan missiles in each (total 8) 8xTTA's

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, Engineering, Computer TAC: Active Sensors, Passive Sensors, 8xFire Control, 2xRemote Operators

Hull Hits: 168 Power Plant Hits: 40 Damage Control: 1 team

Xinjiang Class Heavy Patrol Destroyer

To date the Xinjiang class has 9 ships in her class built with another launched every year; they are the Xinjiang, Gansu, Heilonhjiang, Jilin, Liaoning, Hebei, Shanxi, Nei Menggu, and the Qinghai. This ship was designed to replace the Chein Lung class in the wake of the Central Asian War.

The Xinjiang is a well-rounded ship with excellant endurance, and strong Marine presence, the perfect ship for the long duration missions that the Chinese arm demands. Ironically the design is modeled on the French big ship concept.

The Xinjiang uses an efficient duel power plant design that uses the 25mw fission PP when traveling, when the ship enters combat it starts the 15mw MHD to provide power to the lasers. This also provides redundancy in case of PP failure. The ship carries 100 hours of fuel for the MHD and 10 refuels for its small craft.

Performance

Warp: 1.83 Mass: 12491 tons Power Plant: 25mw Fission, and a 15mw MHD New Military

Stutterwarp: 25mw Old Commercial Fuel: 2662 tons

Crew: 180 (16 Bridge, 16 Tac, 30 Engineers, 8 Small Craft pilots, 4 Small Craft Techs, 100 Marines, 6 Medical)

Cargo: 1125 cubic meters Life Support: 800 days, Comfort: 0

Cost: 48.021 MLv w/o Small Craft, Drones, or Missiles Small Craft: 4xType 16 Assault Shuttle, 1xJA-77M Sensor Drone

Ship Status Sheet

Move: 4 Radiated: 2(5)/3(7) on 2 PP Radial Reflected: 8 Lateral Reflected: 9

Radial Profile: -1 Lateral Profile: +0 Screens: none Armour: 4

Targeting Computer: +1

Sensors

Active 15 w/redundant, Passive 10 w/redundant, Navigation, Deep System, and Gravitational

Weapons

Masked Turrets 1-2: Facing 1,2,7,8 EA-122 x1 dam +1 to hit

Masked Turrets 3-4: Facing 1,2,3,8 EA-122 x1 dam +1 to hit

Masked Turret 5: Facing 2,3,4,5 EA-122 x1 dam +1 to hit

Masked Turret 6: Facing 5,6,7,8 EA-122 x1 dam +1 to hit

Masked Turret 7: Facing 1,6,7,8 EA-122 x1 dam +1 to hit

Masked Turret 8: Facing 1,2,3,4 EA-122 x1 dam +1 to hit

4xLL-2 submunition dispensers (5 shots for each)

2xLhh-637 submunition dispensers (4 shots for each)

2 Missiles bays with 5xGlowworm II missiles in each (total 10)

8xTTA's

4xType 16 Assault Shuttle

1xJA-77M Sensor Drone

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, 2xEngineering, 2xComputer

TAC: Active Sensors, Passive Sensors, 8xFire Control, 4xRemote Operators

Hull Hits: 95 using CRF

Power Plant Hits: 30 Fission, 40 MHD

Damage Control: 5 teams (15)

Bejiang Class Fleet Frigate

To date the Bejiang class has 10 ships in her class built with another launched every 15 months; they are the Bejiang, Tiajin, Taiyuan, Ha'erbin, Ji'nan Fushan, Qiqihar, Yumen, Baotou, and the Shijiaxhuang. This ship was initially designed as fast reinforcements for any fleet in need, with its long endurance and high speed it can rush to the scene of a fleet or colony in need. There is talk that if the Manchurians launch a Battlecruiser that these ships will become its escorts.

