

# MODERN NAVAL CONFLICTS: 1970s

## *Play-through Introductory Scenario #1*

**SCENARIO DESCRIPTION:** This is a very simple introductory scenario involving limited surface forces. It is intended to detail the turn sequence and basic combat system of the game in some detail.

**MAP USED:** "MNC-Test Panel"

**ENVIRONMENT:** Fair weather; Day

**NUCLEAR RELEASE:** No

**LOCATION:** N of upper UK/SE of Iceland

**FORCES:** USSR: 1 x Kresta I CG / USA: 1 x Belknap CG

**FORECAST:** *Day* Turns 1- 26, then *Night*. *Fair* weather Turns 1-18; *Poor* weather Turns 19-24; *Fair* weather rest of the scenario.

**START TIME:** 09:00 local time

**CREW QUALITY:** Belknap (and its SH-2F) = Crack, Kresta 1 (and its Ka-25B)= Average

**SITUATION:** Soviet naval intelligence has discovered that a Belknap-class missile cruiser is racing northward to reinforce a USN carrier group that is NE of Iceland. Fortunately for the Soviet side it has a Kresta I anti-ship cruiser in the area that may be able to locate and intercept the US ship.

**GOALS:** USSR: Sink the Belknap CG, or at least cause sufficient damage to prevent it from reaching the carrier group.

USA: Get the Belknap CG to any of the following 'exit' hexes: 04-03, 05-02, or 06-03 by the end of Turn 30.

The Belknap must not sustain serious damage before it reaches the area.

### **VICTORY CONDITIONS:**

Belknap reaches an exit hex with no damage= US Decisive Victory.

Belknap reaches an exit hex with V Light damage= US Substantial Victory

Belknap reaches an exit hex with Light damage= US Moderate Victory

Belknap reaches an exit hex with Moderate damage= USSR Moderate Victory

Belknap reaches an exit hex with Heavy damage= USSR Substantial Victory

Belknap sustains Severe damage or does not reach exit hex by Turn 30= USSR Decisive Victory

*Note: If the Kresta I is sunk then the victory level is shifted upwards on the above table by 1 level (i.e. a USSR Moderate Victory becomes a US Moderate Victory, etc...)*

**STARTING LOCATIONS:** USSR: Kresta I CG hex 13-04 facing 5, speed Fast.

USA: Belknap CG hex 05-09 facing 1, speed Fast.

*Both ships are in "Main" position on their respective Formation Diagrams.*

**SCENARIO RESTRICTIONS:** The Belknap cannot alter its course from Direction 1 until it detects the Kresta or its helicopter or detects an attack by missiles, etc (via any means: radar, visual, sonar, or ESM). Since no nuclear release has been granted the Kresta I only has three SS-N-3B missiles available to fire since one missile on Mount1 has a nuclear warhead.

**NOTES:** As the US player it will take you a minimum of 21 turns to reach any exit hex if you sustain maximum speed and go straight to the area, so you cannot afford much dithering. The USSR player has an advantage with its favorable initial position; however he is facing a ship with good air defenses so he must hope that his rather limited supply of SS-N-3 missiles are sufficient to penetrate the Belknaps defenses. Both sides must make good use of their single helicopter asset; the USSR's to spot the Belknap and/or target its missiles, and the USA's to help avoid the long-range SS-N-3 missiles!

# MODERN NAVAL CONFLICTS: 1970s

## *Play-through of Introductory Scenario #1*

**SETUP:** The US player (Player 1) places the Belknap CG in the “Main” holding box of Formation Diagram #1 and the marker for Task Force #1 (TF1) on the main map in hex 05-09 facing 1. The USSR player (Player 2) places the Kresta I CG in the “Main” holding box of Formation Diagram #2 and the marker for TF2 on the main map in hex 13-04 facing 5. Both formations are set to speed “Fast” as per the scenario setup. Both players agree that the US player will be the “First Side” for movement purposes. Both players decide that their units will start off at EMCON (*radar and active sonar off- see Section 5.3.2*) so that the other side would not gain an early ESM detection. The players also decide that they will use the “Standard” Initiative Rules (Section 8.2.1) for the game. Both players further decide that they will not use optional Rule 5.0.3 Detection Variance for radar or other detections for this scenario.

