V. SCENARIOS

A. EXECUTIVE SUMMARY

The purpose of these scenarios is to test the three architectures (Current, Planned, and Conceptual) and various design concepts for ExWar. These scenarios are not a prediction of what will happen in the future but are hypothetical situations to be used as tools to help the Systems Engineering and Analysis (SEA) team create measures of effectiveness for modeling and analysis as well as aid the design teams (TSSE, Aero, and Space Operations) in making engineering decisions regarding platform developments. These scenarios will help expose the strengths and weaknesses of each of the three architectures as they are employed in the conduct of expeditionary warfare from start to finish – the main focus will be on indefinitely sustaining troops ashore from a Sea Base. Although every conceivable situation cannot be modeled or simulated, the results of using these scenarios will provide a good baseline.

The future vision of the Naval Services is based on OMFTS and STOM. Three scenarios - a Colombia scenario, a Burma scenario, and an Indonesia scenario - were developed in order to test the Current, Planned, and Conceptual architectures and design concepts for expeditionary warfare.

By subjecting the Current, Planned, and Conceptual architectures to the treacherous Colombian terrain and a well-trained, well-armed foe, the two key operational concepts of OMFTS and STOM will be challenged and analyzed. The first stressor is the long-range insertion of combat troops and equipment from the Sea Base to the Objective Area (OA). The second stressor requires long-range sea-based logistics to be transported across the Andes mountain range in an effort to provide for the indefinite sustainment of combat troops.

The objective of the Burma scenario is to match an MEB-sized expeditionary warfare architecture (Current, Planned, and Conceptual) against a challenging adversary (Burma) with a numerical troop advantage. Geographical challenges also apply, but are secondary. Burma offers a tropical, jungle climate.

Finally, the objective of the Indonesia scenario is to test the surge capability of an expeditionary warfare architecture by simultaneously attacking three positions at the same time. Additionally, this attack will occur from a Sea Base located 200 NM from the closest objective. Although the operation in this scenario is not expected to last long, the crucial aim is to find out which of the three expeditionary architectures can best strike the objectives and then reconstitute employing the key concepts of OMFTS and STOM.

A. THE COLOMBIA SCENARIO

The year is 2018 and the Colombian Civil War has raged in the country for fifty years. The current elected president Mario Gutierrez Pedroza assumed the presidency of Colombia after a record low voter turnout. It seems the people of Colombia have lost total confidence in the democratic process and the Colombian Government. The Colombian economy is experiencing the worst crisis the country has seen. The level of violence in the country is unprecedented. During the past two years guerrillas and the San Jose Cartel murdered approximately 1,800 public officials including town mayors, federal and state legislators, judges, and prosecutors. More than 17,000 people have been killed in 420 recorded massacres.

The San Jose Cartel was born after the Medellin and Cali Cartels were virtually dismantled in the year 2007. The economic and military aid provided by the US and the work of both President Andres Pastrana and his successor Alvaro Uribe Velez brought to Colombia a period of relative stability (Janes Information Group 2002a, no page listed). After a reorganization of what was left from the Medellin and Cali Cartels, the San Jose Cartel emerged as the sole drug powerhouse. In early 2012 a new drug called "magia" (*magic*) first appeared in the U.S. Then, months later, *magic* made its debut in the European Union and Asia. This new potent and highly addictive drug is a derivative of coca and opium extracts but chemically altered to be virtually undetectable by the ion scanners used by law enforcement officials. In addition, the drug is highly concentrated, so that only a small amount of the unaltered substance can produce several hundred grams of a ready-to-use drug. The drug is a stimulant that accelerates physical and mental states, produces euphoria and eases physical and mental pain. In many cases, the

user is prone to violent behavior. In the late stages of addiction, the physiological effects of the drug are devastating. The drug produces lung damage, seizures, stroke, heart attack, and weakens the immune system. Today, the use of *magic* has reached epidemic proportions. It is estimated that in the US there are more than 15 million addicts and an estimated 80 million worldwide. The death toll in the U.S. attributed directly or indirectly to the use of *magic* has surpassed 500,000 since the appearance of the drug in 2012.

1. Enemy's Goals

With the advent of *magic*, the San Jose cartel has been able to establish an alliance with the Colombian insurgency movement. After the death of Manuel Marulanda in 2010, Jorge Briceno assumed the leadership of the Revolutionary Armed Forces of Colombia (FARC). Soon after the 2013 government campaign against the rebels, the National Liberation Army (ELN) joined forces with the FARC, and the Common Front for the Liberation of Colombia (CFLC) was born. Today, the CFLC has become the security force for the San Jose Cartel. The CFLC has taken advantage of increased drug revenue to build up their conventional arsenal. Last year, the annual CFLC income was estimated at over US $800 million.

The current situation in Colombia has taken its toll not only on the U.S., but also in the region. The political and economic instability of the neighboring countries has ignited the formation of a series of new narco-guerrilla groups. The violence is rapidly spreading to neighboring Ecuador, Peru, and Venezuela. Funded by the San Juan Cartel, these guerrilla groups follow the same tactics of terror and murder employed by the cartels and the CFLC. With this respectable arsenal and forces, the San Jose Cartel and the CFLC's objective is to continue to disrupt and eventually to overthrow the Colombian Government. The CFLC desires to establish a government that will allow the San Jose Cartel to continue to massively export *magic* worldwide, but particularly to the United States.

In the last two years, the CFLC has practically crippled the Colombian Armed Forces. In a coordinated attack, CFLC forces infiltrated into four air force bases and

destroyed most of the aircraft. Only the airbases at Barranquilla and Santa Maria were able to minimize the damage inflicted by the CFLC. The naval base at Puerto Tamuco was also attacked and 37 out of 41 patrol craft were seized by the guerrillas. Intelligence reported the possible deployment of floating mines in the ports of Buenaventura and Tamuco. Those reports were later confirmed by the sinking of the merchant ship *Tulango* after a mine explosion 37 miles NW of Buenaventura. The Colombian Army has also suffered a series of devastating blows that practically left the CFLC in control of Colombia south of the 4th parallel. In addition, the CFLC has systematically destroyed most of the transportation infrastructure west of the *Cordillera.* The few usable roads are under heavy guerrilla guard and practically unsuitable for the transportation of heavy equipment.