Performance

Warp: 2.97 Mass: 3053 tons Power Plant: 15mw Fission, 15mw MHD NM Stutterwarp: 15mw New Mil Fuel: 325 tons

Crew: 47 (14 Bridge, 14 Tac, 17 Engineers, 2 Medical)

Cargo: 55 cubic meters Life Support: 180 days, Comfort: 0 Cost: 94.641 MLv w/o Small Craft, Drones, or Missiles

Ship Status Sheet

Move: 6 Radiated: 2(5) Radial Reflected: 7 Lateral Reflected: 8 Radial Profile: -2 Lateral Profile: -1 Screens: none Armour: 4

Targeting Computer: +2

Sensors

Active 13 w/redundant, Passive 10 w/redundant, Navigation, Deep System, and Gravitational

Weapons

Masked Turret 1: Facing 1,2,7,8 EA-122 x1 dam +1 to hit Masked Turret 2: Facing 1,2,3,8 EA-122 x1 dam +1 to hit Masked Turrets 3-4: Facing 2,3,4,5 EA-122 x1 dam +1 to hit Masked Turrets 5-6: Facing 5,6,7,8 EA-122 x1 dam +1 to hit Masked Turrets 7-8: Facing 1,6,7,8 EA-122 x1 dam +1 to hit Masked Turrets 9-10: Facing 1,2,3,4 EA-122 x1 dam +1 to hit 4xLL-2 submunition dispensers (5 shots for each)

2xLhh-637 submunition dispensers (4 shots for each)

2 Missiles bays with 5xGlowworm II missiles in each (total 10)

8xTTA's

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, Engineering, 2xComputer TAC: Active Sensors, Passive Sensors, 8xFire Control, 2xRemote Operators

Hull Hits: 76 using CRF

Power Plant Hits: 22 Fission, 30 MHD

Damage Control: 2 teams (8)

Lungchen Class Destroyer

To date the Lungchen class has 8 ships in her class built with another launched every year till there are 20; they are the Lungchen, Hailar, Lupeh, Solun, Paicheng, Linsi, Xian, and the Hailung.

The Lungchen was designed to take the place of the Tunghu as the patrol ship of the Chinese arm, it is a well-rounded ship with good endurance, and the perfect ship for the long duration's that the Chinese arm missions demands.

The Lunchen will be the primary Space Lanes of Commerce patrol ship for the MSN. She is required to have enough firepower to take on heavily armed pirates, long endurance, and will likely be the first ship at the seen of any trouble along the Chinese arm.

Performance

Warp: 1.90 Mass: 4468 tons Power Plant: 20mw Fission Stutterwarp: 10mw Old Commercial Fuel: 250 tons Crew: 100 (16 Bridge, 12 Tac, 14 Engineers, 4 Small Craft Pilots, 2 Small Craft Tech., 48 Marines, 3 Medical) Cargo: 50 cubic meters Life Support: 550 days, Comfort: 0 Cost: 35.835 MLv w/o Small Craft, Drones, or Missiles

Ship Status Sheet Move: 4 Radiated: 2(5) Radial Reflected: 6 Lateral Reflected: 8 Radial Profile: -2 Lateral Profile: +0 Screens: 0 Armour: 4

Targeting Computer: +1

Sensors

Active 13 w/Redundant, Passive 10 w/Redundant, Navigation, Deep System, and Gravitational

Weapons

Jack Turret 1: Facing 1,2,8 EA-122 x1 dam +1 to hit

Jack Turret 2: Facing 2,3,4 EA-122 x1 dam +1 to hit

Jack Turret 3: Facing 6,7,8 EA-122 x1 dam +1 to hit

Jack Turret 4: Facing 4,5,6 EA-122 x1 dam +1 to hit

Jack Turret 5: Facing 1,2, EA-122 x1 dam +1 to hit

Jack Turret 6: Facing 1,7, EA-122 x1 dam +1 to hit

2xLL-2 submunition dispensers (5 shots for each)

2xLhh-637 submunition dispensers (4 shots for each)

2 Missiles bays with 4xGlowworm II missiles in each (total 8)

8xTTA's

2xType 16 Assault Shuttle

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, 2xEngineering, 2xComputer TAC: Active Sensors, Passive Sensors, 8xFire Control, 1xRemote Operators, 1xFlight Controller

Hull Hits: 48 using CRF Power Plant Hits: 26 Fission Damage Control: 2 teams (7)

Tunghu III Class Corvette

The Tunghu frigate has been the mainstay of the Manchurian fleet for over 60 years; the ship class will soon be reduced to corvette to reflect its new role in the expanding Manchurian fleet. Weighing in at only 2000 tons it was never really frigate caliber and was often forced to group into squadrons in order to overwhelm pirates. This ship has a number of problems, such as if the active sensors are used they draw so much power that the ship is rendered immobile and unable to shoot, if the ship shoots its laser its speed slows to 1.27 warp (3 movement). To date 22 Tunghu's have been built, with 12 still in service with MSN, they are the Anshan, Nanning, Changchun, Qingdao, Dandong, Siping, Maoming, Yibin, Shaoguan, Xiaguan, Nanchong, and the Heilong.