**Movement Notes:** The first units that move are always ships and/or Task Forces; since each side only has a single Task Force the First Side (Player 1) will always move his TF1 and then the Second Side (Player 2) will move his TF2 on the operational map. After all operational movement is completed each side can then move their ship within the Formation Diagram (this is performed in order of lowest speed to highest speed). See Section 4.1.1 for details.

### TURN1:

**MOVEMENT PHASE:** Checking Table 6.0 we see that on Turn 1 only ships/formations moving at “SFast” speed are allowed to move a hex on the operational map. Since both formations are moving at “Fast” speed neither task force is allowed to move this turn. Both sides decide to not move their ships within the Formation Diagram this turn, so movement is over. Either or both sides could launch their helicopters during this phase (*see Section 4.1*) but both decide they are too far apart considering the limited range of their helicopters (*see Section 7.4.3 Aircraft Endurance/Range*).

**DETECTION PHASE:** Looking at the best sensors for both sides, surface search radars with a base detection range of 1 Operational Hex (*the second value by the “RADAR” tag on the unit record sheet*) it is obvious that neither side is remotely close enough to detecting the other side with their ships, so detection is skipped for this turn.

**COMBAT:** No unit is attacking another unit so this phase is skipped for this turn.

**UPDATE PHASE:** No items to update this phase

### TURN2:

**MOVEMENT PHASE:** Both players decide to maintain their “Fast” speed. Again this turn neither side will move on the operational map, and both sides again decide not to change position with the formation or to launch helicopters.

**DETECTION PHASE:** No detections possible this turn

**COMBAT:** No combat

**UPDATE PHASE:** Nothing to update

### TURN3:

**MOVEMENT:** Both players decide to maintain their “Fast” speed. Table 6.0 shows that “Fast” units/formations may move this turn, so Player 1 moves his TF 1 marker into hex 05-08 (*according to the scenario notes he must move straight ahead until he detects the Soviets or is attacked*). Player 2 decides to move his TF2 marker ahead into hex 12-05. Player 2 also decides that he will launch his Ka-25B to scout for the US ship; the Ka-25B counter is placed in the “Main” holding box of the TF2 formation diagram (*the counter is placed upside-down to show it is being launched but is not yet launched as per Section 7.2.2*).

**DETECTION PHASE:** No detections possible this turn

**COMBAT:** No combat

**UPDATE PHASE:** The counter for the Ka-25B is turned over to show that it is launched (*Section 7.2.2*); at this point it is considered airborne at “Low” altitude and is separate target for attack/damage purposes. You do not count the launch turn for fuel use purposes, so at this point the Ka-25B has its full endurance value of “7” remaining.

### TURN4:

**MOVEMENT PHASE:** Both players decide to maintain their “Fast” speed. Again this turn neither side will move on the operational map, and both sides again decide not to change position with the formation. Player 1 does not launch his helicopter. Player 2 now may move his helicopter; looking at the Ka-25B data on the Kresta I sheet the Ka-25B may travel at a speed of “1.5”.; since this is an even-numbered game turn, looking at Table 6.3 we see that the Ka-25B may move 2 hexes on the operational map this turn. Player 2 thus moves the Ka-25B into hex 11-05 and then into hex 11-06. Player 2 sets the Ka-25B’s altitude level to “Medium” (*which is as high as it may fly according to its “CEILING” data value*).

**DETECTION PHASE:** Player 2 activates the Ka-25B radar and attempts to detect the US ship; the Belknap is 5 hexes (125nm) away. The Ka-25B has a radar arc of 120 degrees (*Section 5.2.1*) and thus the Belknap is with the arc. The Ka-25 has a Radar rating of “-/8”, which means its surface search rating is an “8” (*Section 5.2.2*). Next we check radar LOS (*Section 5.2.3*) to determine if radar detection

