

TONKIN GULF YACHT CLUB

NAVY OVER VIETNAM 65-68



JET AGE Quick Reference Chart (QRC) Page 1

AIR-TO-AIR MISSILE SUMMARY (B5.6)

MISSILE TYPE	MISSILE BASE TO HIT & RANGES (MIN - MAX)			MAL-FUNCTION d10	DMG DICE d10	NOTES
	REAR TARGET	SIDE TARGET	FRONT TARGET			
AA-2 Atoll, AIM-9B Sidewinder	7+ 3 - 10	No	No	1-3	3 / 5	No launch after Ext. Turn, any Split-S, or Immelman Use Narrow Arc for rear arc of the Target
AIM-9D Sidewinder	6+ 3 - 12	No	No	1-2	4 / 6	No launch after Ext. Turn, any Split-S, or Immelman +1 to Malfunction <=1967
AIM-9C "Mini-Sparrow"	9+ 4 - 10	12+8 - 20	11+ 16 - 40	1-4	3 / 5	No launch after Ext. Turn, any Split-S, or Immelman -2 to Lock-On Roll
AIM-7D Sparrow	9+ 6 - 15	12+9 - 30	11+ 18 - 60	1-4	5 / 7	No launch after Ext. Turn, any Split-S, or Immelman
AIM-7E Sparrow	8+ 4 - 20	11+6 - 40	10+ 12 - 80	1-3	5 / 7	No launch after Ext. Turn, any Split-S, or Immelman

MODIFIERS

GENERAL MODIFIERS	SPECIFIC IRM MODIFIERS 	SPECIFIC RHM MODIFIERS 
+/- n Crew Skill Difference -1 Target Taking Evasive Action -1 Target at Lower Altitude	+2 Target Used Afterburner this Turn -4 Target Up Sun from Attacker -1 / -2 Target at Maximum / Min Range	-n Target ECM Rating -1 Target < 11 Hex Range -1 Target Lower at TAL 3 or TAL 2 SURFACE LOW CAB -2 Target at TAL 1 SURFACE LOW CAB

AIR-TO-AIR MISSILE RULES

Direct Hit: If modified die roll is 2+ more than the to-hit "n" number then use damage dice to the right of slash.

Evasive Action: Target must pass an Awareness Check upon missile launch to identify threat. If successful, the target may elect to execute evasive action and use the defensive modifier (-1) against the incoming missile(s) but then must commit to making an Extreme Turn or Special Maneuver in the next move bringing its nose closer (both in alt and distance) to the firing platform. If there is *more than one attacking missile*, resolve each attack separately including evasive action threat identification; take evasive action based on the last missile attack resolved (from the greater distance). *Half or Full-Load* aircraft must immediately drop ordinance to execute. Aircraft that have declared firing at the start of the Air-to-Air Fire Segment may not take evasive action.

Missile Vertical Envelope: TAL up/down envelope = Hex Range / 2, round up.

IR Missile Close Targeting: If other aircraft are within 3-hexes of the target of an IR Missile, within missile envelope (alt and range), and present the same or better target profile to the shooter (rear is best - front is worst) randomly select actual target.

ECM Limits: ECM is effective against all attacking RHM and RHS unless otherwise noted in the scenario.

GUNS AIR-TO-AIR FIRE SUMMARY (B5.7)

RANGE & BASE TO-HIT (2d6)	MODIFIERS
1 hex = 5+ (POINT BLANK)	+/- n: Crew Skill Difference +/- n: Agility Difference -2*: Head-to-head or Deflection Shot -1: Extreme Shot (+/-2 TAL) +2: Target Speed Zero (0) -1: Low Rate of Fire @ -1 Adv. Gunsight w/ Deflection shot
2 hexes = 6+ (CLOSE)	
3 hexes = 7+ (SHORT)	
4-6 hexes = 9+ (MEDIUM)	
7-10 hexes = 11+ (LONG)	

