COMBAT LESSONS FROM LEBANON AND THE FALKLANDS:

IS THERE A LITTLE WHEAT UNDER ALL THAT CHAFF?
A CAUTIONARY EXAMPLE:  
THE 1973 ARAB-ISRAELI WAR

- Immediate Post-Combat Chaff:
  -- One-third of the Israelis’ 251 air-to-air kills (claimed) were due to Sparrow
  -- Sparrow $p_k$ was 50%

- The Truth, 5 Years Later:*  
  -- Total Sparrows fired = 12
  -- Total Sparrow kills = 0 to 1

BEWARE OF EARLY “LESSONS LEARNED”:
WE SHALL SEE THAT THE DISTORTION OF VALID COMBAT LESSONS IS WORSE IN 1982 THAN IN 1973

*REFERENCE: GEN. MORDECAI HOD.
SOME TYPICAL CLAIMS

- EXOCET-TYPE MISSILES ARE THE DEATH-KNELL OF SURFACE NAVIES
- F-14, E-2C, AND THE BIG CARRIER WOULD HAVE DEFEATED EXOCET
- HARRIER PROVED TO BE ONE OF THE WORLD'S BEST AIR-TO-AIR FIGHTERS
- ISRAELIS DESTROYED SCORES OF TANKS USING A MAGIC AIR WEAPON THAT HOME ON CUPOLAS AND DRILS HOLES IN THE ROOF
- E2C CONTROL OF ISRAELI FIGHTERS LED TO AIR VICTORY; IT DETECTED EVERY SYRIAN FIGHTER AT TAKEOFF
- HALF OF THE ISRAELIS' 80 AIR-TO-AIR KILLS (CLAIMED) WERE DUE TO SPARROW

IS THERE A SHRED OF TRUTH IN ANY OF THIS?
FIVE AREAS WITH INTERESTING COMBAT RESULTS

- Armored Combat
- Subs, ASW and Torpedoes
- Ships, Bombs and Antiship Missiles
- Air-to-Ground Combat
- Air-to-Air Combat
SOME INSIGHTS FROM
ARMORED COMBAT IN THE BEKAA

• About 60% of Syrian tank losses caused by Israeli tank fire.

• T-72s easily killed by 105mm tank cannon (with Israeli APFSDS), despite projected "special" armor.

• No magic Israeli guided weapons were used.

• Israeli mods made their M-60s much more survivable than ours: added loader's mg and auto fire extinguishers; scrapped U.S. cupola; bolt-on armor "blocks" gave 360° RPG-7 protection (better than M-1).

• Israelis and Syrians used about 30 small antitank helo each; both achieved some kills; Syrians lost half in 3 days.

• Little Israeli tank-infantry cooperation; almost no fixed wing close support (except for several strikes on friendlylies).

• Israeli infantry refused to ride inside closed-box APCs; as in 1973, the M-113's aluminum armor proved lethal to infantry behind it.

CREW/UNIT SKILLS DOMINATED:
ABOUT 2 BRIGADES DEFEATED NEARLY 2 SYRIAN ARMORED DIVISIONS
ISRAEL’S BLITZ
QUESTIONS RAISED BY THE
FALKLANDS UNDERSEA WAR

- After the Belgrano, British sub threat apparently neutralized
  Argentine surface navy.

- Only one Argentine sub was operational, due to poor maintenance.

- The small diesel sub seems to have easily penetrated British
  ASW defenses (the best in NATO), attacked, and then eluded 72
  hours of ASW search (similar to outcome in most NATO exercises).

- Both sides may have had a torpedo disaster, just like in WWII:

  -- Brits are said to have sunk Belgrano with a WWII
     unguided torpedo, not the new and complex homing
     Tigerfish.

  -- Argies probably fired one or two German wire-guided
     torpedoes which failed.
SHIPS, BOMBS AND ANTISHIP MISSILES

- Failure to turn off Sheffield's radar caused her to be found (by Argentine 707) and sunk.

- British warship flammability proved catastrophic, despite steel superstructures and better survivability design than ours.

- Radar ship defense missiles showed almost no useful capability against fighters or AMSs at 30 feet altitude.

- As in WWII, fighters with dumb bombs proved extremely hazardous to the health of ships -- despite Argentine fuzing with a disastrous 50% to 80% dud rate.

- Of 5 ships sunk and 12 damaged, only 2 were Exocet hits -- and these 2 were followed in by A-4 bombers, according to Argentines.