is even possible; consulting Table 5.2.3 we cross-index the Ka-25s altitude (Med Alt) to the Belknap's Size Rating (Med). The indexed value is "4", meaning that the radar LOS is 4 hexes. Since the distance to the Belknap is 5 hexes the Ka-25 cannot make a detection attempt via radar against the Belknap. Since the Ka-25 used its radar the Belknap can now attempt an ESM detection to see if it can detect the Ka-25s radar use (Section 5.3.1). As with radar we must first check to see if the ESM has a LOS to the Ka-25s radar; cross-indexing the Belknaps altitude (surface level) with the Ka-25s "Med" altitude level on Table 5.3.2 we see the following values shown: "5/5/6". Since the Belknaps EWR/ESM rating is a "3" we use the second value, which is "5". This means that the ESM LOS is 5 hexes; since the Ka-25B is 5 hexes away it is within ESM LOS. Cross-indexing the Ka-25Bs SS radar value of 8 and the Belknaps EWR/ESM rating of a 3 on Table 5.3.1 we obtain a value of 26, meaning the Belknaps ESM could detect the Ka-25B radar at up to 26 hexes if within ESM LOS. Since we have determined the Belknap is within LOS, it detects the Ka-25 use of radar! Player 1 decides to maintain EMCON since he fears the Ka-25 may detect his own radar transmissions (and since he believes the Ka-25 has not yet detected him). *Note that if the players were using optional Rule 5.0.3 the Ka-25B would need to roll for variance to its detection range for the radar detection attempt.*

**COMBAT:** No combat this turn.

**UPDATE PHASE:** The Ka-25B uses 1 point of its endurance for this turn, so its current endurance is reduced from 7 to 6.

#### **TURN5:**

**MOVEMENT PHASE:** Both players decide to maintain their "Fast" speed. According to Table 6.0 neither Task Force moves this turn. Neither player elects to move within their formation. Player two may move his Ka-25 one hex on the operational map this turn since it is an odd-numbered turn (Table 6.3 again). Player 2 moves the Ka-25 into hex 09-06, and keeps it at "Medium" altitude. Player 1 elects to launch his SH-2F, so the SH-2F counter is placed upside-down in the "Main" holding box of TF1.

**DETECTION PHASE:** Player 1 decides to maintain TF1 EMCON status in hope that the Ka-25 will still not detect his ship. Player 2's KA-25B is now 4 hexes from TF1, and is now within radar LOS (*we checked this last turn and since the KA-25B altitude and the target size is still the same the "4" radar LOS we obtained is still valid*) so we can now check for radar detection by the Ka-25B: (Section 5.2.4 in the rules cover this) Cross-indexing Table 5.2.2 with the Ka-25B (surface-search) radar rating of an "8" with the Belknaps radar signature rating of a "2" we obtain a base radar detection range of 8 operational hexes. Looking at Table 5.2.2.1 for range modifiers we find that none of those apply, so the final detection range is 8 hexes. Since the Belknap is within both radar LOS and detect range it is detected by the Ka-25B SS radar. The Belknap is still picking up the KA-25B radar via ESM.

**COMBAT:** No combat this turn.

**UPDATE PHASE:** We now turn over the SH-2F counter to indicate that it is launched and airborne and is at "Low" altitude. The Ka-25B uses 1 point of its endurance for this turn, so its current endurance is reduced from 6 to 5.

#### **TURN6:**

**MOVEMENT PHASE:** Both players decide to maintain their "Fast" speed. Table 6.0 shows that "Fast" units will move this turn, so both Task Forces will move one hex. Player 1 moves TF1 into hex 05-07, while Player 2 moves his TF2 into hex 11-05. Both sides' helicopters are using a "1.5" speed and Table 6.3 indicates that both can move 2 hexes this turn. Player 1 moves his SH-2F counter to hex 05-07 and then to hex 06-07 and goes to "Med" altitude, while Player 2 elects to move his Ka-25B only a single hex into hex 08-06 (and turns to face direction 5) and maintains his "Med" altitude (*Player 2 knows the Belknaps SM-1ER missiles have a range of 2 hexes and does not want to enter range*).

**DETECTION PHASE:** Player 1 decides to stop EMCOM and turns on the Belknaps radar; the Belknap has an air-search radar rating of 7 and we already know the Ka-25B is within radar LOS; indexing the 7 rating with the Ka-25s radar signature of 3 we obtain a base detection range of 5 hexes...since there are no applicable modifiers the net detection range is 5 hexes, and since the Ka-25 is 3 hexes away it is detected by the Belknaps radar. The Ka-25B is still within radar LOS and radar range since it maintained its altitude so it still has radar detection of the Belknap...since it does not have air-search radar it however cannot detect the SH-2F. The SH-2F has an SS radar rating of "1" and it is obvious that it cannot possibly detect the Kresta I at a range of 5 hexes so no attempt is made.

