# Dunnigan, James F. How to Make War 2003

Prof. Rafael Ávila [2005]

#### **Part I Ground Combat**

## 2. Poor Blood Infantry

- Infantry Unit Fire Teams, Squad, Platoon, Company, Battalion, Regiment, Brigades, Divisions, Army Corp, Army
- Specials: Combat Enginners, Special Operations Forces
- Tasks Reserve, Movement, Engagement, Construction, Patrols, Pursuit
- Drill against Doctrine
- Light Infantry Weapons (Pistols The Stopping Power; Baionets; Grenades Explosive, Smoke and Flash; and Rifles)
- Heavy Infantry weapons (Machine Guns; Antitank and Antiaircraft Missiles; Mortars)
- Etc's: Mines; Radio; Telephone; Flares; Gas Mask; Kevlar and Helmet

#### 3. Tanks: Not the Arm of Decision

- In Portuguese: Tanques versus Veículos Blindados
- Cannot Do: Self-operate; Mass Formations; Quality Crew; Long Run
- Tactics 'Dead duck' and Combined Arms
- Threats (Below: mines; Above: mines)
- APC's (Armored Personnel Carriers) and IFV's (Infantry Fighting Vehicles) Missions
- Antitank Weapons: Missiles and Rockets; Mines
- Armor, FirePower

### 4. Artillery

- Main Missions: Harassment; Neutralization; Destruction

- Other: Barrages (Preplanned, On Call, Target of Opportunity) Standing; Fire Assaults; Harassment; Interdiction; Counterbattery
- Prepararing Positions Organization – Common (Batallions and Regiment)
- Shells (HE; Somke; Star; Beehive; Contact; Delayed Action; Proximity; Variable Time)
- Self-Propelled versus Towed
- Howitzers (angle); Gun

## 5. Combat Support

- i) Engineer Support (bridges, Digging and Minelaying, defensive Positions, Mine Clearing, Demolition, Construction and Repair, Mpas, Utilities;
- ii) Signal Troops (conection and intelligence);
- iii) Military Police;
- iv) Transportation Troops;
- v) Chemical Troops;
- vi) Eletronic-warfare Troops (jamming; dependence in eletronic paraphernalia);
- vii) Headquarters Troops

# 6. Paramilitary Forces

- Partially Trained Civilians
- Police Armies Role
- Military Reserves Role
- Missions/Tasks Peacetime Skeleton; Maintenance of active units; Replaceents for Combat Losses; Formation of New Units
- Light Armed and Poorly Trained
- Primitive War against High Techonological

## **Part Two Air Operations**

#### 7. Fighters, Bombers and Snoopers

- Primary Purpose: Information Gathering
- Command of the Air (Theory)
- Ground Support Operations

- Planes against Radar
- Reconnaissance Mission: Tactical Recon (Temporary Valuable; Range); Operational Recon (Range); Strategic Reconnaissance (Peacetime)
- Interception Missions Dogfighting; Eletronic Warfare
- Strike Missions "Air to mud" (Dangerous and unpredictable)

  Targets: Aircraft; Radars; antiaircraft missions; fuel and ammo supplies; transportation system; combat units and support units
- Stealth Aircraft
- Fire Control Systems FLIR (Forward Looking Infrared Radar); Sensors; Laser Designators and Guided Bombs
- Close Air Support for ground troops
- RPVs (Remotely Piloted Vehicles), UAVs (Unmanned Aerial Vehicles) and Drones (Robot pilots)
- Al (Artificial Intelligence)
- Pilot Skill; Eletronic Equipment; Weapons; Maneuverability; Durability and Miantainability (Types p. 190)
- Air-to-air Missiles (Infrared homing; Radar homing)
- Air-to-surface Missiles (Homing Missile; Antiradar Missiles; Guided Missiles; Guided bombs)
- Air-to-ground (Cluster Bomb Unit antitank, incendiary, chemical, concret piercing bombs)
- UAVs (Drones and RPVs)

#### 8. Air Defense