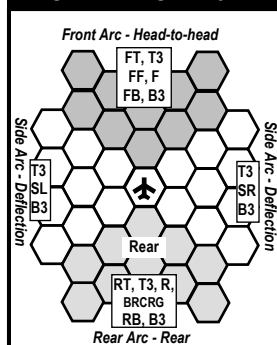
CHECK AMMUNITION: If DOUBLES rolled to-hit, consult the AMMUNITION DEPLETION TABLE

AMMUNITION DEPLETION TABLE (B5.7)

	ALL	RC/CANNON	HVY CANON
ACE (+3)	6	4+	3+
VETERAN (+2)	5+	3+	2+
SKILLED (+1)	4+	2+	auto
GREEN (+0)	3+	auto	auto

■ aircraft out of ammunition type if DOUBLES of noted number rolled in To-Hit roll
 ■ auto = automatically out of ammunition for weapon

AIRCRAFT ARC DIAGRAM



GUN FIREPOWER & RANGE SUMMARY

WEAPON	DMG DIE	MAX RNG	NOTES
LMG	d4	6	
MC	d10	10	
LVHC	d20	6	-2 at Medium Range LROF
LRHC	d20	10	

ROBUSTNESS TABLE (B6.2)

TARGET	<1	1-2	3-5	6-10	11-15	16-20	21-25	26-30	31+
R0	5	6	7	8	9	10	11	12	12
R1	4	5	6	7	8	9	10	11	12
R2	3	4	5	6	7	8	9	10	11
R3	-	3	4	5	6	7	8	9	10
R4	-	-	3	4	5	6	7	8	9

MODIFIERS

(GUNS ONLY) COLUMN SHIFT
Right: ≤ 3 hex Range, Special Weapon (*cumulative*)
Left: ≥ 7 hex Range, Special Armor (*cumulative*)

CRITICAL DAMAGE: robustness roll critically failed
LMG: 5+ lower than "n" factor destroyed
HMG, Light AA: 4+ lower than "n" factor destroyed
IRM & RHM, MC, or M/H AA: 3+ lower than "n" factor destroyed
SA-2, LRHC, LVHC: 2+ lower than "n" factor destroyed

DAMAGE NUMBER: # or > on 2d6 to prevent damage

DAMAGE EFFECT

ENGINE DAMAGE (Even) JET // PROP

- 4 // -2 to Max Speed (min 1); No ABurner
- Crew Check to Climb: *failure* = OOC
- Climb Factor reduced to 1/4 // 1/3
- 1 to all Checks

AIRFRAME DAMAGE (Odd)

- 1 Agility
- Crew Check to Special Maneuver or Extreme Turn: *failure* = Destroyed
- 1 to all Checks

AIR-TO-AIR ROCKET SUMMARY (V10.52)

Number of Rocket Fired	To Hit Modifier	ORO-57 S-5 Dmg d20	Zuni Dmg d20
2	-5	-	3
4	-4	-	3/6
6, 8 or 16+*	-3	1/2	3/6

Find to Hit using **Guns AtA** w/o any Gunsight mod.
 Multiple Hits (>= +2 hit #) use damage to right.
 Max Range 6 Hexes; addl. -2 if Medium Range
 * VPAF ORO-57 Rkt Pods Must Fire All Rockets

GREEN or POOR CREW CONFUSION RULES (B3.6.10 Optional)

If a **Green (+0)** or **Poor (-1)** crew attempts a Special Maneuver with a 120° turn, they must take a skill check. If passed they execute the move as plotted. If failed roll 1d6.