- Brits had a decoy transponder that successfully decoyed Exocet -- but carried it under Helos instead of on a raft behind every ship!

- US has no towed decoy transponder to defeat Soviet ASMs

- US had no delayed fuze bomb (for penetrating ships or structures or runaways) that works
SOME LESSONS FROM AIR-TO-SURFACE COMBAT

- Harrier loss rate in ground attack was too high to sustain: 25+ per 1000 sorties, triple the U.S. losses around Hanoi. (Brits admit 200 sorties with 4 lost to guns, 1 to SAMs*.)

- Brits made emergency purchases and shipments of 35mm AAA because of low Rapier $p_k$ and impossibility of keeping Rapier resupplied.

- Due to ineffectiveness of ship missiles against attackers at 30 foot altitude, British ships hastily mounted as many light AA guns as they could find.

- Harrier and Vulcan bombing proved incapable of closing runways; Harrier attacks were to shoot up a dozen or so uns sheltered Pucaras.

- Pre-war IAF placed minimal priority on close support and FACs; during war provided essentially no close support (except for Helos attached directly to tank units).

- One IAF success in interdiction: found a Syrian brigade column moving up at night with lights on and unable to get off road. Used rockets and cluster bombs under flares to immobilize unit.

- SA-6 was easy to outmaneuver, as in 1973 where $p_k$ was 1% to 2%.

- The 19 SA-6 sites were not destroyed. Most had their antennas or radar vehicles put out of action for the day. The timing of the drone decoy raid plus the low level fighter attack was superb. The weapons used were the same antiradiation missiles we used in Vietnam in 1968.

* Argies claim 5 more downed, which tracks with the number of replacements ordered by Brits.
A FEW AIR-TO-AIR LESSONS FROM
THE TWO WARS

- Triumph for simple, close-in IR missiles (through British-claimed \( p_k \) of 24/27 seems exaggerated).

- Defeat for "BVR" radar missiles: Israelis refused to carry Sparrows; Argentine radar Matras missed.

- AV-8s saw little or no air fighting after first day; almost all of the 24 fighter victims were bomb-loaded. Most kills probably by surprise from rear hemisphere.

- In Israel, more than half the kills were by F-16s despite most F-16s having bombing missions while F-15s had 100% air-to-air.

- Syrian pilots said to hate MiG-23; worse fighter than MiG-21.

- Israelis used broadcast control of fighters, not close control.

- Therefore, E2C was just another radar feeding the ground controller; neither E2C nor AWACS had capability to see every Syrian fighter at takeoff.

- Instead, most important early warning/search sensors for both Argentina and Israel were Boeing 707s loaded with passive receivers.

AS IN ALL PREVIOUS AIR WARS, PILOT SUPERIORITY WAS THE MAIN DETERMINANT OF AERIAL VICTORY
SOME UNCOMFORTABLE QUESTIONS

- Will combat show that DD-963s and CG-47s are even more flammable and easier-to-sink than the Sheffield?

- Will the example of the Sheffield force us to turn off our ship radars? Wouldn't our warships look vastly different if they were designed primarily for radio silence operations?

- Why isn't every U.S. warship protected against Soviet radar missiles by a towed decoy transponder?

- Why is the entire U.S. submarine force dependent on one very complex torpedo, the MK-48?

- If the closed box APC/IFV has already failed in Asian infantry warfare and in Mideastern armored warfare, under what circumstances is it likely to succeed?

- Why is every track-mounted American infantryman and marine placed behind aluminum armor that, if hit, will help kill him?
A FEW OVERALL LESSONS

- Victory was almost entirely determined by the superior tactics and skills of British and Israeli soldiers, sailors and airmen.

- The US and European complex technology we prefer was largely irrelevant.

- Current Soviet fighters, tanks, ATGMs and SAMs don't look too good.

- The Western weapons that proved outstanding were the Sidewinder missile, the 105mm tank cannon, the Boeing 707 with passive receivers, and the F-16.

- Western weapons that proved disastrous: Radar ship defense and air-to-air missiles; bomb fuzes, U.S. APCs, and destroyer/frigate firefighting systems.
INSIGHT:

- The experience and results of current combat are infinitely more valuable than even the most realistic of tests.

- If so, why are we not assigning independent combat historians and tacticians -- rather than procurement-oriented technologists and bureaucrats -- to managing the crucial task of learning the combat lessons that Allied forces had to pay for in blood?