The 1978 OOB.

OOB notes:

This is a 7th Fleet scenario, so I have calculated values based on 7th fleet. In particular, the ASW and AAA strengths follow the 7th fleet model, and CC strength includes SSM strength. I have only set out the 'front' side of the counters in the table. The rear sides follow the usual proportional reductions in the game. SEATO means the US, Japan, South Korea, Republic of China (Taiwan), Philippines, and the expeditionary forces from Malaysia, Indonesia, Canada, New Zealand and Australia. The Eastern block includes the USSR, North Korea, Vietnam and the PRC. Note that the PRC here will try to take advantage of the US being "distracted" to mount an amphibious/air mobile assault on Taiwan. Taiwan is however a tough nut to crack.

I have introduced a new type of flotilla – the "2DD" counter, usually consisting of 2 ex USN FRAM DD in SEATO service, or older JMSDF or PRC destroyers without much modern equipment.

I have not included any CS, OL, AM, TK, MP, FC or SC units, as the existing ones can be used. The same comment in general applies to SSBNs, which were not included in the original 7th Fleet game but do appear in other games in the series.

I have not included the PCM missile boats in the scenario (except for the PHM Pegasus). In the original game the USSR has 4, China 7, and North Korea 3 of these. Also Taiwan had 4 and South Korea 1. Each represented 6 – 10 PCMs, although no figure is given for the PRC, although each seems to 'represent' the serviceable component of about 20 boats. The PLAN had some 150 "*Hang Feng*" and "*Hoku*" (*Osa* and *Komar* class) PCMs carrying Styx missiles in the 1978 time frame. North Korea had about 26 *Osa* and *Komar* boats, and the Soviets about 50 on the Pacific Coast. Their high SSM strengths would see them overvalued in this scenario, and they ought not be able to motor around all day making multiple SSM attacks. As the PRC also had about 200 torpedo boats and hydrofoils the simplest way to represent these boats is to treat each PRC Chinese, Soviet, and North Korean coastal hex as a defended hex with an SSM attack value but no ASW attack value. If players prefer they can include the East Block PCM units from the original game instead.

I have changed the type rating of some aircraft from INT to ATK (eg the F111) and some from ATK to BMB (the Il-28/Harbin H-5 Beagle). The effect on their usage and capability is deliberate. For example, the F111 is not a fighter despite being able to carry AAMs, and the subsonic post world war 2 Beagle (including the early 50s torpedo bomber version!) would not be effective against 1970s SAM defences. If you disagree, or for additional game balance, feel free to treat the Il-28/ H-5 as an ATK unit on surface ship attack, but under the air unit replacement rules it should still be treated as a BMB.

Where air units are referred to as "steps", undamaged = 2 steps, 1 step = 'damaged' side only. PRC, Soviet and Vietnamese air units with green, as opposed to the usual black, aircraft silhouettes are 'variable' reinforcements.

For the USN, as a general rule I have included about 2/3 of the ships in the wider Pacific and Indian ocean areas in this OB. I have omitted ships known to be deployed in the Indian Ocean and Eastpac in 1978, and ships in long refit periods. There are NO Phalanx armed ships. There a limited number of Harpoon ships although some ships without canisters could fire Harpoons out of their Mk13 Asroc launchers. As the USN acquired only 700+ harpoons in 1976-77, I decided to have Harpoon on only the "canister" ships. Ships with Talos or Standard missiles which could be used as short range SSMs (with conventional warheads) have this included in their CC strength. If you are of the view this undervalues the Talos/Standard deployed in this role, I suggest you allow the *Brooke* FFGs, *Adams*, *Decatur* and *Coontz* DDGs, and all cruisers a strength 1 range 1 SSM attack that depletes all bar one of their SAM boxes. The CG *Chicago* could fire Harpoons from its Mk13 launcher. USS *Chicago* was on upkeep status at San Diego from April until late July 1978, before entering refit. I have included an 'alternative *Chicago*' with Harpoon, Talos, and Tartar (actually the Standard SM-1MR replacement) loaded, and light ASW helos to go with its ASROC and homing torpedos, as a what if option. The reality is that the second world war vintage CAs were very expensive to maintain and run, particularly because of their large crews, and smaller more modern ships (such as the *Ticonderoga* cruisers of the 1980s, or even the *Kidd* class DDGs) were equally effective, and less expensive, as well as being smaller targets. When Talos was retired in 1979, so was the *Chicago*. But with decks scarce, who knows. Talos armed ships were granted +1 cc point on the basis Talos RGM-8H ARMs could be used

to damage radars, and like the Standard they could be used as SSM, so the *Long Beach* gets 2 points – one for the Talos, and 1 for its Standard (evolved Terrier) missiles. The *Oklahoma City* has 4 points: 1 for the Talos, 1 for the 5" guns and 2 for the 6" guns. These are the largest US naval guns in the game (something for scenario designers to consider). The cruisers still carrying 8" mounts such as the *Boston* had been decommissioned by 1970, stripped and placed in reserve and would not feature in this conflict. Nor would the *Iowa* BBs, which would take at least 10 months to activate and have missiles added. The LPD *Tarawa's* first deployment to the Western Pacific began in March 1979, however I have included *Minsk* and *Ivan Rogov* which also arrived in 1979 so decided to include *Tarawa*. There is a USMC AV8A squadron at Iwakuni; before the more capable AV8B entered service, the LHA's carried only a detachment oif 'A' models for ground support of the MEU, so these do not operate as shipboard naval fighter bombers. The SS *Tang* was the Pacfleet "OPFOR" sub so I included it. Similarly I have included the USAF's 26th TFS, an "aggressor" squadron, based at Clark Field. Air units include USN & USMC squadrons 'on station', and USAF air units in theatre as well as Pacific earmarked reinforcing regular Air Force units and Navy P3 squadrons. I did not include ANG or Air Force reserve squadrons. The E3 Sentry detachment from 552nd ACW arrives at Guam as a 1-step unit late in the scenario.

The USN CGs with LR AAA are the Talos ships; the Terrier had not been replaced by the Standard SM-2ER and Mk14 NTU weapons direction system at this time. The earlier (1960s) RIM2F Terrier had a range of 70km, and had been replaced by the (1970s) RIM67A Standard SM-1ER with a range of about 65km. Similarly, the Soviets have no LR AAA. The *Karas* only have SA-N-3 (twin arm, 72 missiles)[and SR SA-N-4]. I have given the 1978 *Karas* an Area AA of 3, but not long range. Range of the 3B was 55km, the A model less. The only *Kara* with SA-N-6 was the missile's test ship, the *Azov*, which as at 1995 had never left the Black Sea. In 6th Fleet it had an AAA value of 8, and I don't think 6th fleet included LR AAA. Range of the SA-N-6 was claimed to be with the 5V55RM missile, introduced 1984, extended to 90 km. In this 1978 scenario none of these ships have the SM2-ER or the Mk14 Fire Control system, or SA-N-6 with the 5V55RM missile , so there will be no LR AAA except on the Talos ships. RIM8G Talos (in service 1966) had an alleged 185km range. The Talos ships also had a 4kt W-81 tac nuke warhead as an option - with surface-to-surface capability. The only USN Talos ships in the scenario are *Long Beach*, *Chicago*, and *Oklahoma City*. The RIM2D BT-3A(N)Terrier with range 37 km had a 1 kT W-45-0 warhead as an option from the 60s on, I'm not sure about including that.