1: Immediately Out of Control
 2-3: Opposite 120° turn
 4-6: Standard 180°



TONKIN GULF YACHT CLUB



PLAY SEQUENCE (B Intro)

TAILING DECLARATION PHASE (simultaneous)

MOVE PLOTTING PHASE (simultaneous)

- **Formation Status Segment:** Break-up/Drop-out of formation

MOVEMENT PHASE (in Move Group order)

- **Move Segment:** execute move in Move Group order with Pilot Reaction; then make final speed & altitude adjustments
 - **Move Group 1:** OOC, Bombers, Helos, Green (+0)
 - **Move Group 2:** Skilled (+1) crew
 - **Move Group 3:** Veteran (+2) crew
 - **Move Group 4:** Ace (+3) crew

Group Priority
 A) Tailed Aircraft
 B) "Up Sun"
 C) Lower Altitude
 D) National Order

DETECTION PHASE (simultaneous)

- **Radar Search & Visual Spotting Segment:** attempt aircraft using *radar search* and *visual spotting*

FIRE PHASE (simultaneous within each segment)

- **Anti-Aircraft Fire Segment:** fire SAMs, AAA batteries
 - **Lock-on:** resolve SAM lock-on
 - **Anti-Radiation Missile (ARM) Fire:** declare fire & SA-2 counter
 - **SAM Fire:** resolve SAM missile fire
 - **Anti-Aircraft Artillery (AAA) Gunfire:** resolve surface-to-air gunfire
 - **AAA and SAM Suppression Recovery:** resolve recovery attempt
- **Air-to-Air Fire Segment**
 - **Declare Firing and Targets**
 - **Missile Fire:** resolve missile fire
 - **Air-to-Air Gunfire:** resolve air-to-air gunfire
- **Surface Attack Segment:** resolve surface attacks



JET AGE

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Quick Reference Chart (QRC)

SA-2 SAM MISSILE SUMMARY (C4.0 & V10.3)

MISSILE TYPE	MISSILE BASE TO HIT AND MIN/MAX RANGE			DMG DICE	RADAR DIE	CAB LIMIT
	REAR TARGET	SIDE TARGET	FRONT TARGET			
SA-2 B/C	8+ 14 - 38	10+ 22 - 75	9+ 44 - 150	4 / 8	d6	TAL 4 S.LOW+

GENERAL MODS	MODIFIERS	
	SPECIFIC SA-2 MODIFIERS	
+/- n Crew Skill Difference	-n Target ECM ("Shoehorn" N/A May '67+)	
-1 Full Load Evasive Action	-2 to Awareness Check vs SA-2	
-2 1/2 & Unloaded Evasive Action	If Flying Over "Undercast"	

SA-2 Procedure: Lock-on to target, fire next turn if still locked -or- Lock-on and Fire fires in same turn.
Direct Hit: If modified die roll is 2+ more than the to-hit "n" number then use damage dice to the right of slash.
Malfunction: SAMs always malfunction on a roll of "1".
Evasive Action: Target must pass an Awareness Check upon missile launch to identify threat. If successful, the target may elect to execute evasive action and use the defensive modifier (-1 or -2) against the incoming missile(s) but then must commit to making an Extreme Turn or Special Maneuver (if possible) in the next move bringing its nose closer to the firing platform. Full-Load aircraft **must** dive at least 2 TAL as part of their evasion, Half-Load or Unloaded aircraft are not required to dive as part of the evasion.
Off Table SA-2: On turn of launch missile is placed d6+1 hexes from the allocated board edge. If target in range resolve immediately. If not resolve on the next SAM Fire segment.

ANTI-AIRCRAFT ARTILLERY (AAA) SUMMARY

AA TYPE	TO-HIT	MAX RANGE	DMG DICE	CAB LIMITS
LIGHT (to 37mm)	11* / 12	5 hexes	6d6	S LOW
MEDIUM (38-70mm)	10* / 11+	10 hexes	4d10	S LOW & LOW
HEAVY (71mm+)	11* / 12 (1 hex blast)	20 hexes	2d20	LOW - V HIGH

MODIFIERS
 +1 Radar Directed Guns (Med & Heavy Guns) -n Target ECM vs Radar Directed
 +1 Flying Under Overcast (V9.0)

*NEAR-MISS: half number of Damage Dice, optional Extreme Turn
 Low Alt: Max range is 3 hexes if the target is at TAL 1 in S. LOW CAB over rough/uneven land
LIGHT & MEDIUM AAA:
 - Pick a target, roll to-hit per battery firing, roll for damage and robustness as normal
HEAVY AAA:
 - Blast affects all aircraft in Target Hex and one hex adjacent to Target Hex