2. Mission

In an address to a joint session of Congress, the President of the United States has declared the situation in the U.S. and Colombia to be a clear and present threat to U.S. national security and the stability of the region. Following the President's speech, Congress authorized the deployment of military forces to Colombia. The mission for U.S. Forces is to engage and destroy CFLC/Cartel forces, and to locate and destroy any infrastructure that enables the Cartel to manufacture *magic*. Operation "Magic Touch" will be a combined U.S./Colombian operation scheduled to commence on 21 October 2018. U.S. Force composition is as follows:

a. Expeditionary Strike Groups

ESSEX STRIKE GROUP		BHR STRIKE GROUP	
11th MEU		15th MEU	
LHD-2	Essex	LHD-6	Bon Homme Richard
LPD-17	San Antonio	LPD-18	New Orleans
LSD-43	Fort McHenry	LSD-56	Chambersburg
CG-50	Valley Forge	CG-57	Lake Champlain

DDG-56	John S. McCain	DDG-60	Paul Hamilton
LCS-1	Defiant	LCS-2	Gallant
SSN-772	Greenville	SSN-769	Toledo

b. Maritime Action Group

CG-69	Vicksburg	DDG-76	Higgins
DDG-77	Ray	SSN-758	Ashville

To build up the naval expeditionary force to a Marine Expeditionary Brigade (MEB), all remaining troops, specifically the troops and equipment from the 13th MEU, will be transported via current, planned, and conceptual force structures. Naval expeditionary forces will converge in the operations area located at 03° 00' N, 078° 50' W (25 miles from coast).

Intelligence reports estimate the CFLC to be 10,000 well trained and superbly armed rebels. Force concentrations are localized in the departments of Meta and Caqueta. Intelligence reports at least five underground drug laboratories and force protection provided by the CFLC in the following locations:

Site	Location	Estimated force
A	00° 50' N 075° 30' W	2,000
B	01° 30' N 075° '25 W	1,500
C	01° 40' N 074° 50' W	2,000
D	01° 40' N 074° 20' W	3,000
E	02° 35' N 075° 20' W	1,500

Figure V-1: Map of Colombia
(Source: Janes Information Group, 2002b)

The operation requires attacks on sites "A", "E", and "B." The 11th MEU will be tasked to land and stage its forces 10 miles NW of site "A". The 15th MEU will land and stage its forces 10 miles north of site "E". The 13th MEU will be tasked to land and stage its forces 10 miles north of site "B". Coordinated assaults will be mounted on all three sites NLT 24th October. After sites "A", "E", and "B" are taken, the 13th MEU will proceed to site "C" and secure it. The 11th MEU will proceed NW to site "D". The 15th MEU will proceed SW to site "D" and execute a coordinated attack with 11th MEU on site "D." Concurrently, the Colombian Army will execute an attack on San Jose del Guaviare in order to retake the city, eliminate the Cartel forces, and cut off the CFLC retreat.

The Sea Base must re-supply all combat forces in the area of operations. The Sea Base must also re-stock its inventory in order to provide indefinite sustainment capabilities of forces ashore.

3. Geography

Colombia	Geography
Location:	Northern South America, bordering the Caribbean Sea, between Panama and Venezuela, and bordering the North Pacific Ocean, between Ecuador and Panama
Geographic coordinates:	4 00 N, 72 00 W
Map references:	South America
Area:	*total:* 439,776 sq mi *land:* 401,081 sq mi *note:* includes Isla de Malpelo, Roncador Cay, Serrana Bank, and Serranilla Bank *water:* 38,694 sq mi
Area - comparative:	slightly less than three times the size of Montana
Land boundaries:	*total:* 3,730 mi *border countries:* Brazil 1,021 mi, Ecuador 367 mi, Panama 140 mi, Peru 930 mi (est.), Venezuela 1,273 mi

Coastline:	1,993 mi (Caribbean Sea 1,094 mi, North Pacific Ocean 900 mi)
Maritime claims:	*continental shelf:* 109 league depth or to the depth of exploitation *territorial sea:* 12 NM *exclusive economic zone:* 200 NM
Climate:	tropical along coast and eastern plains; cooler in highlands
Terrain:	flat coastal lowlands, central highlands, high Andes Mountains, eastern lowland plains
Elevation extremes:	*lowest point:* Pacific Ocean 0 ft *highest point:* Pico Cristobal Colon 18,948 ft *note:* nearby Pico Simon Bolivar also has the same elevation
Natural resources:	petroleum, natural gas, coal, iron ore, nickel, gold, copper, emeralds, hydropower
Land use:	*arable land:* 2% *other:* 96% (1998 est.) *permanent crops:* 2%
Irrigated land:	3,282 sq mi (1998 est.)
Natural hazards:	highlands subject to volcanic eruptions; occasional earthquakes; periodic droughts
Environment - current issues:	deforestation; soil and water quality damage from overuse of pesticides; air pollution, especially in Bogota, from vehicle emissions
Environment - international agreements:	*party to:* Antarctic Treaty, Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Marine Life Conservation, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands *signed, but not ratified:* Antarctic-Environmental Protocol, Law of the Sea, Marine Dumping
Geography - note:	only South American country with coastlines on both North Pacific Ocean and Caribbean Sea

Table V-1: Geographical Statistics of Colombia
(Source: Central Intelligence Agency (CIA), 2002)

4. Enemy Order of Battle

a. Land Forces

Heavy armament estimates are provided below with approximately equal amounts of armament distributed among all sites. The San Juan Cartel is estimated to be 4,000 strong. Most of these personnel are experienced mercenaries concentrated mostly in the vicinity of San Jose del Guaviare and major coca and poppy plantations. The CFLC's unprecedented funding allowed it to purchase weapons that had not previously been available to Latin American guerrillas. The CFLC is known to have acquired shoulder-launched SAMs of various types, surface-to-surface rockets, mortars, recoilless rifles, heavy machine guns, and sophisticated night vision and communications equipment.