In the JMSDF, all DD classes before *Amatsukaze* were built pre 1965. The JMSDF underwent a massive modernization program in the mid-late 1980s. Many vessels bearing familiar names to those found in 7th Fleet are their much older predecessors. For example the *Harusame* there is the 1989 model, here it's a 1950s ship. These older destroyers have weapons which would not have been out of place in WWII, and are grouped as 2DD flotillas. Only the later DDs have ASROC. As part of the modernisation shipboard helicopter facilities were greatly expanded, but there were only 3 helo capable ships in 1978 carrying 7 helos. 2 of these were the DDHs with 3 heavy HSS-2B each, to serve as the principal vessel and air operations ships of ASW groups. The shortage of ships with high ASW capacity is somewhat alleviated by the long range land based ASW aircraft fielded by the JSDFAF, and there are plenty of them. The "Corvette" flotillas now consist of either 3 or 4 *Chikugo* or *Isuzu* class destroyer escorts (which were referred to as frigates in the original game's notes.)

The JASDF F4EJ (Mitsubishi) Phantoms were for constitutional reasons not equipped for surface attack, or air to air refuelling. (The hardware for the air to air refuelling was delivered and stored away). Later, as political restraints relaxed, these capabilities were added back in. In a program starting in 1984 the F4EJs were upgraded to F4EJ Kai standard, which included the necessary equipment for ship attack using the Mitsubishi ASM-1 missile, among other improvements. The first F4EJ Kai in squadron service was delivered on 24 November 1989. The Kai version are the fully capable aircraft depicted in the original 7th Fleet. In the 1978 time frame the Phantoms are purely interceptor aircraft. I have assumed however that the JASDF could if pressed have at least attached some iron bombs to wing racks and given them a capability of 25% of the standard Phantom.

I have included the land based JMSDF HS2B ASW helos, and the shorter legged (compared to the P2J) land based S2F Tracker squadrons as individual units. I infer that they were subsumed in the high ASW strength of the defended hexes in and about Japan in the original game. A reduction in that ASW attack value is included in the scenario rules.

The ROK Navy used the dash decks on its FRAM DDs to spot Allouette ASW helos. I have rated these as +1 ASW point (per helo in the counter). The *Gearing* FRAM II ships were fitted with a 20mm Vulcan Phalanx or twin 30mm Emerlecs in 1976 but did not get ASROC. I have included all the ROK air; scenario designers will have to judge what units are 'not available', or at least restricted to CAP and raiding airbases, consequent on the presumed land war. The ROK, and Taiwan, have additional airbase markers indicating bases not included on the original map.

The ROC Navy consists of a sizeable force of FRAM destroyers from the US. As these were likely more useful in the 70s than 80s/90s, I have depicted them as 2 ship flotillas instead of 4 ships units. Some carry Sea Chaparral; However according to my research the Hsuing Fen SSM was not deployed until the 1980s. The Hughes/MD 500 helo was eventually introduced, using the DASH drone deck, in the same role as the Allouette in the ROKN, but not until the 1980s. I omitted the ROC *Guppy II* class subs; they were probably limited to shallow diving by 1978. The ROC air force consists mostly of obsolescent Super Sabres and G model Starfighters, with some F5Es entering service, but like all ROC equipment they were excellently maintained and upgraded, and on a 1 for 1 basis are more than a match for the PLAAF. There is a 1-step unit of four RF-100 and a unit of RF-105 Thuds of the same vintage as the RA-5 Vigilantes on the US carriers for added 60's flavour.

The Philippine armed forces were mostly equipped for COIN operations, as they still are, however in the late 70s there were still Sabres flying along with some Crusaders and Freedom Fighters.

The Australian expeditionary force reflects a posture of "forward defence" which was not replaced until the 1980s. Essentially, Australia as a consequence of an unbroken alliance with the US since 1941 (1917?) would have (and in Vietnam did) commit its regular forces to support the US. Since the conservative government returned to power in the 1990s Australia has again contributed forces to assist US operations, a posture a majority of Australians support . In 1978 the conservatives were in power. Here the expeditionary force consist of 3 RAAF squadrons and a light ASW carrier TF. The CVL HMAS *Melbourne* deployed to Pearl Harbor for Exercise RIMPAC 78. On her return to Australia in May, the ageing aircraft carrier commenced a lengthy refit that completed in April 1979. It is assumed that in the pre war tension period here that lengthy refit would have been forgone for a shorter yard period. *Melbourne* had a steaming rage of 12,000 nm. The air wing consisted of #805 SQN RAN with 15 A4Gs, which were optimised for air defence, and usually 8 or 9 were spotted, and #816 Sqn RAN with S2 Trackers, along with Seaking ASW helos. The air squadrons were also known as VF805 and VS816 because the RAN frequently exercised with the USN. The *Yarra* class DE unit is a 3 ship flotilla, these ships carried Seacat Sams and Ikara ASW systems. They make an interesting contrast to the modernised FRAM DDs The Yarra's were replaced by Oliver Hazard Perry class frigates in the 1980s.

I have also included 1 ship each from the RCN and the RNZN. The RCN contributes the very capable ASW DDH *Huron* (my research indicated ships of this class did operate in the Pacific in the late 70s) and the RNZN an ASW frigate. Both vessels have ASW helos, and the *Waikato* carries Seacat Missiles. I decided to rate the Seacats (and also Sea Chaparral) at 2 points (Sea Sparrow BPDMS I rated at 3 – in each case add one for modern radar directed DP gun defences) after studying the values assigned in later games and considering the performance of this weapon off the Falklands in 1982.

The Vietnamese air units in the game represent, at one counter per regiment of up to 50 aircraft, about half of the aircraft said to be available, with some types left out – such as the Su7, ex ARVN A37B, and Mig17. My rationale for this is that having finally achieved victory after a 30 year war, and while trying to rebuild a shattered country, the Vietnamese were unlikely to commit fully to a conventional war which might be won by the West. Further, relations with the Chinese in the wake of the move into Cambodia were not warm, and indeed China mounted a punitive expedition into North Vietnam in 1979. National pride and a sense of obligation would likely however see them defend their airspace and the Soviet base at Cam Rahn bay. As about 50 A1E & H Skyraiders and 50 –70 F5A and Es were captured in 1975, and were not exactly "modern technology" aircraft, I decided to include one unit each of these aircraft as variable reinforcements. The Vietnamese ocean going navy consisted of 2 Petya frigates, and some PCM and PT boats, and has been left out, assumed to be operating off map in the vicinity of Haiphong in The Tonkin Gulf.

For North Korea (DPRK), as with the ROK, I have included all units, leaving the issue of what forces would be committed over the ocean as opposed to held back for a land war up to the scenario designer.

It should be noted that many of the regiments depicted by a 2 step counter represent units with a TOE of 40 (fighter) or 50-60 (ground attack) machines. I left these at two steps per regiment because firstly I still have 19 DPRK air counters as opposed to the 12 in the original game, secondly that is even after making an across the board assumption about serviceability and availability adverse to the DPRK's efficiency, and thirdly because information was generally only available on overall numbers of aircraft, and numbers of regiments. Deployment was based on information known from later periods. Hence the TOE numbers of machines could include unserviceable ones or lost ones. The DPRK surface navy is largely a patrol boat force, but they did have 2 x 1500 ton 26kt frigates, armed with 1940s weapons and 1950s sensors. These appear as a flotilla. There are 4 SS units, each depicting three boats (one has only two) in the same way as the PLAN units do.