AAA MISDIRECTION
 If double "1s", "2s", "3s" or "4s" rolled to-hit, fire directed at closest friendly aircraft in range of AA Battery (V8.05)

VISUAL/RADAR SEARCH, LOCK-ON & AWARENESS

ACTION	TARGET ALTITUDE	DIE ROLL TOTAL		
		8 - 9	10 - 11	12+
Visual Search <i>2d6+skill</i>	▲ / =	F + S	F + S + R	F + S + R
	▼	F	F + S	F + S + R
Radar Search <i>d6+dRad+skill</i>	▲ / =	F	F + S	F + S
	▼	none	F	F + S
Lock-on <i>d6+dRad+skill</i>	▲ / =	Lock-on	Lock & Fire	Lock & Fire
	▼ / FT	none	Lock-on	Lock & Fire
Awareness Check <i>d6+dDefSys+skill</i>	▲ / =	Detect*	Detect	Detect
	▼	(*none if PVA rear arc)	Detect	Detect

▼=TARGET BELOW; ▲=TARGET ABOVE FT= FRIENDLY AC WIN 6 HEXES OF TARGET
 none = NO DETECTION (roll total <8 = "none") F=FRONT ARC; S= SIDE ARC; R=REAR ARC

RADAR RULES

- **RADAR SEARCH:** Radar detects Hidden Aircraft in *Radar Search & Visual Spotting Segment*.
- **RADAR ARCS:** Aircraft use arcs specified above for Radar Searches; Lock-on is only possible in the front arc. Each radar has a maximum detection distance (in hexes) listed in the Aircraft stats or scenario. Aircraft radars detect TAL up/down = 1/2 hex range (round up).
- **LOCK-ON:** Spotting platform must "Lock-on" to one target in its front arc prior to launch of RH Missiles. The target is Locked-on until it flies off the board or flies out of the locking platform's front arc. Lock-on is also lost if the locking aircraft executes an extreme turn/special maneuver, is out of control, or the locking platform is damaged. While Locked-on a target the spotter may not attempt *Radar Searches*.
- **LOCK-ON AND FIRE:** The locking aircraft or SAM may fire RH missiles immediately.
- **GROUND RADARS:** Ground radars have 360° arcs and are assumed to be at TAL1.
- **RWR:** Target is informed of radar Lock-on if it has a RWR.

VISUAL SPOTTING RULES

- 1/2 **SPOTTING RANGE:** target in spotter rear arc and/or target at TAL 1-3 SURFACE LOW CAB and below spotter or at the same altitude.
- 1/4 **SPOTTING RANGE:** targets below and in spotter rear arc.
- **POOR VISIBILITY AIRCRAFT (PVA):** 1/2 spotting range for targets in spotter rear arc; targets in rear arc and below may not be spotted. Awareness check passed on 10+ in rear arc.
- **Radar Malfunction (Radar Search Check only):** if double 1s are rolled.

LOADED AIRCRAFT RULES (B3.11)

- **HALF-LOAD:** -1 Agility, -1 off Maximum Speed, 1/2 Climb Factor. Aircraft moderately laden with weapons and/or drop-tanks. HALF-LOAD that drop load are CLEAN at start of move.
- **FULL-LOAD:** +0 Agility, Lx acceleration, -2 off Maximum Speed, 1/2 Climb Factor. Aircraft heavily laden with weapons and/or drop-tanks.