Type	*Role*	*Quantity*
M3A1	Light Tank	15
M8	Armored Car	15
M20	Armored Utility Vehicle	8
EE-9 Cascavel	Armored Car	80
EE-3 Jararacá	Scout Car	30
RG-31	Armored Personnel Carrier	4
EE-11 Urutú	Armored Personnel Carrier	27
M113	Armored Personnel Carrier	44
M3A2	Armored Personnel Carrier	45

Table V-2: Armor Inventory of the CFLC
(Source: Janes Information Group, 2002b)

Type	*Role*	*Quantity*
105 mm M-101 Brandt	Towed Howitzer	68
75 mm M-116	Pack Howitzer	50
120 mm Thomson-Brandt	Mortar	120
81 mm M-1	Mortar	125
60 mm M-19	Mortar	80
4.2 inch M-30	Mortar	148

Table V-3: Artillery Inventory of the CFLC
(Source: Janes Information Group, 2002b)

Type	*Role*	*Quantity*	*In Service*
TOW	Anti-Tank Guided Missile	6+	6+
106 mm M-40A1	Recoilless Rifle	n/a	n/a
75 mm M-20	Recoilless Rifle	n/a	n/a
Note: 1. Mounted on M8 armored cars in place of a 37 mm gun.			

Table V-4: Anti-Tank Weapons Inventory of the CFLC
(Source: Janes Information Group, 2002b)

Type	*Role*
7.62 mm G3	Rifle
7.62 mm SAFN 49	Rifle
7.62 mm M-14	Rifle
5.56 mm Galil	Rifle
.30 in M-1	Rifle
.30 in M10	Carbine
.30 in M2	Carbine
9 mm Madsen M46	Sub-Machine Gun
9 mm Madsen M50	Sub-Machine Gun
9 mm Madsen M53	Sub-Machine Gun
9 mm Uzi	Sub-Machine Gun
9 mm MP-5	Sub-Machine Gun
M-10	Sub-Machine Gun
BAR	Automatic Rifle
7.62 mm M1917	General-Purpose Machine Gun
7.62 mm M1919	General-Purpose Machine Gun
7.62 mm HK21E1	General-Purpose Machine Gun
7.62 mm FN MAG	General-Purpose Machine Gun
7.62 mm M60	General-Purpose Machine Gun
12.7 mm M2HB	Heavy Machine Gun
40 mm M79	Grenade Launcher

Table V-5: Infantry Weapons Inventory of the CFLC
(Source: Janes Information Group, 2002b)

b. Air Forces:

Type	*Role*	*Quantity*
Stinger	IR SAM	200
40 mm M1A1	Gun System	55

Table V-6: Air Defense Weapons Inventory of the CFLC
(Source: Janes Information Group, 2002b)

Type	*Role*	*Quantity*
Gulfstream Aerospace Commander Jet prop 1000	Attack, Transport	2
Beech King Air 90	Attack, Transport	1
Beech King Air 200	Attack, Transport	2
Piper PA-34 Seneca	Attack, Transport	4
Piper PA-31 Navajo	Attack, Transport	2
Rockwell Turbo Commander	Attack, Transport	1
Cessna TU206G Turbo-Stationair	Attack, Transport	2
Convair 580	Attack, Transport	1
Mi-17	Attack helicopter	30

Table V-7: Aviation Inventory of the CFLC
(Source: Janes Information Group, 2002b)

c. Naval Forces:

Intelligence also reports the CFLC has been able to acquire at least 50 French Exocet Anti-Ship Missiles (ASMs) and fitted the missiles in their 37 patrol craft. Patrol craft are operating out of the captured naval base in Tumaco. In addition, the CFLC purchased about 80 Russian Silkworm missiles and placed them on undisclosed sites north of Tumaco Bay.

Type	*Role*	*Quantity*
Exocet	ASCM	50
Silkworm	ASCM	80

Table V-8: Anti Ship Weapons Inventory of the CFLC
(Source: Janes Information Group, 2002b)

Figure V-2: Colombian Insurgency Disposition
(Source: Janes Information Group, 2002b).
Note the distance from the coast and the overlap with areas of illegal drug activity (see Figure V-3).

Figure V-3: Illegal Drug Activity in Colombia
(Source: Janes Information Group, 2002b).
Note the distance from the coast and the overlap with CFLC regions.

B. THE BURMA SCENARIO

1. Background

With the Taliban's demise in 2002, Burma (Myanmar) eventually became the world's leading illicit opium producer. In the following 16 years, increased revenue from drug activity within Burma has funded an expansion of government and military power. Western Europe and North America fear the illicit Burmese drug trade will eventually saturate the European and North American markets. In addition to reinforcing its hold on power and conducting an aggressive campaign against members of the old People's Assembly and Shan rebels, the military regime has established a naval Special Force Bureau capable of interdicting sea-borne traffic flow through the waterways of South-East Asia.

The Burmese Naval Special Forces have been posing as pirates in small, fast patrol craft armed with hand-launched and base-mounted missile systems. These forces are believed to be headquartered in the port city of Myeik; the actual vessels are scattered around the islands of the Merguis Archipelago close to the western entrance of the Strait of Malacca. Despite international protests, they have exercised within Indonesian, Thai, and Malaysian territorial seas. It is reported these forces number from 30 – 50 watercraft manned with 200 – 300 specially trained personnel. According to some sources, the watercraft may also have limited mine deployment capability. In addition to these forces, the Burmese West Coast Fleet based in Akyab (Sittwe), is comprised of 1 Luhai DDG, 2 Jiangwei FFGs, 5 Hainan class coastal patrol craft, and five Houxin class missile boats. The rest of the fleet is based at Moulmein (Mawlamyine). The Burmese use these more conventional forces to protect their territorial seas and, by doing so, offer safe haven to the so-called pirates.

China is also concerned with Burmese drug trade on its own borders, but has approached the military regime in a supportive manner in an attempt to gain the regime's help in controlling the drug flow and to check what it perceives as India's expansion. Since 1990, China has sold the regime military equipment and provided military and technical advisors. In addition to arm sales, the Chinese have assisted Burma in building

and improving naval facilities at the port city of Myeik, the port city of Akyab along the Burmese coast of the northern Bay of Bengal, and the port city of Moulmein due east of Rangoon on the Burmese coast of the Andaman Sea. Intelligence also reports possible electronic stations manned by Chinese in facilities along the Bay of Bengal coastline, the Cocos Islands near the Preparis South Channel, and Lord Loughborough Island and Great Western Torres Island in the Mergui Archipelago in the Andaman Sea (Cole, 2001, 5).