These ships had their fourth upgrade following the CAW and the improvements included the replacement of the powerplant with 2 newer designs, adding redundant arrays to the sensors, improving the targeting computers, upgrading the lasers to American EA-122's, the addition of 2 TTA's, and the use Glowworm II's.

These ships will supplement the Punyuangs in the colonial defense role. The fighters have long made it difficult for anyone to enter their zone of control (within 6 hours of the planet), but this left the outer regions open for interdiction or pirate activities. With Tunghu's acting as short range carriers, hauling out a squadron and acting as their fire support as well as tanker. This will make Manchuria's colonies more secure from predication than they have ever been.

(Writers notes: In order to accurately design these ships I had to reverse engineer the known Manchurian ships, and they don't jive. In order for the reflected signatures and profiles to work the hull of the Tunghu had to be made of Synthetic and have a volume of 2911 cubic meters, but this increased the weight of the ship to 2110 tons, about 600 tons overweight. If I make the ship 1412 tons as is stated in the Star Cruiser rules, all the stats are dead on to the original rules, but there are no hull materials that will match that weight and reflective properties, so the ship now weighs more.)

Performance

Warp: 1.91 (1.52 in combat) Mass: 1750 tons Power Plant: 2x4mw MHD Old Military

Stutterwarp: 4mw Old Commercial Fuel: 800 tons

Crew: 31 (11 Bridge, 12 TAC, 6 Engineering, 2 Medical) Cargo: 358. cubic meters

Life Support: 21 days, Comfort: 0 Cost: 4.447MLv upw/o Missiles

Ship Status Sheet

Move: 0,3,4 Radiated: 1(4) Radial Reflected: 6 Lateral Reflected: 7 Radial Profile: -2 Lateral Profile: -1 Screens: None Armour: None

Targeting Computer: None

Sensors

Active 13, Passive 10, Navigation, Deep System, and Gravitational

Weapons

Turret 1: Facing 5,6,7,8 and has a LL-98 copy x1 dam Turret 2: Facing 1,2,3,4 and has a LL-98 copy x1 dam 2 Missiles bays with 3xGlowworm missiles in each (total 6) 2xTTA's

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, Engineering, Computer TAC: Active Sensors, Passive Sensors, 2xFire Control, 4xRemote Operators

Hull Hits: 4

Power Plant Hits: 11 Damage Control: 1 team

Wusuli class Escort Carrier

The Wusuli class Escort Carrier was designed after battle of Beowulf in the 2nd Kafer War, small ships such as fighters often meant the difference between defeat and victory. The Manchurian general staff thought the fighter complement for the 1st fleet was too small. Two (the 2nd is the Yalu) Chein Tsu blockade-runners were converted into light carriers, each carries 4 fighters. Their use is primarily to repair and refuel of fighters. During combat the ships are to proceed as far from the fighting as possible and count on the Emperor's to support her fighters. These ships are being replaced with a dedicated fighter carrier the Manchuria class.

(This ship required extensive redesign; it is a broken design. First I had to replace the 20mw MHD with 20mw Fission, this was required because I couldn't get the 4 week fuel supply in a ship capable of warp 8 empty. Even using Fission PP it ends up priced about right.)

Design Date: 2296 Laid Down: 2297 Launched: 2299

Performance

Warp: 2.59 Mass: 4760 tons Power Plant: 20mw Fission Stutterwarp: 20mw Old Military

Fuel: 880 tons (10 refills for small craft)

Crew: 46 (12 Bridge, 6 TAC, 14 Engineering, 8 Small Craft pilots, 4 Small Craft Techs, 2 Medical) Cargo: 475 cubic meters

Life Support: 180 days, Comfort: -2 Cost: 36.69 MLv w/o Small Craft, Drones, or Missiles

Ship Status Sheet

Move: 5 (6 with fighters off) Radiated: 5 Radial Reflected: 5 Lateral Reflected: 5

Radial Profile: -1 Lateral Profile: +0 Screen: 0 Armour: 0

Targeting Computer: +2

Sensors

Active 5, Passive 10, Navigation

Weapons

1xGrape Shot submuntion dispensers (24 shots for each)

1xTTA's

4xPunyuang class fighters in 4 bays

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, Engineering, Computer

TAC: Active Sensors, Passive Sensors, Fire Control, Flight Control

Hull Hits: 33 using CRF Power Plant Hits: 26 Damage Control: 2 teams

Punyuang Class Fighter

The mainstay of Manchurian colonial defense, these ships produced in large numbers, are a very effective fighter and still can hold its own with most other fighters. By far the most numerous (16) ship in the MSN.