LUCKY HIT TABLE (B6.3)

DICE ROLL	LMG / HMG / IRS-MP	CANNON / IRM / RHM / SAM / AAA
2	Pilot Killed - Plane Crashes	Pilot Killed - Aircraft Crashes
3	Pilot Wounded - Crew Check to save aircraft; pass plane must abort, fail and plane crashes	Pilot Killed - Aircraft Crashes
4	Missile/Gun Damaged + *B + *R - Half (random) of aircraft weapons are inoperable for the rest of game	Targeting Damaged + *O + *B - Aircraft must fire with a -2 to-hit modifier for remainder of the game
5	Rudder Jam + *E + *R - Aircraft must do right turn next turn; check for OUT-OF-CONTROL	Rudder Jam + *E + *R + *A - Aircraft must do right turn next turn; check for OUT-OF-CONTROL
6	Elevator Damaged + *D + *A - Aircraft must Steep Dive in following turn and may not Special Maneuver, or extreme turn for rest of mission	Elevator Damaged + *D + *A - Aircraft must Steep Dive in following turn and may not Special Maneuver, or extreme turn for rest of mission.
7	Fire - Aircraft on fire, take Crew Check at start of next move to stop fire. If not stopped aircraft is damaged (roll randomly to determine type)	Heavy Fire + *P - Aircraft on fire, take CC with -1 at start of next move to stop fire. If not stopped aircraft is damaged (roll randomly to determine type)
8	Engine Problems + *D + *H - Aircraft may only move at half speed (round down) for remainder of mission	Engine Problems + *H + *R - Aircraft may only move at half speed (round down) for remainder of mission
9	Wing Problems + *O - No special maneuvers for remainder of mission; check for OUT-OF-CONTROL	Fuel Leak + *D + *R - Aircraft must fly forward until Crew Check passed on a subsequent move
10	Fuel Leak + *P + *R - Must fly forward until Crew Check passed. Next hit destroys aircraft.	Engine Critical + *A - Aircraft may only move at speed 1 for rest of mission. Next hit destroys AC.
11	Serious Fuel Leak + *P + *A - Roll Crew Check to prevent tank leak. If failed, next hit destroys aircraft.	Wing Problems - No special maneuvers for remainder of mission; check for OUT-OF-CONTROL
12	Fuel Tank Explodes + *D + *E - Plane destroyed	Fuel Tank Explodes + *D + *E - Plane destroyed

LUCKY HIT ADDITIONAL DAMAGE

*A = Afterburner Damaged - The aircraft may not use afterburner for the remainder of the mission.
 *B = Pilot Blackout - The aircraft must make random movements until Crew Check passed (check at start of subsequent moves). Roll d6 for aircraft move where "x" is the current aircraft speed: on 1-2 aircraft executes an Lx2 turn, on 3-4 an Rx2 turn, on 5-6 it moves directly forward. Aircraft flies Level Flight Maneuver on odd roll and Dive Maneuver on even roll. If Dive, the aircraft must increase all speed possible.
 *D = Debris - The nearest aircraft within 3 hexes (if any) in the target's tail arc and at the same TAL or 1 TAL lower immediately suffers a hit with firepower of 2d6 (as if from HMG fire) due to debris from weapons impact.
 *E = Possible Ordnance Explosion - Roll a d6 if loaded with heavy weapons (bombs, rockets, torpedoes); on 1-3 the weapons explode. If an explosion occurs, any aircraft within 2 hexes must roll on the Lucky Hit table Cannon column.
 *H = Crew Heroic - Take a Crew Check; if passed the aircrew has been inspired by events in the battle, from this point forward firing is one Crew Skill level better and Ammunition Depletion is one level worse.
 *O = Oxygen System Hit - Roll a d6 if flying at MEDIUM-TOP CAB or above; on 1-3 the oxygen system malfunctions. The aircraft must immediately attempt to exit the board by dive no matter if it is a friendly edge or not.
 *P = Crew Panic - No firing until Crew Check passed at start of a subsequent move.
 *R = Radar, Defensive Systems and RWR Destroyed - Aircraft's Radar, Defensive Systems and Radar Warning Receiver are destroyed. Aircraft may not launch RH missiles.