Burmese Army units have been stationed around the country as follows: four elite Light Infantry Divisions and five State Infantry Divisions stationed in and around Rangoon; two Armor Divisions, two Light Infantry Divisions and three State Infantry Divisions based in Kyunchaung near the Three Pagodas Pass on the Isthmian border with Thailand; at least one Special Force Bureau and a Light Infantry Division based near the Amya Pass on the isthmian border with Thailand; three Light Infantry Divisions, three State Infantry Divisions, and one Armor Division based in Ngape in western Burma in the Arakan Yoma mountain range near the An pass; and a strategic task force of two Light Infantry Divisions, two State Infantry Divisions and two Special Forces Bureaus headquartered in Mandalay. Eight Regional Divisions are scattered along Burma's eastern border with Thailand. The other four Regional Divisions are scattered along Burma's northwestern border with India.

This year, a popular uprising occurred in Bhamo. The revolutionaries established a stronghold and asked remaining members of the old People's Assembly to establish a new Burmese government in Bhamo. Coordinating a second uprising in Tavoy (southern city on the Andaman Sea Coast) with Thai arms shipments, the fledgling revolutionary government called for assistance from the international community.

The Burmese military regime responded by threatening to close all South-East Asian waterways if any country intervenes on the revolutionaries' behalf. In addition to mobilizing forces to defeat the revolutionaries in Bhamo and Tavoy, the Burmese military activated air defenses around Rangoon, deployed shore-launched missile systems (unlocated), deployed their naval special forces (unlocated), and began regular maritime patrols with their ships.

The Association of Southeast Asian Nations (ASEAN) member-states, the United States, and the European Union (E.U.) have recognized the rebel forces as the legitimate

government of Burma. ASEAN and the United States called for an immediate cease-fire and demanded the military government relinquish power to a transitional government, headed by the Shan rebel faction, with popular elections soon to follow. China and India agreed with the cease-fire, but China independently warned the United States that they would not support any U.S. military "adventurism." China promised a United Nations (U.N.) Security Council veto if the U.S. tried to organize a military coalition against Burma under U.N. auspices.

In a classified memo to Commander, United States Pacific Command (PACCOM), the U.S. National Command Authority, after conferring with its ASEAN allies, outlined two strategic objectives for the current situation:

a. Directly support the revolutionary movement, permitting it time to broaden its foothold in Bhamo and Tavoy and solicit support from the countryside.

Strategic end state: Overthrow of the military government of Burma and the installation of a freely elected Burmese government that supports international anti-drug efforts.

b. Protect friendly/commercial shipping in Southeast Asian waters.

Strategic end state: Unimpeded international trade of legal goods and an end to drug shipments throughout the region.

2 Mission

Based on these objectives, the U.S. Chairman of the Joint Chiefs of Staff (CJCS) directed Commander, PACCOM, to form a Combined Joint Task Force (CJTF) 140 to execute the following military missions:

a. Counter Burmese special forces' activity in and around the critical international straits, including dealing with a possible mine threat before or after mines are in the water.

b. Reinforce/resupply revolutionary forces in Bhamo and Tavoy.

c. Determine requirements and timeline for a large scale invasion to defeat Burmese military forces.

d. Evaluate forces required to deter Chinese counter-intervention and monitor their forces' locations and behavior.

CJTF 140 will have at his disposal assets from all branches of the U.S. military services as well as key support from the United States Special Operations Command (SOCOM), the United States Strategic Command (STRATCOM), and the United states Transportation Command (TRANSCOM). He will also have basing and overflight rights in Thailand; coalition military assets and supplies will be available from Thailand, Singapore, Malaysia, and Indonesia.

CJTF 140 has determined the operational objective for the Naval Component Commander is to aid the revolutionary cause in Tavoy and end Burmese piracy on the high seas. The Naval Component Commander has at his disposal two CVBGs, and an Amphibious Task Force (ATF) of two Amphibious Ready Groups (ARGs), PHIBRON 1/26th MEU and PHIBRON 4/15th MEU, Tactical Control Squadron (TACRON) 21, and NBG (Naval Beach Group)-3. The ATF commander will have operational control (OPCON) over a Maritime Action Group of 3 CGs, 3 DDGs, 3 Guided Missile Frigates (FFG)/Destroyers (DDs), 3 Nuclear-powered Submarines (SSNs), and a squadron of P-3C Update III Aircraft Improvement Program (AIP) aircraft based at an airfield near Bangkok, Thailand. The Commander of the ATF will be the Commander Amphibious Group (COMPHIBGRU) 3. The Marine Component Commander will assign 1st MEB to the ATF commander. TRANSCOM will deploy Maritime Prepositioned Squadron (MPSRON) -2 from Diego Garcia to become part of the Assault Follow-On Echelon

(AFOE) and support the Sea Base. The Sea Base must support CJTF 140 and his staff. CJTF 140, as the establishing authority, will determine if and when the supporting/supported roles between the ATF commander and the Landing Force commander will shift.

The military mission for the ATF commander will be to launch an opposed amphibious assault on the Burmese naval base at Moulmein. The military mission for the Landing Force commander will be to attack Burmese military forces in the immediate vicinity of Moulmein, control the airport, and defend a 30 statute mile perimeter around the city. Intelligence suggests the locals may be supportive of the invasion, but an aggressive psychological operations (PSYOPS) campaign will be necessary to shore up this support. The purpose of this mission is to cut off supplies to Burmese military forces located to the south as well as act as a blocking force, preventing further Burmese military reinforcement of the area. The immediate intention of this mission is to help protect and supply rebel forces in Tavoy. Once Moulmein is under coalition control, reinforcements for the Landing Force will be brought in.

CJTF 140 will eventually arrange for military supplies to be airlifted via the Air Mobility Command (AMC) from the Thai airbase at Chiang Mai to the rebel base at Bhamo. A U.S. Army combat aviation brigade and an airborne division will also be lifted to support rebel forces in Bhamo; once the force is strong enough it will move south to engage Burmese forces based out of Mandalay. Coalition land forces will invade Akyab and drive east in and engage Burmese forces based at Ngape and attack the western flank of the Burmese forces based in Rangoon.