China (PRC): 1978 PRC air OBs are sketchy, but overall aircraft numbers that entered service are more readily ascertainable. The difficulty is in assessing how many serviceable aircraft survived the cultural revolution, and were flyable in the late 1970s before, in the 1980s, the PRC military commenced its modernisation process - which resulted in a substantial decrease in numbers but increase in capability per capita. This air OB is in effect an approximation based on later known organisational structure applied to then current aircraft. PLANAF units (regiments) are included, PLAAF units only as 'variable' reinforcements. The defensive values of mainland China bases probably reflect not only SAMs (which may well have become generally unserviceable by this time) and AAA, but also the hundreds of obsolete fighters in the PLAAF. Despite the numbers, knowledgeable commentators all speak with one voice: post cultural revolution serviceability and quality training levels were appalling and stayed that way until the 1980s modernisation. Therefore, each PLANAF regiment is represented by 1 counter (2 steps) despite in theory fielding 30 machines. There are many more PLAAF regiments than have been included in the counter mix, but their serviceability is so questionable that it was better to include a selection as potential variable reinforcements, and up the arrival rate if mainland China bases are attacked by anyone other than Taiwan. The PLANAF H-6 Badgers did not have an SSM at this time but carried a big bomb load. In game terms they cannot, as bomber class units, attack ships.

The PRC surface navy consists mostly of small DD and FF – either Soviet or domestically built. Usually, they carry 2 to 6 Styx missile launchers. Their sensors were reportedly wholly inferior to Western and Soviet ships, and again, serviceability was questionable. Notwithstanding that, a new class, the *Jianghu I*, was being built in the 1970s. They were armed with 4 x HY-2 (Styx) SSM, 2 x 100mm, 12 x 37mm, 2 RBLL-1200 ASWRL, 4DCT, 2 DCR. The 100-mm guns are hand-loaded and they have no fire-control radar. The first 7 of class (#509-515) were completed by 1978, mixing a serviceable if obsolescent SSM (which is still better than not having one at all like most SEATO ships) with otherwise 1950s vintage weapons. I have included these ships and the earlier frigates in groups of 2DD or 4FF (as opposed to the original game's 6 ship groups). I calculated from the existing games counters that 1 PRC Styx launcher is worth 1.12 SSM strength (compared to for example the Harpoon which is worth 2 per canister, and the Tomahawk worth 3 per canister). Only one vessel, the *Yintang*, carried a SAM launcher, the HQ-61. Unfortunately this SAM did not become operational until the mid 1980s, and so no PLAN ships have SAMs. The PLAN had hundreds of *OSA* and *Komar* patrol combatants carrying SSN-N-2 (ie, Soviet made Styx), torpedo hydrofoils and smaller ships. The 7 PCS flotillas from the original game can still be used to represent the serviceable part the 140 *Osa* and *Komar* PCM, but the ability of PCs to motor about all day making multiple SSM attacks and then going home for the night seems to overate their staying power. As an alternative suggestion to reduce map clutter, rather than including these as counters I suggest that all Chinese coastal hexes (even those with bases) be Close Defence hexes, with an SSM attack value of 20, but no ASW value. As Field Marshall Montgomery said, when asked what major lessons had been learned in World War II, "…don't invade Russia and don't invade China" or something similar.. Alternately, mark each China coast hex as a defensive hex with the same qualities as a Soviet hex. (But no any effect on subs). Lastly, I decided to include 2 PLAN AA units depicting 5 x 1500 ton LSM each, in case the PRC does well enough to mount an invasion of Taiwan. There is also a counter representing the 6th Air Assault Regiment (helo transport) for that purpose.

One major quandary was what to do with all the PRC subs. My research indicated there were 21 *Whiskeys*, 60 *Romeos*, and 5 others including the *Golf* that wasn't really available until 1982. A discussion at the Fleet League board on Yahoo suggested grouping them together would result in something with a defence strength making it impervious to even the P3 Orion. However on further considering this and after examining the defence strengths of other multi vessel counters I decided that 3 x SS counters could be used, with the defence strength left the same as for 1 boat. Similarly, I did not

triple the torpedo and ASW strengths, but did double them to allow for the benefit of having three boats working in concert. The logistics roster proportionately has 50% more boxes. As the strengths of the *Romeo* were only 12 torpedo combat, and 1 for ASW combat, respectively, the resulting 24/2 is useful without being earth shattering. It is still less useful than a single JNSDF *Oshio* class diesel sub. The *Whiskeys* are not very useful, even in groups of three. The next issue was how many to actually include. It would be reasonable to assert that 1/5 to 1/4 of the boats would be in refit at any one time in a navy working efficiently, let alone in the PLAN suffering the effects of the cultural revolution. Many Chinese built SS suffered from poor workmanship. In one *Romeo* sold to Egypt the engine wore out on the way due to inferior tensile steel used in its construction. I decided to go with 50%, rounding up fractions. That meant 4 *Whiskeys x3*, 11 *Romeos x3* (including the 2 slightly quicker Ming class improved models) and separately the 2 *Han* class SSN.

The OOB for the PRC may still be too optimistic about serviceability so an optional scenario rule is included for cultural revolution inspired PRC "mechanical breakdown" – anything leaving an airbase or port has a 10% chance of failing to activate, increasing to 20% after 2 weeks (42 game turns).

I would like to especially thank Jakob Wedman for his assistance in researching the Soviet orders of battle, and in particular the air units. The Soviet air OOB is similar to the original game OOB, with the main difference being in interceptor type aircraft. The bombers have in general terms less effective ASM, but then the Western AAA is far less effective as well. Aircraft units depicted include both PVO and AV-MF, and a regiment of Su-24 Fencers 'borrowed' from frontal aviation. Proper application of the workhorse T16 bombers (in concert with the submarine fleet) will be the difference between victory and defeat for the Red Banner Fleet. Your subs with long range SSMs, the SSN-3 Shaddock SLCMs, are supposed to be used as 'pilotless aircraft carriers' to help your airborne 'saturation' strikes to overwhelm the Talos and Terrier ships and swamp the carrier groups' close defences. You have plenty of other spear (or in this case, torpedo) carriers to use against cargo and AA vessels and play with the USN SSNs. The ranged ASM carried by the Su 17 Fitter and Su 24 Fencer is the Raduga Kh-28 (AS-9 Kyle). This was originally designed as an ARM for the bomber version of the Yak28, but is an almost 6 meter long missile with a 160 kg warhead. By comparison the AS-5 Kelt is less than 5m long, but has 4 times the mass and ad a 1000kg warhead. AS-9 had a range of 120km (as opposed to the 10km range of the AS-7 Kerry also used by these aircraft.) Other missiles available in 1978 for these aircraft included the AS-10 Karen, the AS-11 Kilter and the AS-12 Kegler ARM, with ranges varying from 10 to 60 km depending on the version of the missile. The AS-9 Kyle was also carried at times by the Tu22M/Tu26. The Badger C carries the AS-2 - K-10S Kipper, and the Badger G the AS-5 - KSR-2 Kelt. The Backfire also carries the KH-22/AS-4 Kitchen, and all three bombers could carry the AS-6 - KSR-5 Kingfish. The variable reinforcement Tu22K Blinder regiment carried one missile as opposed to the 3 carried by the Tu22M Backfire. I have used the Tu22M designation instead of Tu26 because it was still the official designation in 1978. Since 1991 sources at Tupolev have hinted this designation was used to help secure the political decision for funding development of the Backfire, disguising it not as a new plane but a Blinder upgrade. The other theory is that the designation was used to evade START treaty obligations.