Following the Central Asian War the Punyuang was modified to carry a single Fantan missile, vastly improving the fighter offensive punch and extending its service for quite a while.

Performance

Warp: 2.79 w/o missile, 2.72 w/missile Mass: 190.8 tons w/o missile, 205.1 tons w/missile

Power Plant: 3mw MHD Old Military Stutterwarp: 1mw Old Military

Fuel: 21.8 sufficient for 12 hours Crew: 2 Life Support: 12 hours Comfort: 0 Cost: 11.787MLv

Ship Status Sheet

 $Move: 5 \ (6 \ after \ missile \ launch) \ Radiated: 1 \ Radial \ Reflected: 4 \ Lateral \ Reflected: 4 \ the \ missile \ adds \ 1 \ to \ each$

Radial Profile: -3 Lateral Profile: -2 Screens: None Armour: 2

Targeting Computer: +1

Sensors

Active 10, Passive 6, Navigation

Weapons

Turret 1: Facing 1,2,8 and has a LL-98 copy x1 dam

1xFantan Missile 1xTTA's

Crew Hits

Bridge: Captain, Weapons Officer

Hull Hits: 4 using CRF Power Plant Hits: 8 Damage Control: None

Punyuang-A Class Fighter

Following the Kafer war the MSN decided to extend the life of its fighters by instituting a Service Life Extension Program. This program involves a complete overhaul of the craft. The MHD turbine is replaced by a new, smaller and lighter unit, the old Stutterwarp is recycled and replaced by larger, new 2mw design, a new targeting computer is installed, the passive sensors are upgraded to a range 7 light-second unit, and it is modified to carry and fire the Big Clip submunition.

Currently 2 Punyuang's a year are being converted to A's. Currently 4 serve aboard the BC Ch'ing, and the remaining 8 are based with the 1st fleet.

Performance

Warp: 3.77 Mass: 199.8 tons Power Plant: 3mw MHD New Military Stutterwarp: 2mw New Military Fuel: 21.8 sufficient for 12 hours Crew: 2 Life Support: 12 hours, Comfort: 0 Upgrade Cost: 12 MLv, New Cost: 24.62 MLv

Ship Status Sheet

Move: 8 (6 if firing the laser with sensors active)

Radiated: 3 Radial Reflected: 3 Lateral Reflected: 4 the missile adds 1 to each

Radial Profile: -3 Lateral Profile: -2 Screens: None Armour: 2

Targeting Computer: +2

Sensors

Active 10, Passive 7, Navigation

Weapons

Turret 1: Facing 1,2,8 and has a LL-98 copy x1 dam

1xBig Clip 1xTTA's

Crew Hits

Bridge: Captain, Weapons Officer

Hull Hits: 4 using CRF Power Plant Hits: 7 Damage Control: None

Chein Tsu (Stalhammer) Class Freighter

This is being produce under license by the Manchurians. Its purpose in the MSN is to act as blockade runner and deliver critical supplies to units' cutoff from the homeland. The MSN has 5 in service.

(This ship required extensive redesign; it is a broken design. First I had to replace the 20mw MHD with 20mw Fission, this was required because I couldn't get the 4 week fuel supply in a ship capable of warp 8 empty. Even using Fission PP it ends up priced about right.)

Performance

Warp: 3.46 empty, 2.76 w/2565 tons of cargo Mass: 3930.5 full Power Plant: 20mw Fission

Stutterwarp: 20mw New Military Fuel: none Crew: 22 Life Support: 28 days, Comfort: -2 Cost: 33.89 MLv

Crew: 22 (5 Bridge, 1 TAC, 14 Engineering, 2 Medical)

Ship Status Sheet

Move: 7 (6 if loaded) Radiated: 5 Radial Reflected: 3 Lateral Reflected: 4 Radial Profile: -1 Lateral Profile: +0 Screens: None Armour: none Targeting Computer: none

Sensors

Active 5, Navigation

Weapons

None

Crew Hits

Bridge: Captain, Helm, Navigator, Communications, Engineering, Computer

TAC: Active Sensors

Hull Hits: 33

Power Plant Hits: 13 Damage Control: 1 team

Fantan II and Glowworm II Missiles

The new Fantan II and Glowworm II missiles will eventually replace both the Fantan and the Glowworm. The biggest advantage of upgrading missiles are, all existing ships can use newer missiles, and it is far more inexpensive to upgrade and existing missile than design and build completely new missiles.