It has been two weeks (C+14) since the rebels have captured Bhamo and Tavoy. Time is critical. D-Day for the amphibious assault on Moulmein has been set for C+25. PHIBRON 1 and the 26th MEU are in port in Yokosuka, Japan. PHIBRON 4 and the 15th MEU are on deployment in the Southern Arabian (Persian) Gulf (SAG). The harbor at Moulmein is mined. Three Hainan class patrol craft and five Houxin class missile boats are currently in port. Ten to fifteen smaller, coastal patrol boats have been spotted around the Bilugyun Islands. Several riverine craft have been sighted on the Salween River near the port city. It is assumed that Moulmein is protected by at least one coastal battery of surface-to-ship missiles (SSMs) with a range of 200 NM and another battery of

320 mm rocket cannons with a range of 120 NM. The location of these mobile batteries is unknown. Objective A is the town of Chaungzon located on Bilugyun Island. Objective B is the airport located just north of Moulmein. Objective C is the village of Mudon, just south of Moulmein. The Burmese have stationed three Light Infantry Brigades at each of these objectives. A sizeable Burmese force based at Three Pagodas Pass (discussed earlier) is about 40 statute miles away from Mudon. At top speed, this Burmese force can move at about thirty miles an hour.

The Assault Echelon (AE) will begin the amphibious assault as far away as 50 NM from the first objective, eventually take up a position 25 NM away from it, and stay there for the remainder of the assault phase. The AE will assault Objective A first. The entire regimental landing team (RLT) troops and equipment (minus the M1A1 tanks) must be moved ashore in as short a time as possible, but the timeline must not take longer than 24 hours. Forces will be employed via the STOM doctrine. No forces can be moved via seacraft until a channel has been swept and cleared of mines. Objectives B and C will be assaulted next and must take place simultaneously. The Burmese force based at Three Pagoda Pass must be neutralized in order for the Marines to have enough time to fortify Moulmein against possible attack from Burmese military forces to the north or from Burmese military forces located to the south at Amya Pass. Tactical air support must cover the Regimental Landing Team and rebel forces located at Tavoy. Strike Warfare will be used to destroy/neutralize military targets located in Moulmein and based in areas along the isthmus. United States Air Force (USAF) B-52 and B-1B bombers based in Diego Garcia will be directed by the Joint Forces Air Combat Commander based in Bangkok, Thailand to carry out strategic bombing of targets in the wider area.

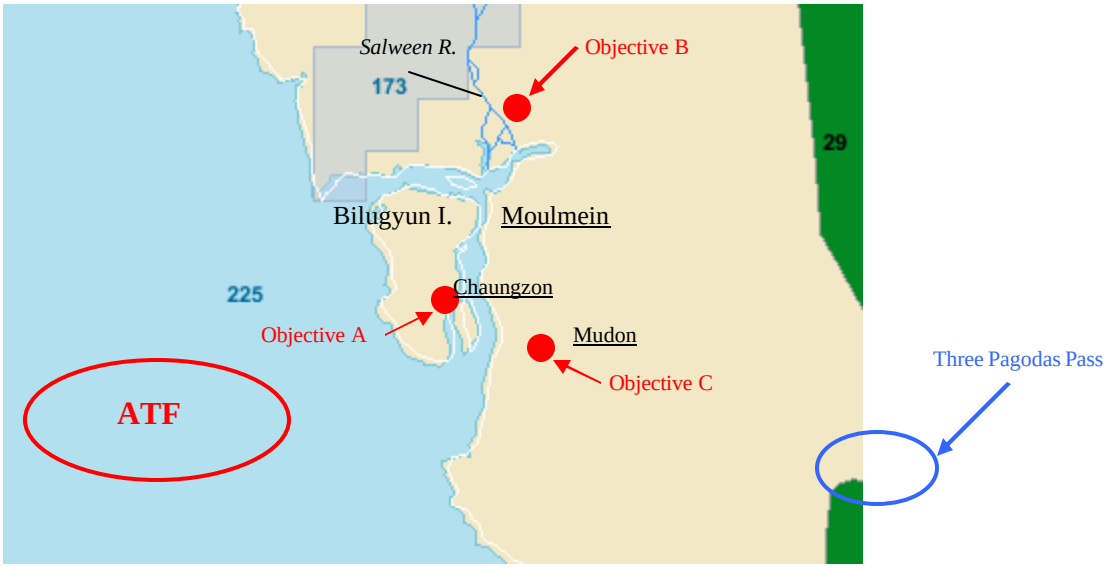

Figure V-4: This is the Enlarged View of the OA. See Fig. V-5 for the larger context. (Source: National Geographic Online, 2002)

Figure V-5: Map of Burma with Coalition, Rebel, and Key Enemy Positions (Burma Star Association, 1991)

3. Geography

Burma	Geography

Location:	Southeastern Asia, bordering the Andaman Sea and the Bay of Bengal, between Bangladesh and Thailand
Geographic coordinates:	22 00 N, 98 00 E
Map references:	Southeast Asia
Area:	*total:* 261,995 sq mi *land:* 253,978 sq mi *water:* 8,016 sq mi
Area - comparative:	slightly smaller than Texas
Land boundaries:	*total:* 3,651 mi *border countries:* Bangladesh 120 mi, China 1,358 mi, India 909 mi, Laos 146 mi, Thailand 1,118 mi
Coastline:	1,199 mi
Maritime claims:	*contiguous zone:* 24 NM *continental shelf:* 200 NM or to the edge of the continental margin *exclusive economic zone:* 200 NM *territorial sea:* 12 NM
Climate:	tropical monsoon; cloudy, rainy, hot, humid summers (southwest monsoon, June to September); less cloudy, scant rainfall, mild temperatures, lower humidity during winter (northeast monsoon, December to April)
Terrain:	central lowlands ringed by steep, rugged highlands

Elevation extremes:	*lowest point:* Andaman Sea 0 ft *highest point:* Hkakabo Razi 19,295 ft
Natural resources:	petroleum, timber, tin, antimony, zinc, copper, tungsten, lead, coal, some marble, limestone, precious stones, natural gas, hydropower
Land use:	*arable land:* 15% *permanent crops:* 1% *permanent pastures:* 1% *forests and woodland:* 49% *other:* 34% (1993 est.)
Irrigated land:	4,124 sq mi (1993 est.)
Natural hazards:	Destructive earthquakes and cyclones; flooding and landslides common during rainy season (June to September); periodic droughts
Environment - current issues:	deforestation; industrial pollution of air, soil, and water; inadequate sanitation and water treatment contribute to disease
Environment - international agreements:	*party to:* Biodiversity, Climate Change, Desertification, Endangered Species, Law of the Sea, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94 *signed, but not ratified:* none of the selected agreements
Geography - note:	Strategic location near major Indian Ocean shipping lanes

Table V-9: Geographical Statistics for Burma (Source: CIA, 2001)

4. Enemy Order of Battle

a. Land Forces

12 Light Infantry Divisions (LIDs): There are 12,000 troops per division. The LIDs are considered the best Burmese units. The weapons and equipment order consists

of a multiple launch rocket system (MLRS), 122 mm howitzers, trucks, SA-18, and RPG-12. These troops are motivated by pay and pride.