The Soviet surface navy includes two ships which did not arrive until early 79, but are needed for balance: The *Ivan Rogov* to land the naval infantry somewhere useful (note that in 1978 there were probably too many Marines stationed on Okinawa for it to be a viable option)and the *Minsk*. In Soviet terms the *Kievs* were designed as large ASW cruisers with some fixed wing air to chase away the Orions and Nimrods, and all round SSM and SAM abilities. As originally envisaged in the late 50's, there were to be 4 *Moscow* (*Moskva*) class ASW aviation cruisers, 2 for the North and two for the Pacific. With the increase in Mediterranean activities, that (according to Conway's) became a planned 6 ships, and there were to be companion ships of comparable displacement designed for surface action with SSMs. The *Moscows* were not entirely successful. They had a tendency to trim down at the bow which caused substantial practical problems, and couldn't operate the new VSTOL fighter bomber. Ultimately the later 4 planned became the *Kievs*, with VSTOL as well as helo aviation facilities, and mounting the long range SSN-12 missiles to operate as "pilotless strike aircraft". They formed the centrepiece of powerful surface warfare/ASW groups rather than carrier groups in the classical sense. The priority mission was protecting the Soviet boomers from western hunter killer subs. While the *Minsk's* task force might form part of a saturation effort against a USN carrier group, it cannot take one on by itself, and it is the component that will bear the brunt of the A7/A6 counter strike if the swamping attack fails to put the CV out of operation. The smaller Soviet cruisers combine either anti surface and anti air strength (*Kresta* I) or anti air and asw strength (*Kresta* II, *Kara*). The old *Sverdlovs*

are not much good for anything except gunfire. The original game seemed to assume that some type of SAM had been added; my sources indicate that only the *Dzerzhinski* was so modified; it was the test ship for the SA-2 Guideline (SA-N-X-2 in naval service) and the attempt to use this missile as a shipboard weapon failed. The *Dzerzhinski* does not appear in the game, and in the same way that an alternative CG USS *Chicago* was provided, I decided to add in some alternative up gunned Soviet CLs : The alternative *Alexander Suvorov*,and *Dmitry Pozharski* appear here with some SSN-1 Scrubber and SSN-2 Styx launch cannisters hurredly bolted on, along with some SA-N-4 and an ASW helo. They lose their X & Y 6 inch turrets and some of their light battery and associated ammo load to make weight. These emergency measures produce a "short ranged" surface action ship with some close air defence and ASW protection, one that is more use than the original version. The *Admiral Lazarev*, also a *Sverdlov* class CL, was laid up in reserve in 1972, and it took from 1980 to 86 to refit it for reactivation, so it (like the *Iowas*) is not included. I have included 4 *Kara* class and 2 *Kynda* class CGs for the Soviets that were not on my original OOB list for 1978. I also have added 1 extra *Kresta I*. Whist my research indicated those ships were assigned to Pacific Fleet at some (usually) later stage of their carreer, I had no information definitely placing them there in the summer of 1978. In the best tradition of the Fleet series, where Soviet ships appear in more than one game but Western ones don't, and remembering this simulation is only going to hold interest if it is, or the scenarios can be, balanced, the extra 7 CGs are included – giving the scenario designer plenty of Soviet crusiers of varying capability to choose from. Many sources list two ships with the NATO assigned name *Vladivostok* – one is a *Kara*, one is a *Kresta I*. The *Kara* class *Vladivostok* (ex-*Tallinn*) was commissioned on new years eve, 1979, and served in the Black Sea/ Mediterranean. I decided to include the *Kresta I* of the same name which was commissioned in 1969 and did serve in the Pacific Fleet. According to Conway's, both ships assigned the name *Vladivostok* served until the 1990s, so I am sure this has caused confusion over the years... There are many Soviet escort vessels included of varying capability and usefulness.. The *Krivak* frigates have a dual purpose ASuW and ASW weapon.

The main Soviet seaborne offensive arm is the submarines. The Soviet forces are split effectively into 4 groups – ballistic missile subs, which are not included here; cruise missile subs both nuclear and conventionally powered, primarily tasked with sinking US carriers; nuclear hunter killer subs for ASW; and diesel ASW subs for commerce raiding and other such activities, although some diesel subs, the *Tango* class, were designed with the primary mission of "bastion protection" for the boomers. The second group suffer to an extent from the Soviet method of designing a missile, and then engineering the sub to fit it. The slow *Echo II* and *Juliet* subs are stuck with the SS-N-3 Shaddock, and have to surface to fire and guide it. My sources indicate the Soviets eventually mounted the SSN-12 Sandbox on these classes of sub, perhaps 10 *Echos* and a few *Juliets* were converted to carry the improved SS-N-12 in the 80s (which is depicted in the fleet series), but not in this timeframe. The Charlie I boats carry the SSN-7 Starbright, and can launch while submerged, but it is a short range SSM rather than an SCLM like the Shaddock/Sepal. The *Echo I* carried a land attack version of the SS-N-3C Shaddock, and was not equipped with targeting radars for shipping strikes, and they were converted back to torpedo subs once sufficient SLCM carrier subs had been commissioned. However, scenario designers may wish to use the similarly armed *Whiskey "Long Bin"* conversions to launch strikes on Western bases. The *Whiskey LB* was a conversion of the diesel attack boat with a bulbous enlarged conning tower (or sail or fin) housing 4 x SS-N-3C launch tubes at about a 10 degree angle. It made only 8 knots submerged, was noisy, and had only 4 forward torpedo tubes. Like the *Echo 1*, it did not have the guidance equipment to be used in an anti-ship role, and was originally a stop gap missile delivery measure used at a time when Soviet production of nuclear boats was limited to 6 per year. I have given it an SSM strength of * and a range of 6. If nuclear warheads are being used against bases, then these boats should be able to launch 4 x 200kt SLCM strikes against western bases. Alternately you may want to allow them to make a conventional warhead SLCM strike. If so give them an attack strength of 15 (being the same as a *Kresta I* cruiser which also had a 4 missile P-35 SS-N-3b ('SEPAL') salvo.). Recently released information has revealed that the Victor I class was very noisy and there was never much problem detecting or tracking them – so they should be treated as 'noisy'. I decided to depict the *Foxtrot* boats individually instead of grouping them as I did with the PLAN SS, however the still active *Whiskey* class boats have been grouped into 3 boat "flotillas" in the same fashion as the PLAN vessels, as has the similarly aged group of *Zulu* diesel boats. I did not include any of the 29 boats said to be in reserve. In the absence of reliable names (or pennant numbers) for the diesel boats, I assigned them F, W and Z series numbers for logistics tracking. If anyone has a good source of names let me know, we can add them in. The diesel attack boats, being slow like their predecessor U boats in the Battle of the Atlantic, should position themselves in picket lines.