**COMBAT:** (*Rules Section 9.1 covers the basics of combat*) As per Step (5) we determine Initiative for all units since it appears combat is likely (since we are using the Standard initiative rule we consult Section 8.2.1): The scenario gives the Belknap a "Crack" crew, which adds a net 2 to its base 6 CR (Table 7.1 or 7.6) for a total of an 8 Initiative, while the Kresta I has an average crew (no modifier to any rating) so its Initiative is equal to its base CR of "4". The SH-2F has a base CR of a 5 and with the Crack crew bonus of +2 has an Initiative of 7. The Ka-25B has a base CR of 5, but gains a +3 initiative bonus from Table 7.1 because it directly detected the Belknap first (Table 7.1) for a net 8 Initiative. The Belknap and Ka-25B tie, but since the Belknap cannot engage the KA-25 with any weapon (its SM-1ER range is 2 hexes and the Ka-25B is 3 hexes away) the Ka-25B may attack first. The Kresta's notes show that the Ka-25B can target for the SS-N-3B missiles it carries; since the Ka-25B has TF1 detected this turn via radar the Kresta can attack TF1 with its SS-N-3B missiles if within range. The range for the SS-N-3B is listed as 10 hexes, and since TF1 is 6 hexes away the SS-N-3B can be fired. Looking at the SSM1 line on the Kresta I record sheet we see that the SS-N-3B AN (Attack Number) value is a 4, so it can fire up to 4 missiles in a single turn. Player 2 elects to fire all 3 available SS-N-3B at TF1 (*one missile is a nuke and cannot be fired without nuclear release*) thus it's AN value will be a 3. The SS-N-3B has seeker codes of "H" and "X"...Player 2 elects to use the "H" (radar homing) seeker for this attack since the Ka-25B can directly target the SS-N-3B and has met all requirements for the "H"-seeker weapon attack (*see Rules Section 9.1.5*). Player 2 marks off 1 missile round from the M1 mount and both missile rounds from M2 mount of

the SS-N-3B. The speed of the SS-N-3B is “11” and thus will cover the 6 hexes to TF1 in a single turn, so we will resolve the attack this turn.

The Belknap is allowed defensive fire with its SAMs and guns against the missile attack, so those are resolved first. All SS-N-3B that survive this defensive fire will then be allowed to make an attack against the ship. The Belknaps SM-1ERb2 missiles are its longest range anti-air defense so we fire that system first: the SM1ER can engage up to “E” (Extreme) altitude level and thus can engage the SS-N-3B since they fly at a “H” altitude level. Checking radar LOS (Table 5.2.3) the SM1 system can start to engage the SS-N-3B at its maximum range of 2 hexes (*which will negate any possible penalty for limited target transverse on Table 9.3.1.2*). Player 1 decides to fire the full AN of 5 in hopes of destroying all the enemy missiles, and marks 5 missiles off of the M1 mount of his SAM1 system. Indexing the AN of 5 with the SM1ERs AI rating of 12 on **Master Attack Table 1** gives an Attack Factor of 6. Now we must calculate modifiers for use on Master Attack Table 2: Looking at the Game Flow Chart (*Sheet 1*) we check each potential modifier in the Surface-to-Air combat section: 5.4.1 EWR only applies when firing vs aircraft/helicopters, **7.6** Crew Quality we obtain a +1 modifier for Crack crew, **9.1.3.1** no modifier as we are firing less than 9 missiles, **9.3.1.2** no modifier, **9.1.4.1** does not apply, **9.1.4.2** does not apply, **9.1.8** does not apply, **9.1.9** does not apply, **9.2** no modifier since fair weather, **9.3.1** we obtain a -1 because the SS-N-3B has terminal dive capability and we are firing at > T1 range (*SS-N-3B has ^ symbol after AN(AI) rating which means terminal dive capable*), and finally the SS-N-3B itself has a DF (Defensive Modifier) of 0 and a Speed Modifier of -1 listed in its data. Totaling all modifiers above gives a net -1 modifier to the SM1ER attack on Master Attack Table 2. Indexing the 6 Attack Factor obtained previously with the -1 total modifier value on **Master Attack Table 2** gives a “5” Hit Table Value. We now roll 2D10 and index the result of the roll with the “5” Hit Table column on **Master Attack Table 3**: rolling a 9 on the 2D10 we obtain 2 hits, which means that 2 SS-N-3B missiles were destroyed by the SM-1ER, leaving 1 missile for the Belknaps gun defenses.