TONKIN GULF YACHT CLUB



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Quick Reference Chart (QRC)

SURFACE ATTACK SUMMARY (C3.0)

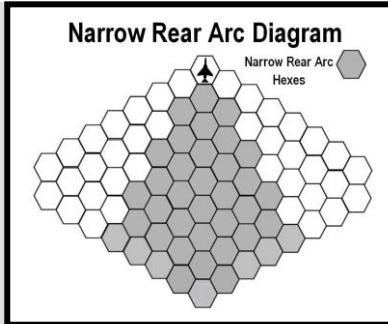
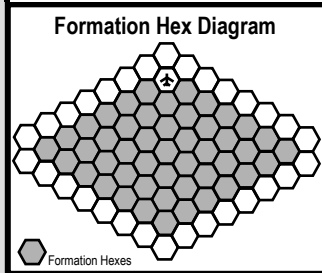
Base To-Hit (2d6)	Modifiers
10+ Surface Low CAB	Bomb-load of Attacker: +0 Light (500-1500lb) +1 Med (1501-4000lb) +2 Heavy (4000lb+)
12+ Low and Medium CAB	Zuni Rocket Modifiers: (V10.51) <i>(replace base rocket modifiers w/ below, max TAL LOW CAB)</i> +3 16 rockets (4 full LAU-10 pods) +2 8 or 6 rockets (2 full LAU-10 pods or 3 LAU-33/35 stations) +1 4 rockets (1/2 LAU-10 pods or 2 LAU-33/35 stations) -1 2 rockets (1/4 LAU-10 pods or 1 LAU-33/35 station) -1 Range > 6 hexes (max range 12)
roll -2 or -1 AAA/SAM suppressed V2.2	General Modifiers: +n Aircrew Skill +1 Dive Bombing/Strafing Attack (3 hexes) -1 Attacking at TAL 1 or 2 S. LOW CAB Speed 5+ -1 Point Target (small target; radar, bunker, etc) -1 or +1 Special Equipment & Training
(roll = or > "Hit" roll 2 + > "Direct Hit")	

Bomb and Rocket Hits (V1.2): A target will yield VPs by the type of hit it receives. Either a standard "Hit" or a "Direct Hit"

Dive Bombing: Must execute their attack in Low or Surface Low CAB; must start minimum one CAB above

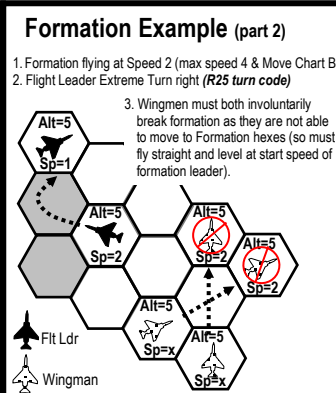
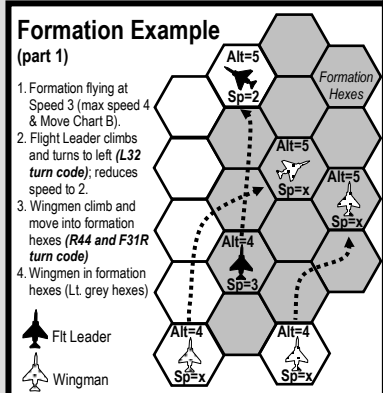
Strafing: If attacker end at TAL 1 S. LOW CAB range only two hexes.

Bomb Blast Debris (V8.06): Any aircraft at SURFACE LOW CAB TAL 1-3 moving through a hex bombed on the previous turn must roll 2d6 damage as if hit by HMG.



FORMATION RULES (C1.0)

- A formation must consist of at least two (2) aircraft (Formation Leader & Wingmen).
- Formations are determined at the start of the game. If a formation must break-up it may not be reformed.
- Formations must move at one less than the maximum speed of the slowest undamaged aircraft in the formation or may move at speed 1 if maximum speed is 1.
- Aircraft in formations must fly at the same Tactical Altitude Level.
- At the start of the **Move Plotting Phase**, players determine if any Wingmen will voluntarily drop-out of formation and what formations will voluntarily Break-up.