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
USA										
Enterprise	CVN	Enterprise	4	8	0	0	0	0	4	12
Constellation	CV	Kittyhawk	4	8	0	0	0	0	4	10
Ranger	CV	Forrestal	4	8	0	0	0	0	4	10
Midway	CV	Midway	4	7	0	0	0	0	2	10
Truxtun	CGN	Truxtun	4	4	0	0	3	5	4	4
Bainbridge	CGN	Bainbridge	4	4	0	0	1	7	4	1
Long Beach	CGN	Long Beach	4	5	0	0	2	7L	4	1
Horne	CG	Belknap	4	4	0	0	3	5	4	4
Sterret	CG	Belknap	4	4	8s	2	11	5	4	4
Gridley	CG	Leahy	4	4	8s	2	9	6	4	1
Halsey	CG	Leahy	4	4	8s	2	9	6	4	1
Worden	CG	Leahy	4	4	0	0	9	6	4	1
Chicago	CG	Albany	4	5	0	0	2	8L	3	1
Chicago +	CG	Albany	4	5	8s	2	10	8L	3	5
Oklahoma City	CG	Cleveland	4	5	0	0	4	3L	4	0
Preeble	DDG	Coontz	4	3	0	0	2	5	3	1
Parsons	DDG	Decatur	4	3	0	0	3	2	2	1
JP Jones	DDG	Decatur	4	3	0	0	3	2	2	1
Towers	DDG	CF Adams	4	3	0	0	5	2	3	1
Cochrane	DDG	CF Adams	4	3	0	0	5	2	3	1
Robison	DDG	CF Adams	4	3	0	0	5	2	3	1
Hoel	DDG	CF Adams	4	3	0	0	5	2	3	1
Buchanan	DDG	CF Adams	4	3	0	0	5	2	3	1
Goldsborough	DDG	CF Adams	4	3	0	0	5	2	3	1
Stoddert	DDG	CF Adams	4	3	0	0	5	2	3	1
Waddell	DDG	CF Adams	4	3	0	0	5	2	3	1
Foster	DDG	Spruance	4	4	8s	2	12	0	4	7
Hewitt	DDG	Spruance	4	4	8s	2	12	0	4	7
Kinkaid	DDG	Spruance	4	4	8s	2	12	0	4	7
O'Brien	DDG	Spruance	4	4	8s	2	12	0	4	7

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
RS Edwards	DD	F Sherman	4	2	0	0	2	0	2	1
Morton	DD	F Sherman	4	2	0	0	2	0	2	1
Schofield	FFG	Brooke	4	2	0	0	2	2	2	4
Ramsey	FFG	Brooke	4	2	0	0	2	2	2	4
Knox	FF	Knox	4	2	0	0	2	0	4	4
Kirk	FF	Knox	4	2	0	0	2	0	1	4
Hammond	FF	Knox	4	2	0	0	2	0	4	4
Lockwood	FF	Knox	4	2	0	0	2	0	4	4
Roark	FF	Knox	4	2	0	0	2	0	4	4
Hepburn	FF	Knox	4	2	0	0	2	0	4	4
Meyerkord	FF	Knox	4	2	0	0	2	0	4	4
Whipple	FF	Knox	4	2	0	0	2	0	4	4
Stein	FF	Knox	4	2	0	0	2	0	4	4
Bagley	FF	Knox	4	2	0	0	2	0	4	4
Peary	FF	Knox	4	2	0	0	2	0	4	4
Harold E Holt	FF	Knox	4	2	0	0	2	0	4	4
Fanning	FF	Knox	4	2	0	0	2	0	4	4
Cook	FF	Knox	4	2	0	0	2	0	4	4
Brewton	FF	Knox	4	2	0	0	2	0	1	4
Sample	FF	Garcia	4	2	0	0	1	0	1	4
Davidson	FF	Garcia	4	2	0	0	1	0	1	4
Bronstein	FF	Bronstein	3	2	0	0	1	0	1	2
Blue Ridge	LCC/ AGC	Blue Ridge	3	4	0	0	1	0	2	0
Tarawa	LHA	Tarawa	3	7	0	0	10	0	3	0
Okinawa	LPH	Iwo Jima	3	5	0	0	6	0	3	0
Tripoli	LPH	Iwo Jima	3	5	0	0	6	0	3	0
Shreveport	LPD	Austin	3	5	0	0	2	0	3	0
Nashville	LPD	Austin	3	5	0	0	2	0	3	0
Cleveland	LPD	Austin	3	5	0	0	2	0	3	0
Trenton	LPD	Austin	3	5	0	0	2	0	3	0
Vancouver	LPD	Raleigh	3	4	0	0	2	0	3	0
Alamo	LSD	Thomasto n	3	4	0	0	2	0	2	0

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Monticello	LSD	Thomasto n	3	4	0	0	2	0	2	0
La Moure County	LST	Newport	3	3	0	0	1	0	2	0
Spartanburg County	LST	Newport	3	3	0	0	1	0	2	0
Schenectady	LST	Newport	3	3	0	0	1	0	2	0
Fairfax County	LST	Newport	3	3	0	0	1	0	2	0
Pegasus	PHM	Pegasus	5	1	9s	2	10	0	1	0
Los Angeles	SSN	Los Angeles	4	8	16s	2	34	0	0	9
Hammerhead	SSN	Sturgeon	3	7	0	0	22	0	0	8
Hawkbill	SSN	Sturgeon	3	7	0	0	22	0	0	8
Pogey	SSN	Sturgeon	3	7	0	0	22	0	0	8
Puffer	SSN	Sturgeon	3	7	0	0	22	0	0	8
Queenfish	SSN	Sturgeon	3	7	0	0	22	0	0	8
Drum	SSN	Sturgeon	3	7	0	0	22	0	0	8
Tautog	SSN	Sturgeon	3	7	0	0	22	0	0	8
Permit	SSN	Permit	3	7	0	0	22	0	0	6
Plunger	SSN	Permit	3	7	0	0	22	0	0	6
Haddo	SSN	Permit	3	7	0	0	22	0	0	6
Dace	SSN	Permit	3	7	0	0	22	0	0	6
Barb	SSN	Permit	3	7	0	0	22	0	0	6
Guardfish	SSN	Permit Long	3	7	0	0	22	0	0	7
Flasher	SSN	Permit Long	3	7	0	0	22	0	0	7
Sculpin	SSN	Skipjack	3	7	0	0	22	0	0	6
Snook	SSN	Skipjack	3	7	0	0	22	0	0	6
Seadragon	SSN	Skate	2	6	0	0	18	-	-	5
Barbel	SS	Barbel	2	6	0	0	18	-	-	3
Blueback	SS	Barbel	2	6	0	0	18	-	-	3
Tang	SS	Tang	2	6	0	0	18	-	-	4
USN Air, includes USMC ship borne units.										
F14A	INT	4 units	18	-	0	0	30	11	0	0
F4J	INT	4 units	26	-	0	0	40	9	0	0
A7E	ATK	8 units	18	-	0	0	40	2	0	0
A6A	ATK	1 unit	28	-	0	0	80	1	0	0

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
A6E	ATK	3 units	28	-	0	0	90	1	0	0
EA6A	EW	4 units	30	-	0	0	0	1	0	0
KA6D	AR	4 units	-	-	0	0	0	0	0	0
E2	AEW	4 units	26	-	0	0	0	1	0	0
S3A	RCN	3 units	40	-	0	0	0	0	0	4
RF8G	RCN	1 unit	30	-	0	0	0	1	0	0
RA-5C	RCN	2 units	52	-	0	0	0	1	0	0
RF4G	RCN	1 unit	30	-	0	0	0	1	0	0
P3	RCN	12 units	70	-	0	0	0	1	0	4
A4	INT	1 unit	14	-	0	0	40	5	0	0
USMC air units										
F4	INT	4 units	26	-	0	0	40	9	0	0
A4	INT	1 unit	14	-	0	0	40	5	0	0
A6A	ATK	2 units	28	-	0	0	80	1	0	0
AV8A	INT	1 unit	14	-	0	0	60	5	0	0
RF4B	RCN	1 unit	30	-	0	0	0	1	0	0
USAF air units										
F4, D&E	INT	12 units	26	-	0	0	40	9	0	0
F5E	INT	1 unit	20	-	0	0	40	7	0	0
F16	INT	1 unit	20	-	0	0	60	12	0	0
F111	ATK	5 units	50	-	0	0	75	6	0	0
A7D	ATK	1 unit	18	-	0	0	40	2	0	0
F4GWW	EW	2 units	30	-	0	0	0	1	0	0
E3A	AEW	1 unit	180	-	0	0	0	1	0	0
KC135	AR	1 unit	-	-	0	0	0	0	0	0
B52	BMB	3 units	120	-	0	0	90	1	0	0
Japanese Self Defence Forces – Naval										
Harukaze, Yukikaze	2DD	Harukaze	4	4	0	0	4	0	2	2
Ayanami, Uranami	2DD	Ayanami	4	4	0	0	2	0	1	2
Takanami, Onami	2DD	Ayanami	4	4	0	0	2	0	1	2
Makniami, Murasame	2DD	Ayanami, Murasame	4	4	0	0	3	0	2	2
Yudachi, Harusame	2DD	Murasame	4	4	0	0	4	0	2	2