Both of the Belknaps gun systems (Mk42 5” & Mk34 3”) can engage the surviving SS-N-3B missile starting at T1 range (their AA range rating). Player 1 fires the Mk42 first: The Mk42 has an AAN (Anti-Air Attack) AN of 1 and an AI value of 4. The player marks off 1 ammo unit from the Mk42 gun mount. Indexing **Master Attack Table 1** with these values we obtain an Attack Factor of 0.4. Now we determine all applicable modifiers for use on Master Attack Table 2: **5.4.1** EWR only applies when firing vs aircraft/helicopters, **7.6** Crew Quality we obtain a +1 modifier for Crack crew, **9.1.3.1** does not apply to guns, **9.3.1.2** no modifier, **9.1.4.1** does not apply, **9.1.4.2** does not apply, **9.1.8** does not apply, **9.1.9** does not apply, **9.2** no modifier since fair weather, **9.2.2** a -3 modifier for target at H altitude, and finally the SS-N-3B itself has a DF (Defensive Modifier) of 0 and a Speed Modifier of -1 listed in its data. Totaling all modifiers above gives a net -3 modifier to the Mk42 attack on Master Attack Table 2. Indexing the 0.4 Attack Factor obtained previously with the -3 total modifier value on **Master Attack Table 2** gives a “0.3” Hit Table Value. We now roll 2D10 and index the result of the roll with the “0.3” Hit Table column on **Master Attack Table 3**: rolling a 12 on the 2D10 we obtain 0 hits (missed!). We now resolve the Mk34 gun attack in the same manner: The Mk34 has an AAN (Anti-Air Attack) AN of 2 and an AI value of 2. The player marks off 1 ammo unit from each of the Mk34 mounts. Indexing **Master Attack Table 1** with these values we obtain an Attack Factor of 0.4. The modifier for Master Attack Table 2 will be the same as for the Mk42 attack, or a -3. Indexing the 0.4 Attack Factor obtained previously with the -3 total modifier value on **Master Attack Table 2** gives a “0.3” Hit Table Value. We now roll 2D10 and index the result of the roll with the “0.3” Hit Table column on **Master Attack Table 3**: rolling a 14 on the 2D10 we obtain 0 hits (missed again!).

A single SS-N-3B missile has survived the Belknaps defenses; thus Player 2 can now resolve the attack with that missile against the Belknap: Indexing **Master Attack Table 1** with the SS-N-3B AN value of 1 and its AI (Accuracy Index) value of 10 we obtain an Attack Factor value of “1”. We now must determine all applicable modifiers for the attack. The Game Flow Chart (*Sheet 10*) lists all applicable modifiers for Surface-to-Surface attacks, looking through the list we check each to find possible modifiers: **5.4.1** the Belknap EWR is 3 so subtracting the SS-N-3B EWR of a 2 = 1 which is a net -3 modifier on the table, **7.6** no modifier, Table **9.1.3.1** no modifier since we are firing less than 9 missiles in the salvo, **9.1.9** does not apply, **9.2.1** indexing this table with the SS-N-3B speed of 11 and the range to the Belknap of 6 hexes we obtain a -2 modifier, **9.2** does not apply, **9.2.2** does not apply, **9.2.3** does not apply. Totaling all modifiers we have a -5 total. Indexing the 1 Attack Factor with the -5 modifier on **Master Attack Table 2** we obtain a Hit Table value of 0.5. We now roll 2D10 and index the result of the roll with the “0.5” Hit Table column on **Master Attack Table 3**: rolling a 16 on the 2D10 Player 2 obtains 1 hit on the Belknap from the SS-N-3B attack. (*Note: the hit was statistically unlikely as Player 2 needed to roll a 15 or above on his dice to hit the Belknap...indeed Player 2 was lucky*)