Due to the lack of Tantalum, new missiles are rebuilt from old missiles, unfortunately this has slowed production, but the fleet still converts 50-75 a year. Furthermore because Manchuria lacks the Tantalum reserves of the larger space powers, she has designed her new missiles to make use of submuntions, this allows the Manchurians to collect the missiles after a battle and reuse them, the only downside is that it requires controlling the system and the missiles require a complete overhaul to refurbish, but at least the Tantalum is not lost.

The MSN has 182 Fantan's and 164 Glowworm's in service. They expended 59 missiles in the Central Asian War. Because of the Tantalum shortage, Manchuria has a full load on board each ship and 23 additional missiles for replacements. These are all with the 1^{st} Fleet.

A special version of the Chein Tsu (Stalhammer) has been designed as a mobile missile repair/conversion depot.

Fantan II

Combat Performance

Movement: 8 Radiated Signature: 1 Radial Reflected Signature: 1 Lateral Reflected Signature: 1

Radial Profile: -4 Lateral Profile: -4 Hull Hits: 1/1/1 Power Plant Hits: 1/1

Armament: two 5x2 submuntions Active Sensors: None Passive Sensors: 10

Design Characteristics

Warp Efficiency: 3.87 Power Plant: 0.2mw Old Military Fuel Cell Stutterwarp: 0.2mw Old Military

Fuel: .45 tons (5 hours) Mass: 14.3 tons

Length: 7 meters Diameter: 1.5 meter Price: 820,000 Lv

Missile Pack

Missiles per pack: 4 Mass of Pack, empty: 7 tons Mass of Pack, Loaded: 64.2 tons Volume of pack: 70m3

Surface Area of Pack: 25m2 Reflective Signature: 25 Price of the Pack, Empty: 159,000 Lv

Price of the Pack, Loaded: 3,439,000 Lv

Bays for Fantan II

Mass per Missile: 31.5 tons Volume per Missile: 31.5m3 Exit port for Missile: 4.5m2

Glowworm II

Combat Performance

Movement: 8 Radiated Signature: 1 Radial Reflected Signature: 1 Lateral Reflected Signature: 1

Radial Profile: -4 Lateral Profile: -4 Hull Hits: 1/1/1 Power Plant Hits: 1/1 Armament: one 5x2 submuntions Active Sensors: None Passive Sensors: 10

Design Characteristics

Warp Efficiency: 3.81 Power Plant: 0.1mw Old Military Fuel Cell Stutterwarp: 0.1mw New Military

Fuel: .45 tons (10 hours) Mass: 9.7 tons

Length: 5 meters Diameter: 1 meter Price: 825,000 Lv

Missile Pack

Missiles per pack: 5 Mass of Pack, empty: 12 tons Mass of Pack, Loaded: 60.5 tons Volume of pack: 30m3

Surface Area of Pack: 20m2 Reflective Signature: 15 Price of the Pack, Empty: 120,000 Lv

Price of the Pack, Loaded: 4,245,000 Lv

Bays for Glowworm II

Mass per Missile: 10 tons Volume per Missile: 10m3 Exit port for Missile: 2m

JA-77M Sensor Drone

The Argentinian JA-77 was selected as the new sensor drone for the MSN in 2283. The MSN has a few modifications made to it. Advanced Hull Masking was added to improve stealthliness, as was an advanced synthetic hull, also Manchurian sensors were installed as they are more efficient. The powerplant was replaced with a new military design. The current MSN inventory includes 31 JA-77M's.

Combat Performance

Movement: 7 Radiated Signature: 0 Radial Reflected Signature: 1 Lateral Reflected Signature: 1

Radial Profile: -2 Lateral Profile: -3 Hull Hits: 1/1/1 Power Plant Hits: 1/1

Armament: none Active Sensors: 10 Passive Sensors: 10

Design Characteristics

Warp Efficiency: 3.36 Power Plant: 2.7mw MHD Stutterwarp: 0.7mw Old Commercial

Fuel: 12.96 tons (8 hours) Mass: 76 tons Length: 8 meters Diameter: 4 meter Price: 11.467 MLv