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Akizuki, Teruzuki	2DD	Akizuki	4	4	0	0	4	0	2	2
Takatsuki	DD	Takatsuki	4	3	0	0	4	0	3	1
Kikuzuki	DD	Takatsuki	4	3	0	0	4	0	3	1
Mochizuki	DD	Takatsuki	4	3	0	0	4	0	3	1
Nagatsuki	DD	Takatsuki	4	3	0	0	4	0	3	1
Amatsukaze	DDG	Amatsukaze	4	3	0	0	2	2	3	1
Tachikaze	DDG	Tachikaze	4	3	0	0	4	2	3	4
Haruna	DDH	Haruna	4	3	0	0	4	0	2	11
Hiei	DDH	Haruna	4	3	0	0	4	0	2	11
Yagumo	FF	Yagumo	4	2	0	0	2	0	2	1
Makigumo	FF	Yagumo	4	2	0	0	2	0	2	1
Asagumo	FF	Yagumo	4	2	0	0	2	0	2	1
Aokumo	FF	Yagumo	4	2	0	0	2	0	2	1
Akigumo	FF	Yagumo	4	2	0	0	2	0	2	1
Yuugumo	FF	Yagumo	4	2	0	0	2	0	2	1
Minegumo	FF	Minegumo	4	2	0	0	2	0	2	1
Natsugumo	FF	Minegumo	4	2	0	0	2	0	2	1
Murakumo	FF	Minegumo	4	2	0	0	2	0	2	1
Isuzu, Mogami, Kitakami, Ohi	4DE	Isuzu x 4	3	4	0	0	3	0	2	3
Chikugo, Ayase, Mikumo, Tokachi	4DE	Chikugo x 4	3	4	0	0	2	0	2	4
Iwase, Chitose, Niyodo, Teshio	4DE	Chikugo x 4	3	4	0	0	2	0	2	4
Yoshino, Kumano, Noshiro	3DE	Chikugo x 3	3	3	0	0	2	0	1	3
Oshio	SS	Oshio	2	5	0	0	18	0	0	3
Asashio	SS	Oshio	2	5	0	0	18	0	0	3
Harushio	SS	Oshio	2	5	0	0	18	0	0	3
Michishio	SS	Oshio	2	5	0	0	18	0	0	3
Arashio	SS	Oshio	2	5	0	0	18	0	0	3

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Uzushio	SS	Uzushio	2	6	0	0	16	0	0	3
Makishio	SS	Uzushio	2	6	0	0	16	0	0	3
Isoshio	SS	Uzushio	2	6	0	0	16	0	0	3
Narushio	SS	Uzushio	2	6	0	0	16	0	0	3
Kuroshio	SS	Uzushio	2	6	0	0	16	0	0	3
Takashio	SS	Uzushio	2	6	0	0	16	0	0	3
Yaeshio	SS	Uzushio	2	6	0	0	16	0	0	3
Japanese Self Defence Forces – Air Force										
F-104J	INT	6 counters	24	-	0	0	30	7	0	0
F-4EJ	INT	6 counters	26	-	0	0	10	9	0	0
F1	INT	3 counters	14	-	0	0	50	1	0	0
F86F	INT	1 counter	10	-	0	0	20	4	0	0
RF-4EJ	RCN	1 counter	30	-	0	0	0	0	0	0
PS-1	RCN	1 counter	43	-	0	0	0	0	0	2
S2F	RCN	5 counters	26	-	0	0	0	0	0	3
P2J	RCN	7 counters	50	-	0	0	0	1	0	3
HSS-2B	RCN	6 counters	6	-	0	0	0	0	0	4
KV107IIA-3	MSW	1 counter	-	-	-	-	-	-	-	-
ROK Navy										
Pusan, Seoul	2DD	Fletcher	5	3	0	0	2	0	1	1
In Cheon, Dae Gu	2DD	AM Sumner FRAM II	4	3	0	0	3	0	1	1
Taejon, Kwang Ju	2DD	Gearing FRAM I	4	3	0	0	2	0	1	4
Chung Buk, Jeong Buk	2DD	Gearing FRAM II	4	3	0	0	3	0	2	3
8x Paek Ku, 2x Modified Kilurki	PCS	Paek Ku has Standard SSM, Kilurki has twin Exocet.	5	2	12	1	0	0	1	0
8x Rudderow APD	APD	1 AA counter	3	3	0	0	1	0	1	0
ROKAF										
F-4D/E	INT	5 counters	26	-	0	0	30	8	0	0
F-5A/B	INT	5 counters	16	-	0	0	30	5	0	0
F-5E	INT	9 counters	20	-	0	0	40	6	0	0

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
F-86F	INT	6 counters	10	-	0	0	20	4	0	0
RF-86F	RCN	1 counter	12	-	0	0	0	1	0	0
RF-5A	RCN	1 counter	20	-	0	0	0	1	0	0
S-2A/D	RCN	1 counter	26	-	0	0	0	0	0	3
ROC Navy										
An Yang, Chiang Yang	2DD	Fletcher	5	3	0	0	2	0	3	1
Kun Yang, Kwei Yang	2DD	Fletcher	5	3	0	0	2	0	5	1
Heng Yang, Hsiang Yang	2DD	AM Sumner	4	3	0	0	2	0	1	1
Hua Yang, Huei Yang	2DD	AM Sumner	4	3	0	0	2	0	1	1
Po Yang, YuenYang	2DD	AM Sumner	4	3	0	0	2	0	1	1
Lo Yang, Nan Yang	2DD	AM Sumner FRAM II	4	3	0	0	2	0	1	2
Fu Yang, Dang Yang	2DD	Gearing FRAM II	4	3	0	0	2	0	1	1
Han Yang, Kai Yang	2DD	Gearing FRAM I	4	3	0	0	2	0	1	1
Lao Yang, Chien Yang	2DD	Gearing FRAM I	4	3	0	0	2	0	1	2
Liao Yang, Shen Yang	2DD	Gearing FRAM I	4	3	0	0	2	0	1	2
Te Yang, Lai Yang	2DD	Gearing FRAM I	4	3	0	0	2	0	1	2
11 ships	APD	Chung Shan	3	4	0	0	1	0	1	1
17 ships	AA	Mix of LSD, LST,LSM	2	4	0	0	1	0	1	0
ROCAF										
F5A/B	INT	4 counters	16	-	0	0	30	5	0	0
F-5E/F	INT	2 counters	20	-	0	0	40	6	0	0
F86F	INT	1 counter	10	-	0	0	20	4	0	0
F100A	INT	6 counters	18	-	0	0	40	5	0	0
F104A/B/D	INT	1 counter	24	-	0	0	25	6	0	0
F104G	INT	4 counters	24	-	0	0	30	7	0	0
RF100	RCN	1 step	18	-	0	0	0	1	0	0
RF-105	RCN	1 counter	30	-	0	0	0	1	0	0
RF-104G	RCN	1 counter	32	-	0	0	0	1	0	0
S-2A	RCN	2 counters	26	-	0	0	0	0	0	3
Philippines										