We now resolve damage to the Belknap (*Note: damage is covered in Rules Section 9.9*): Note that the player owning the unit damaged rolls the damage to the unit. The SS-N-3B has a DR (Damage Rating) value of 11. Looking on **Table 9.9.0** we roll 1d10 on the “Total DR” row that is closest to but still ≤ to the 11 DR value, which is the “11” row. Player 1 rolls a “4” on the 1d10, indexing that roll with the 11 row gives a DN (Damage Number) of 13. We subtract the Belknaps DV (Defense Value) of 4 from the 13 DN to obtain a DT (Damage Total) value of 9. Indexing the 9 DT value on **Table 9.9.1** we obtain a Damage Level of “Severe”. Now we determine the Effective Damage Level (EDL, which is recorded on the Ship Record Sheet): Looking at Table 9.9.2 we see that “Severe” damage requires the player to roll 1d10, and if the result is 1-7 the EDL is recorded as “Severe”, if the result is 8-10 then the ship is Sunk! Player 1 rolls a “7” on his 1d10 roll so he marks all Effective Damage Level boxes up through “Severe” on the Belknaps Record Sheet.

Now Player 1 must determine possible damage to the Belknaps ship and weapon systems (*Rules Section 9.9.1.2 covers this*): *Since the Belknap went from undamaged to Severe damage level this turn we will sum all values in each column from the “V Light” through “Severe” rows to determine the odds of each system being lost, and also apply the worst degrade (D#) value within that range as well.* Consulting **Table 9.9.3 System Damage** we check each item in order from right to left rows on the table: “MISSILES”: summing from “V Light” through “Severe” gives  $2+2+3+2=9$  odds or less on 1d10 to lose each missile system. Checking the SM-1ERb2 system we roll a 3, so its singular mount is lost and the single SAM1 mount is marked in the ‘WPN SYS DAM’ section of the Belknaps record sheet. The “GUN” column is next and the column sums as  $1+2+2+2=7$  odds or less on 1d10. We roll for the Mk42 mount and roll a 8, so it is not lost, while we roll a 1 and a 6 for the two Mk34 mounts and lose both of them. The next column is “TORP/ASW” (which sums up to a 7 loss chance), so we check the two Mk46M2 torpedo mounts and roll 5 and 10 so we lose the first mount only. Note that the ASROC ASW missiles are fired by SAM1 (SM1ERb2) mount so we do not roll for that mount as it is lost with the SAM1 mount. We next check the “EW” system of the Belknap (sums up to an 8 odds) and roll a 5 meaning the EWR system is lost (is now a 0 EWR value). Checking the next item, “TCM” (sums up to 8 odds) we roll a 9 and do not lose that system. Checking the “SPEED” column on Table 9.9.3 we see that the sum is 4 to lose all speed: we roll a 7 on the die and do not lose all speed, however the worst degrade (D) result is a “D3” so we mark that on the ‘SYS DAM’ section of the record sheet (*this means the Belknaps speed is reduced by 3 levels, from Fast to VSlow*). The next column is “RADAR” (sums to a 9 odds) – the Belknap has 2 radar boxes so rolling 1d10 twice we roll a 2 and a 9, both boxes are lost and thus the Belknap has no functioning radar. Checking “SONAR” next (the odds sum to 7) we roll a 7 and lose the sonar system. On the “DATA” column we see that the ships Datalink is automatically destroyed, and the “COOR” columns shows a “X” value in Severe which means the ships CR value is reduced to 0. The “HELO” column sums to an 8 odds but since the SH-2F is aloft it cannot be lost by ship damage so this is ignored.

**UPDATE PHASE:** The SH-2F uses 1 point of endurance this turn so its current endurance is reduced from 5 to 4. The Ka-25B uses 1 point of its endurance for this turn, so its current endurance is reduced from 5 to 4.

#### **TURN7:**

AT THIS POINT THE BELKNAP HAS SUSTAINED “SEVERE” DAMAGE, WHICH ACCORDING TO THE SCENARIO VICTORY CONDITIONS MEANS THAT THE USSR SIDE WINS A DECISIVE VICTORY. BOTH PLAYERS AGREE TO ‘CALL THE GAME’ AT THIS POINT SINCE THE USSR SIDE HAS ACHIEVED VICTORY.

ENDING CONDITIONS: The Belknap is in some danger of being lost (see Rule 9.12) and even if it makes/is towed to a friendly port it will require extensive work to get back into action (many weeks if not months of work). The Kresta I is undamaged but will need to return to a port to replenish its missile supply.