13 State Infantry Divisions (State IDs): There are 12,000 troops per State ID. The weapons and equipment order consists of 122 mm mortars. The State IDs have moderate offensive capability, and most of the units are made up of conscripts. Troops in the State IDs are motivated by the right to plunder rebel territories.

12 Regional Infantry Divisions (Regional IDs): There are 9,000 troops per division. The weapons and equipment order consists of 122 mm mortars. The Regional IDs have little offensive capability and are made up of mostly local conscripts and children. The troops of the Regional IDs are under local command.

3 Armored Divisions: There are 400 infantry employing Chinese-built armored personnel carriers (APCs), 80 Chinese tanks, MLRS, and 122 mm howitzers.

4 Special Forces Bureaus: These SOF units conduct intelligence gathering and strategic strike operations. The troops are highly motivated communists. These SOF units are considered more similar to the NAZI Gestapo than the U.S. Delta Force.

b. Air Forces

1 Air Defense Artillery (ADA) Wing: This unit consists of modern Chinese-made medium altitude systems, numerous SA-18s, and numerous antiquated cannons that are integrated with radar and communication systems bought from China.

1 Fixed Air Wing: This unit consists of 3 intercept aircraft, 6 attack aircraft, 1 troop transport plane, and 2 surveillance squadrons. The attack aircraft can be fitted to carry SSMs.

1 Rotary Air Wing: This unit consists of 3 observation/utility helicopter squadrons and 3 modern (Bell) attack helicopter squadrons with Israeli anti-tank guided munitions (ATGMs).

c. Naval Forces

1 LUHAI DDG and 2 JIANGWEI FFGs

10 HAINAN-Class Coastal Patrol Craft

10 HOUXIN-Class Missile Boats

20 – 30 Coastal Patrol Boats: These patrol boats are capable of mine laying, seizure of merchant vessels, and employing hand-held SAMs.

90 Riverine Craft

3 Coastal Batteries: There are two mobile, 200 NM SSM batteries (12 missiles per battery). There is also one battery of mobile, 320 mm rocket cannons with a range of 120 NM (six cannons comprise the battery).

D. THE INDONESIA SCENARIO

1. Background

The year is 2015. For years the Laskar Milita, supported by Al Qaeda, has been fighting and killing thousands of Christians living in the province of Sulawesi. The Indonesian government tried to stop the atrocities, but was unsuccessful. Under intense international pressure, Indonesia asked the United States to help it deal with terrorism inside its borders.

The United States assessed the situation by gathering intelligence throughout the province of Sulawesi, only to find strong indications there were three secret Al Qaeda training camps located near Poso, Palu, and Kendari. Al Qaeda, operating under a decentralized command structure, had been able to train approximately 300-400 recruits annually at each site in Indonesia.

Indonesia is a nation with a 93 percent Muslim majority. With the financial backing of a minority of radical Muslims in Indonesia, Al Qaeda operations in Sulawesi continue to prosper. Despite millions of U.S. dollars given to the Indonesian government to combat terrorism, Indonesia is reluctant to fight Al Qaeda's terror network for fear of a backlash against its citizens and government officials. The Indonesia government feels it does not have the resources to fight Al Qaeda and protect its vital national resources at the same time. Over the past decade, Indonesia's economy had prospered due to its abundance of natural resources. With a growing economy, the nation had been able to begin paying off its huge foreign debt. Indonesia fears that carrying out an assault on the Al Qaeda training camps would eventually cripple its economy and cause a major civil war.

2. Mission

Using a MEB-sized naval expeditionary force, the United States Navy and Marine Corps' mission is to conduct a simultaneous assault on Al Qaeda's three training camps in order to capture as many Al Qaeda members and equipment as possible, gather as much intelligence as possible, and destroy or contain all hazards (i.e. chemical,

biological, ammunition depots, etc.). After Al Qaeda forces are destroyed, expeditionary forces will be tasked to protect the Christians living in the province of Sulawesi and establish regional stability through the establishment of a peace-keeping mission.

a Assumptions

A CVBG is currently located in Yokosuka, Japan; the approximate distance by sea is 2,520 NM. A Naval Expeditionary Strike Group (NESG) is currently located near Dubai, United Arab Emirates in the Arabian Gulf – approximate distance by sea is 4,140 NM. A MEU is based in Okinawa, Japan, but it needs to be picked-up by NESG ships stationed in Sasebo and Yokosuka, Japan – approximate distance by sea is 2,530 NM. The Commander of the naval expeditionary force has decided to execute the assault on the 3 terrorist camps from the position shown in Figure V-6.