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Co 1	PC	Ex Auk and Admirable rebuilds x15	2	1	0	0	2	0	1	1
F5A	INT	1 counter	16	-	0	0	30	5	0	0
F8H	INT	1 counter	16	-	0	0	15	6	0	0
F86F	INT	2 counters	10	-	0	0	20	4	0	0
Western Allied expeditionary forces										
Australia										
Melbourne	CVL	Improved Majestic	4	6	0	0	0	0	1	7
Perth	DDG	CF Adams	4	3	0	0	5	2	3	1
Hobart	DDG	CF Adams	4	3	0	0	5	2	3	1
Yarra, Derwent, Torrens	3x DE	Yarra	4	4	0	0	6	0	6	6
Oxley	SS	Oberon	2	6	0	0	18	0	0	4
Orion	SS	Oberon	2	6	0	0	18	0	0	4
A4G	INT	1 counter	14	-	0	0	10	6	0	0
S2E	RCN	1 counter	26	-	0	0	0	0	0	3
F-111C 'Pig'	ATK	1 counter	50	-	0	0	70	4	0	0
Mirage III-O	INT	1 counter	26	-	0	0	40	9	0	0
P3	RCN	1 counter	70	-	0	0	0	1	0	4
Canada										
Huron	DD	Iroquois	4	3	0	0	2	0	1	8
CL-28	RCN	1 counter	70	-	0	0	0	1	0	4
New Zealand										
Waikato	FF	Modified Leander	4	3	0	0	2	0	3	4
Malaysia										
F5E	INT	1 counter	20	-	0	0	30	4	0	0
Indonesia										
CA27 Sabre	INT	1 counter	10	-	0	0	20	4	0	0
Vietnam										
MiG-21	INT	3 counters	10	-	0	0	30	5	0	0
J-6 (MiG19)	INT	2 counters	16	-	0	0	10	4	0	0
Il-28	BMB	1 counter	20	-	0	0	50	1	0	0

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Variable:										
F5A	INT	1 counter	16	-	0	0	30	5	0	0
A-1 Skyraider	ATK	1 counter	26	-	0	0	60	1	0	0
DPRK Navy										
FLO 1: #3025, #3026	2FF	Najin	4	2	0	0	1	0	1	1
SS Romeo 1-2 (2 counters)	3SS	3 Romeos	1	5	0	0	24	0	0	2
SS Whiskey 1	3SS	3 Whiskey	1	5	0	0	16	0	0	2
SS Whiskey 2	2SS	1 Whiskey, 1 Romeo	1	5	0	0	14	0	0	1
DPRK Air										
MiG 21	INT	4 counters	10	-	0	0	30	5	0	0
J-7 (M21)	INT	1 counter	10	-	0	0	30	5	0	0
J-6 (M19)	INT	2 counters	16	-	0	0	10	4	0	0
J-5 (M17)	INT	2 counters	16	-	0	0	10	3	0	0
A-5 (M19)	ATK	2 counters	12	-	0	0	25	4	0	0
MiG 15	ATK	3 counters	12	-	0	0	10	3	0	0
Su-7	ATK	1 counter	12	-	0	0	50	1	0	0
H-5 (Il-28)	BMB	3 counters	20	-	0	0	50	1	0	0
HZ-5 (Il-28R)	RCN	1 counter	24	-	0	0	0	1	0	0
PRC - PLAN										
Anshan, Changchun	2DD	2 Type 7	4	3	9	1	11	0	1	1
Chilin, Fuchin.	2DD	2 Type 7	4	3	9	1	11	0	1	1
Kaifeng, Yincuan.	2DD	2 Luda I	4	3	14	1	16	0	1	1
Hefei, Xian.	2DD	2 Luda I	4	3	14	1	16	0	1	1
Jinan, Chongquin.	2DD	2 Luda I	4	3	14	1	16	0	1	1
Xining, Nanjiang.	2DD	2 Luda I	4	3	14	1	16	0	1	1
Dalian, #160.	2DD	2 Luda I	4	3	14	1	16	0	1	1
Changsha, #209.	2DD	1 Luda I, 1 Jiangnan (#209)	4	2	7	1	9	0	1	1
Flot 1: #s 214, 231, 232, 233.	4FF	4 Jiangnan	4	3	-	-	3	0	1	1

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Flot 2: Chengdu, Guiyang, Gulin, Kunming.	4FF	4 Riga	4	3	9	1	12	0	1	2
Flot 3: Yintang, Change de, Shaoxing, Nantong,	4FF	1 Jiandong, (Yintang), 3 x Jianghu I.	4	3	13	1	16	0	1	2
Flot 4: Wuxi, Huayin, Zhenjiang, Xiamen	4FF	4 Jianghu I	4	3	18	1	21	0	1	2
SS Whiskey 1-4 (4 counters)	3SS	Whiskey	1	5	0	0	16	0	0	2
SS Romeo 1-11 (11 counters)	3SS	Romeo	1	5	0	0	24	0	0	2
H401	SSN	Han	3	7	0	0	18	0	0	5n
H402	SSN	Han	3	7	0	0	18	0	0	5n
AA group	AA	5 x LSM	2	4	0	0	0	0	1	0
AA group	AA	5 x LSM	2	4	0	0	0	0	1	0
PRC – PLANAF & PLAAF										
J7	INT	7 counters	10	-	0	0	30	5	0	0
J6	INT	3 counters	16	-	0	0	10	4	0	0
J5	ATK	4 counters	16	-	0	0	10	3	0	0
H5	BMB	3 counters	20	-	0	0	50	1	0	0
H6D	BMB	2 counters	60	-	0	0	60	1	0	0
HZ5	RCN	1 counter	26	-	0	0	0	0	0	0
JZ-6	RCN	1 counter	16	-	0	0	0	1	0	0
Z-5 Helo	AAA	1 counter	6	-	0	0	0	0	0	0
Variable:										
J7	INT	4 counters	10	-	0	0	30	5	0	0
J6	INT	4 counters	16	-	0	0	10	4	0	0
J5	ATK	6 counters	16	-	0	0	10	3	0	0
Q5	ATK	4 counters	12	-	0	0	30	4	0	0
H5	BMB	3 counters	20	-	0	0	50	1	0	0
USSR- Red Banner Pacific Fleet										
Minsk	CV	Kiev	4	7	14	6	18	4	7	15
Tashkent	CG	Kara	4	4	5	1	10	3	7	4