GUIDED AIR-TO-SURFACE MISSILE SUMMARY (C2.7)

MISSILE	BASE TO HIT	MALF. DIE	RANGE/CAB
Bullpup-A (1960)	9+	1-3	6-60 / MED+
Bullpup-B (1960)	9+	1-2	6-100 / MED+

MODIFIERS

- +n Aircrew Skill
- 1 Aircraft fired upon by AAA this turn
- 2 Aircraft fired upon by SAM or SAM and AAA this turn

ARM SUMMARY (C4.4 & V10.4)

MISSILE	BASE TO HIT	MAL. DIE	RANGE/CAB
AGM-45 Shrike	9+	1-3	6-25 / LOW+
AGM-78A Stdrd ARM	8+	1-2	7-60 / LOW+

MODIFIERS

- +/- n Crew Skill Difference
- 1 Target Heavily Fortified/Prepared
- 1 No Lock-on to any aircraft this turn
- SA-2 executes ARM counter-measures (required skill check by crew)
- 2 vs. Stdrd ARM Shrike loses target (automatic miss).
- "Down the Throat": SA-2 vs. Iron Hand roll 2d6, winner resolves first

AGM-62 "WALLEYE" GLIDEBOMB SUMMARY (V10.2)

GLIDEBOMB	BASE TO ACQUIRE	MALF. DIE	Max RANGE/CAB
Walleye I	8+	*	3xTAL / LOW+

MODIFIERS TO ACQUIRE IMAGE

- +n Aircrew Skill
- +n Target Contrast
- 1 Each set of 8 hexes or less: beyond the first 8.
- n Clouds or Smoke over target.

IMAGE ACQUISITION

- Must fly straight and level for two turns, while keeping the target in front arc prior to attempting to acquire the target.
- If a Target Acquisition roll result is not a "Good Image", the aircrew can attempt to improve or gain an image in the following turn as long as they continue fly straight and level, and target remains in front arc.
- Once an Image is acquired the aircrew may release the bomb.

MOVEMENT AND HIT RESOLUTION

- Acquisition roll 2 + > than to-hit then "Good Image" Auto Hit
- Acquisition roll = or 1 greater than to-hit, then "Unclear Image"
 - On arrival to target roll 2d6
 - 8+ Target is Hit, Full VPs
 - 6-7 Close hit, 1/2 VPs
 - < 6 Miss
- The Walleye has a speed of 10, it cannot be hit by flak, aircraft guns or missiles.





TONKIN GULF YACHT CLUB



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PRE-GAME TABLES (V4.0)

United States Navy: The Eroding Edge

The number of *skilled* (+1) aircrews in the scenario

Year	2-4	5-8	9-12	>12
1965	0	1d2-1	1d2	1d3
1966	1d2-1	1d2	1d3	2d2
1967	1	1d3	2d2	2d3
1968	1	2d2	2d2	3d2

Vietnamese Peoples Air Force: Physical Weakness

Roll 1d6. If that roll is less than the number of *green* (+0) and *poor* (-1) pilots then 1 pilot is physically weak, and must make skill checks for all extreme turns or special maneuvers at speed 5 or greater. If the test is failed treat as "Blackout" in lucky hits. If greater than six *green* (+0) and *poor* (-1) pilots, only roll for the excess, one pilot is automatically physically weak.

POST-GAME RESOLUTION SEQUENCE

1. Neutral and Unfriendly Board Edge Exit (A6.2)
2. Carrier Recovery (V5.2) USN Only
 - a. Recovery Skill Check (Damaged Aircraft only)
3. Combat Search and Rescue (V5.3) USN Only
 - a. Ejection Check
 - b. Ejection Location
 - c. CSAR Recovery



NEUTRAL AND UNFRIENDLY BOARD EDGE EXIT (A6.2)

All aircraft that exit a non-friendly edge or are considered off a non-friendly edge due to scenario rules must make a crew check.