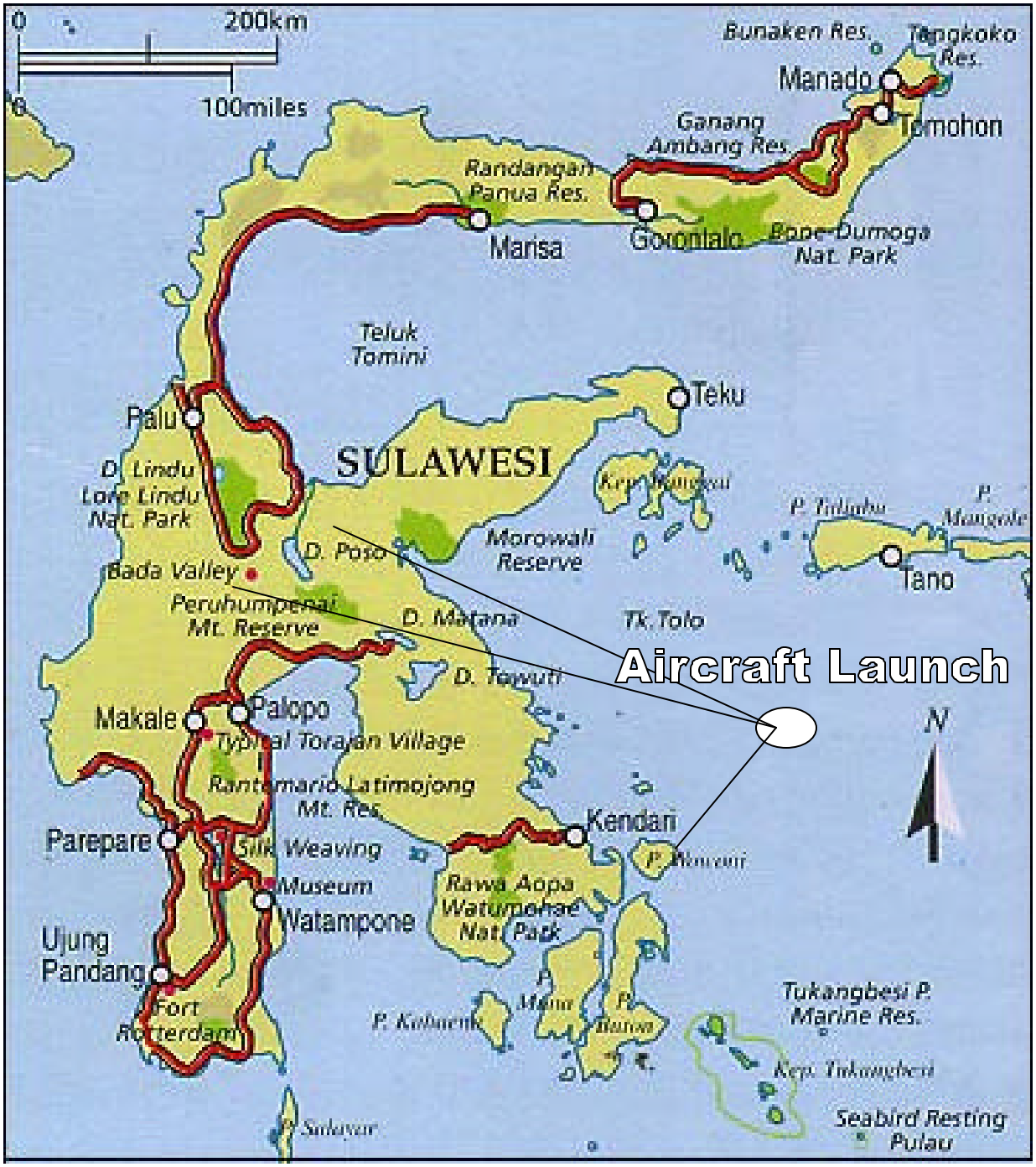

Figure V-6: Location of the Naval Expeditionary Force vis-à-vis the Three Objectives in Sulawesi. Palu is 275 NM away, Paso is 220 NM away, and Kendari is 80 NM away. (Source: Images.google.com, 2002)

b. Locations of Objectives

Al Qaeda's primary nerve center operates from the province of Sulawesi, Indonesia. Refer to Figure V-7. They have three main terrorist camps located close to the following three cities: Poso, Palu, and Kendari. Refer to Figure V-8.

- Poso Training Camp – Trains recruits in general Al Qaeda operating procedures, as well as urban environment tactics.
- Palu Training Camp – Trains recruits in general Al Qaeda operating procedures, as well as biological, chemical, and nuclear tactics.
- Kendari Training Camp – Trains recruits in general Al Qaeda operating procedures, as well as diving, mini-sub operations, high-speed boat tactics, and underwater explosives.

Map of Indonesia

Figure V-7: Location of the Province of Sulawesi
(Source: CountryReports.org, 2002)