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Petropavlovsk	CG	Kara	4	4	5	1	10	3	7	4
Ochakov	CG	Kara	4	4	5	1	10	3	7	4
Nikolayev	CG	Kara	4	4	5	1	10	3	7	4
Vladivostok	CG	Kresta I	4	4	15	5	16	2	3	1
Sevastopol	CG	Kresta I	4	4	15	5	16	2	3	1
Khabarovsk	CG	Kresta II	4	4	3	1f	6	4	6	3
Admiral Oktyabrsky	CG	Kresta II	4	4	3	1f	6	4	6	3
Vasily Chapayev	CG	Kresta II	4	4	3	1f	6	4	6	3
Ad Fokin	CG	Kynda	4	3	12	5	16	2	3	1
Varyag	CG	Kynda	4	3	12	5	16	2	3	1
Admiral Senyavin	CCL	Sverdlov ccl	4	5	0	0	4	0	3	0
Alexandr Suvorov	CL	Sverdlov	4	5	0	0	8	0	2	0
Dimitriy Pozharskiy	CL	Sverdlov	4	5	0	0	8	0	2	0
Alexandr Suvorov bis	CL+	Sverdlov bis	4	5	4	1	8	0	4	3
Dimitriy Pozharskiy bis	CL+	Sverdlov bis	4	5	4	1	8	0	4	3
Gnevny	DDG	Kanin	4	3	4	1	8	1	3	1
Gordy	DDG	Kanin	4	3	4	1	8	1	3	1
Uporny	DDG	Kanin	4	3	4	1	8	1	3	1
Odarenny	DDG	Kashin	5	3	3	1	5	2	2	3
Sposobny	DDG	Kashin	5	3	3	1	5	2	2	3
Steregushchy	DDG	Kashin	5	3	3	1	5	2	2	3
Neuderzhimy	DDG	Kilden	5	2	3	1	5	0	3	1
Skrytny	DDG	SAM Kotlin	4	3	4	1	8	1	2	1
Vozbuzhdennyy	DDG	SAM Kotlin	4	3	4	1	8	1	2	1
Bessledny	DD	Kotlin Mod	4	3	0	0	4	0	1	2
Burlivyy	DD	Kotlin Mod	4	3	0	0	4	0	1	2
Dalnyvostochnyy Komsomolets	DD	Kotlin Mod	4	3	0	0	4	0	1	2
Vliyatelnyy	DD	Kotlin Mod	4	3	0	0	4	0	1	2
Blestyashiy	DD	Kotlin	4	3	0	0	4	0	1	1
Vdokhnovenny	DD	Kotlin	4	3	0	0	4	0	1	1
Veskiy	DD	Kotlin	4	3	0	0	4	0	1	1

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
Verniy	DD	Skoriy Mod	4	3	0	0	2	0	1	2
Vikhrevoiy	DD	Skoriy Mod	4	3	0	0	2	0	1	2
Vstrechniy	DD	Skoriy Mod	4	3	0	0	2	0	1	2
Vechniy	DD	Skoriy	4	3	0	0	2	0	1	1
Vidniy	DD	Skoriy	4	3	0	0	2	0	1	1
Rasyashchy	FFG	Krivak 1	4	3	3	1	6	0	3	2
Retivy	FFG	Krivak 1	4	3	3	1	6	0	3	2
Razumny	FFG	Krivak 1	4	3	3	1	6	0	3	2
Storozhevoi	FFG	Krivak 1	4	3	3	1	6	0	3	2
Grozyashchy	FFG	Krivak 2	4	3	3	1	6	0	4	2
Flot 1	4 CO	1 x Riga 1xGrisha I 2 x Petya mod	4	3	0	0	4	0	3	3
Flot 2	4 CO	1 x Riga 1xGrisha I 1 x Petya 1 x Petya mod	4	3	0	0	4	0	3	3
Flot 3	4 CO	1 x Riga 1xGrisha I 2 x Petya	4	3	0	0	4	0	3	3
Flot 4	4 CO	1 x Riga 1xGrisha3 2 x Petya	4	3	0	0	4	0	2	3
Flot 5	4 CO	1 x Riga 1xGrisha3 2 x Petya	4	3	0	0	4	0	2	3
Flot 6	4 CO	1 x Riga 1xGrisha3 2 x Petya	4	3	0	0	4	0	2	3
Flot 7	4 CO	1 x Riga 1xGrisha3 2 x Petya	4	3	0	0	4	0	2	3
Flot 8	4 CO	2 x Riga 2 x Petya	4	3	0	0	4	0	1	2
Poti 1	8 CO	8 x Poti	5	2	0	0	4	0	1	3
Poti 2	8 Co	8 x Poti	5	2	0	0	4	0	1	3
K-25	SSGN	Charlie I	2	7	20	1	12	0	0	4
K-121	SSGN	Charlie I	2	7	20	1	12	0	0	4
K-10	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-23	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-48	SSGN	Echo II	2	6n	28	5	8	0	0	3

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
K-56	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-94	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-108	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-116	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-127	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-134	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-175	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-184	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-199	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-431	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-557	SSGN	Echo II	2	6n	28	5	8	0	0	3
K-63	SSG	Juliett	1	6	14	5	4	0	0	1
K-70	SSG	Juliett	1	6	14	5	4	0	0	1
K-73	SSG	Juliett	1	6	14	5	4	0	0	1
K-120	SSG	Juliett	1	6	14	5	4	0	0	1
S-142	SSG	Whiskey LB	1	4n	*	6	4	0	0	1
S-155	SSG	Whiskey LB	1	4n	*	6	4	0	0	1
K-38	SSN	Victor I	3	7n	0	0	22	0	0	5
K-53	SSN	Victor I	3	7n	0	0	22	0	0	5
K-454	SSN	Victor I	3	7n	0	0	22	0	0	5
K-14	SSN	November	3	7n	0	0	18	0	0	3
K-42	SSN	November	3	7n	0	0	18	0	0	3
K-113	SSN	November	3	7n	0	0	18	0	0	3
K-115	SSN	November	3	7n	0	0	18	0	0	3
K-45	SSN	Echo I	2	6n	0	0	16	0	0	3
K-59	SSN	Echo I	2	6n	0	0	16	0	0	3
K-66	SSN	Echo I	2	6n	0	0	16	0	0	3
K-122	SSN	Echo I	2	6n	0	0	16	0	0	3
K-259	SSN	Echo I	2	6n	0	0	16	0	0	3
SS Foxtrot 1 to 19 (19 counters)	SS	Foxtrot	1	6	0	0	12	0	0	3
SS Zulu 1-2 (2 counters)	3SS	3 Zulu	1	5	0	0	20	0	0	2

Name	Type	Class	Move	Def	SSM	MR	CCTB	AAA	CAA	ASW
SS Whiskey 1 to 5 (5 counters)	3SS	3 Whiskey or Romeo	1	5	0	0	16	0	0	2
USSR – PVO and Naval Aviation										
MiG-25	INT	1 counter	26	-	0	0	0	8	0	0
MiG-23	INT	3 counters	18	-	0	0	30	6	0	0
MiG-21bis	INT	1 counter	10	-	0	0	30	5	0	0
Su-15	INT	4 counters	12	-	0	0	0	5	0	0
Yak-28P	INT	2 counters	16	-	0	0	40	4	0	0
Tu-128	INT	1 counter	13	-	0	0	0	4	0	0
Y-38	INT	1 counter	12	-	0	0	50	3	0	0
Su-17	ATK	1 counter	18	-	6	1	50	3	0	0
Su-24	ATK	1 counter	38	-	6	1	70	4	0	0
Tu-22M	BMB	1 counter	90	-	75	3	75	1	0	0
Tu-16C	BMB	3 counters	60		45	2	50	1	0	0
Tu-16G	BMB	2 counters	60	-	60	3	60	1	0	0
Tu-16E	EW	5 counters	60	-	0	0	0	1	0	0
Tu-16D	RCN	3 counters	70	-	0	0	0	0	0	0
Tu-95D	RCN	1 counter	160	-	0	0	0	0	0	0
Be-12	RCN	3 counters	36	-	0	0	0	0	0	2
Il-38	RCN	2 counters	60	-	0	0	0	0	0	3
Variable:										
MiG-25	INT	1 counter	26	-	0	0	0	8	0	0
MiG-23	INT	1 counter	18	-	0	0	30	6	0	0
Tu-22K	BMB	1 counter	40	-	25	3	45	1	0	0
Tu-22M	BMB	1 counter	90	-	75	3	75	1	0	0

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