MODIFIERS

GENERAL MODIFIERS

+n Crew Quality	-1 Exit Neutral Edge
-1 Damaged	-2 Exit Unfriendly Edge

SPECIFIC USN MODIFIERS

+1 Year 1965
-1 Year 1967

- If the Crew Check succeeds, the VPAF aircraft safely returns to base.
- If the Crew Check is failed the aircraft is damaged.
 - If previously damaged, the aircraft is destroyed.
- If the Crew Check is failed by **four or more** the aircraft is destroyed.
- Damaged USN aircraft attempt Carrier Recovery (V5.2).
- Destroyed roll for crew survival C6.0.
- Ejected USN crew roll for Ejection Location with a -2 modifier (V5.3).

CARRIER RECOVERY (V5.2)

Damaged or Bingo USN aircraft must take a skill check.

TYPE OF DAMAGE

AIRFRAME DAMAGE OR LUCKY HIT (WINGS OR CONTROL SURFACES)

Tough to Kill Bonus: +1 Die Roll Modifier.

Delicate Hydraulics Penalty: -1 Die Roll Modifier.

- **Passed:** The damaged aircraft has landed on the carrier.
- **Failed:** Pilot must eject. Ejection Location: Deep Water. Critical Fail by **four or more**: Pilot must eject immediately.

ENGINE DAMAGE OR LUCKY HIT (FUEL OR ENGINE) OR BINGO FUEL

Bingo Fuel Bonus:

- All Bingo fuel checks +2 Die Roll Modifier.
- Additional +1 Die Roll Modifier, if exit off a friendly edge.
- Twin Engine Bonus: +1 Die Roll Modifier (**NA** for Bingo or Fuel).
- A-4 Single Wing Tank Penalty: -1 Die Roll Modifier (Lucky Fuel Hit)
- **Passed:** The damaged engine keeps running.
- **Failed:** The engine flames out. Pilot must eject. Critical Fail by **four or more**: Pilot must eject immediately.

If more than one type of damage due to "Lucky Hits" or Bingo and Damage make a single Carrier Recovery check, apply modifiers by type and take the worst result.

SAFE EJECTION & EJECTION LOCATION (V5.3)

Ejection Check: Roll 2d6, on a 2 the crew is killed, and wounded on a 3 (wounded crew suffer -2 Die Roll Modifier)

F-4 and A-6 crews make a single die roll for both crew members for Ejection and Rescue

Roll 1d6

TARGET LOCATION	INLAND	COASTAL/OVER GULF
<1	Inland High Population	Inland Low Population
1	Inland: Low Population	Feet Wet: Coastal
2	Feet Wet: Coastal	Feet Wet: Deep Water
3-7	Feet Wet: Deep Water	Feet Wet: Deep Water

Modifiers

+1 Bingo	-2 Board Edge Exit Shootdown
-1 Route Pack 6	-1 Critical Failure

COMBAT SEARCH AND RESCUE RECOVERY (V5.4)

CSAR ROLL 2D6

RECOVERY LOCATION	CREW RECOVERED *	CSAR COMBAT LOSS
Inland: High Population	>= 11	<=3
Inland: Low Population	>= 8	2
Feet Wet: Coastal	>= 5	2
Feet Wet: Deep Water (SAR)	>2	N/A

ON TABLE CSAR

Within 8 hexes of strike target, or flak or SAM position	>= 11	<=3
Any other table land area	>= 9	2
Any on table water zone, excluding Hanoi or Haiphong	>= 6	2

-2 Wounded Crew (applies only to recovery not SAR combat loss)

* +3 VP per successful CSAR roll, excluding Deep Water (V3.1)

Notes

If more than one CSAR attempt is being attempted on a table with different locations, the USN player determines the order of resolution.

No Recovery Attempt: An aircrew shot down over Hanoi or Haiphong, no SAR mission may be attempted. Aircrew is automatically captured.

CSAR Combat Loss: If a "CSAR Combat Loss" is rolled, make an immediate *skilled* (+1) crew check:

- **Passed:** CSAR aircraft is damaged and must recover per standard rules. The type damage is determined by passed roll, with doubles being a lucky hit.
- **Failed:** CSAR aircraft is shot down, no further CSAR attempts may be made on table.
- VPAF score standard VPs for lost or damaged CSAR aircraft treat as "Other Aircraft" for VPs.