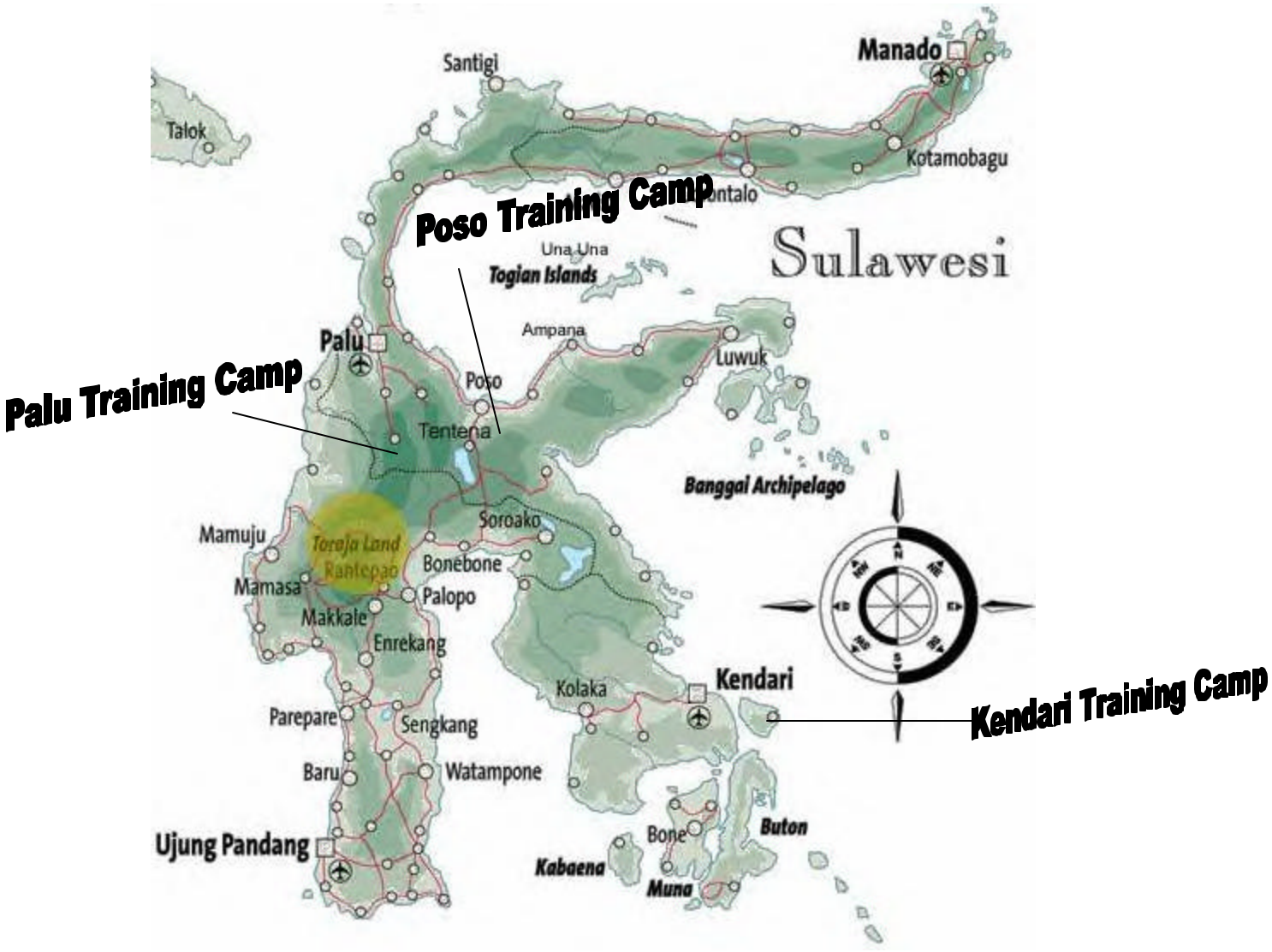

Figure V-8: Locations of Al Qaeda Training Camps in Sulawesi
(Source: Universitat Wien zur Verfugung, 2002)

3. Geography

Indonesia	Geography
Location:	Southeastern Asia, archipelago between the Indian Ocean and the Pacific Ocean
Geographic coordinates:	5 00 S, 120 00 E
Map references:	Southeast Asia
Area:	*total:* 741,169 sq mi *land:* 705,258 sq mi *water:* 35,911 sq mi
Area - comparative:	slightly less than three times the size of Texas
Land boundaries:	*total:* 1,617 mi *border countries:* Malaysia 1,107 mi, Papua New Guinea 509 mi
Coastline:	34,000 mi
Maritime claims:	measured from claimed archipelagic baselines *exclusive economic zone:* 200 NM *territorial sea:* 12 NM
Climate:	tropical; hot, humid; more moderate in highlands
Terrain:	mostly coastal lowlands; larger islands have interior mountains
Elevation extremes:	*lowest point:* Indian Ocean 0 ft *highest point:* Puncak Jaya 16,503 ft
Natural resources:	petroleum, tin, natural gas, nickel, timber, bauxite, copper, fertile soils, coal, gold, silver

Land use:	*arable land:* 10% *permanent crops:* 7% *permanent pastures:* 7% *forests and woodland:* 62% *other:* 14% (2013 est.)
Irrigated land:	17,751 sq mi (2013 est.)
Natural hazards:	occasional floods, severe droughts, tsunamis, earthquakes, volcanoes
Environment - current issues:	deforestation; water pollution from industrial wastes, sewage; air pollution in urban areas; smoke and haze from forest fires
Environment - international agreements:	*party to:* Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands *signed, but not ratified:* Climate Change-Kyoto Protocol, Marine Life Conservation
Geography - note:	archipelago of 17,000 islands (6,000 inhabited); straddles Equator; strategic location astride or along major sea lanes from Indian Ocean to Pacific Ocean

Table V-10: Geographical Statistics for Indonesia (Source: CIA, 2001)

4. Enemy Order Of Battle

a Troop Strength

Analysts say it is difficult to estimate the numbers of troops at each terrorist location because they are well guarded and very hard to find. Based on satellite imagery and human intelligence, analysts estimate there are approximately 500-600 terrorists at

each terrorist camp. Analysts further estimate there are roughly 10,000 Al Qaeda terrorists worldwide.

b. Training

First, recruits are thoroughly screened by Al Qaeda officers. Next, they are covertly taken to one of three secret camps located in the Sulawesi province of Indonesia. At the training camps they receive a 52-week course in terrorist tactics. After graduating, they blend into society and wait for their calling.

b. Equipment

Al Qaeda has state of the art equipment: mini-submarines; airplanes; high speed boats; UAV's; high-powered assault rifles; surface-to air missiles; land mines; sea mines; limited biological and chemical weapons; thousands of pounds of explosives and ammunition; and possibly 3 suitcase-sized nuclear weapons.

c. Financial Assets

The Al-Qaeda are backed by anti-government groups and separatist factions operating throughout Indonesia. The biggest source of financial support, however, comes from extremist Muslim sympathizers from the Middle East who siphon money away from oil revenues to give to Al Qaeda subsidiaries in Indonesia.

d. Possible hazards

Booby-traps, chemical, biological, nuclear weapons, landmines, heavily fortified camps, and naval mines near and around Kendari and Poso are the major hazards. Al Qaeda forces are also know to possess SAMs and MANPADS.

E. SUMMARY

These three scenarios—Colombia, Burma, and Indonesia—were written to provide a baseline set of assumptions so the SEA team could develop measures of effectiveness used to model the Current, Planned, and Conceptual architectures in the ExWar Integrated Project in order to determine the strengths and weaknesses of each architecture. The TSSE design team, Aero design team, and Space Operations design team also referred to these scenarios to ascertain the assumptions needed for their respective efforts. These scenarios were used to determine neither system of system level requirements nor system level requirements for the design teams. These scenarios are not to be construed as a geopolitical prognostication twenty years in the future. The main purpose of each scenario can be summed up as follows:

1. Colombia

The first objective was to provide a basis to test the long-range insertion of combat troops and equipment from the Sea Base to the OA. The second objective was to provide a scenario in which long-range sea based logistics might need to be delivered across challenging geography and determine the difficulty of indefinite sustainment of combat troops under these conditions.

2. Burma

The objective of the Burma scenario was to provide a situation whereby an expeditionary warfare architecture opposed a challenging adversary (Burma) with a numerical troop advantage.

3. Indonesia

The objective of the Indonesia scenario was to provide a basis to test the surge capability of an expeditionary warfare architecture by simultaneously attacking three positions at the same time.