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The Military Balance and Arms Sales in Yemen and the Red Sea States: 1986-1992

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While the Gulf is of critical importance in terms of oil supplies, and the Red Sea can be bypassed by sailing around the Cape, the Red Sea is still of potential strategic importance. Over 325 million tons of cargo, or roughly 10% of the world's commercial shipping, passes through the Suez Canal and Bab el-Mandeb each year. This is roughly 45-50 ships a day, and over 18,000 ships a year. It is also approximately one-third more cargo than passes through the Panama Canal.

Yemen poses a potential threat to both Saudi Arabia and Oman. The other Red Sea states -- Ethiopia, Djibouti, Somalia, and the Sudan -- can serve as bases for naval and air forces that can attack ships moving through the Red Sea and the Gulf of Yemen. They also can serve as air bases for powers hostile to Egypt, Israel, and Saudi Arabia. While none of these states currently pose a major threat to their neighbors, several are highly unstable and the Red Sea region offers little prospect of near term stability.

A. The Military Trends in the Red Sea Area

The overall military efforts of the states in the Red Sea area are summarized in **Table VIII-1.** While none of the Red Sea states have particularly strong military forces by Middle East standards, these forces are the product of long and enduring conflicts. Ethiopia, Somalia, the Sudan, and Yemen have made the Red Sea area a region of civil wars. While these civil wars have received less public attention than those in other parts of the Middle East, they have cost hundreds of thousands of lives, and created far higher casualties and human suffering than the struggles in Middle Eastern nations with far higher levels of military forces, technology, and arms imports.

At the same time, there have been many border clashes, minor wars, and tensions between states. The two Yemens fought and feuded virtually from the day of their independence to the day of their merger. The former PDRY backed the Dhofar rebels in a war in Oman. Border tensions between the Yemens and Saudi Arabia have led to several major clashes, and Ethiopia, the Sudan, and Somalia have all been involved in border wars. This situation does not seem likely to change in the future, and new civil wars and border wars are virtually certain to occur.

Table VIII-1

Comparative Military Effort of Red Sea and Key African States Affecting Red Sea Security

	Defense Expenditure in 1991 ($Millions)	Arms Imports '85-'89 ($Millions)	Military Manpower	Battle Tanks	Combat Aircraft	Major Combat Ships
Saudi Arabia	**26,810**	**23,040**	**76,500**	**700**	**253**	**20**
Oman	**1,440**	**445**	**30,400**	**82**	**57**	**12**
Republic of Yemen	**1,060**	**3,000**	**65,000**	**1,275**	**101**	**27**
Sudan	**650**	**330**	**71,500**	**230**	**51**	**2**
Ethiopia	**400**	**3,805**	**125,000**	**300**	**68**	**18**
Somalia	**22**	**160**	**65,000**	**293**	**63**	**6**
Egypt	**5,900**	**5,800**	**420,000**	**3,190**	**495**	**60**
Libya	**1,100**	**5,080**	**85,000**	**2,150**	**409**	**54**
Israel	**6,390**	**6,100**	**141,000**	**4,488**	**591**	**68**
Djibouti	**38**	**?**	**3,400**	**(45)**	**0**	**0**
Chad	**60**	**210**	**17,200**	**(63)**	**4**	**0**
CAR	**20**	**?**	**6,500**	**4(14)**	**0**	**0**
Zaire	**65**	**170**	**50,700**	**80**	**28**	**2**
Uganda	**75**	**195**	**70,000**	**12(30)**	**19**	**0**
Kenya	**225**	**80**	**23,600**	**76**	**28**	**7**

Source: Adapted from the IISS, Military Balance, 1991/1992; ACDA computer data base for World Arms Transfers and Military Expenditures, 1990.
Explanatory Note. Military data shown often differ from those in differ from text which is adapted to include information from other sources. Figures in parenthesis indicate country has somewhat similar equipment in form of lighter AFVs or armed training aircraft. Figures shown generally include total equipment inventory, rather than strength that can be operationally deployed.

The trends in Red Sea forces are show in Table VIII-2 also reflect the impact of a long series of military confrontations and civil wars. At the same time, it is apparent from these trends that the Red Sea states are the "poor relations" of the Middle East. In spite of long and bloody civil wars, Ethiopia is the only Red Sea state to have received the kind of massive arms transfers common elsewhere in the Middle East, and none of the Red Sea states have been able to spend anything like the money per man in service of the Gulf states or Levant. All of the Red Sea countries are exceptionally poor, and military forces and arms imports had a powerful impact in consuming funds needed for economic development and sheer survival.

Table VIII-2

Trends in Forces in the Red Sea Area - Part One

Military Expenditures in $Millions Current

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Red Sea													
North Yemen[a]	320	278	393	537	551	434	379	368	379	641	618	1000	1006
South Yemen[a]	87	101	135	156	171	197	198	211	207	217			
Djibouti											36	26	36
Sudan	279	302	317	442	230	236	220	201	313	286	339	320	340
Ethiopia	254	321	331	357	363	389	382	388	432	440	763	536	500
Somalia	38	23	30	31	31	25	39	31	60	60	39	19	21
Red Sea Total	978	1025	1206	1523	1346	1281	1218	1199	1391	1644	1795	1901	1903

Arms Imports in $Millions Current

	72	74	76	78	80	82	84	86	88	90	92	94
Red Sea												
North Yemen[a]	10	10	20	110	575	420	80	280	430	400	400	400
South Yemen[a]	20	40	40	350	700	250	330	110	380			
Sudan	20	30	50	120	100	240	110	50	90	70	80	90
Ethiopia	10	10	50	1,500	725	575	1,200	330	700	840	570	470
Somalia	20	90	100	240	200	130	90	20	30	70	60	60
Sub-total	80	180	260	2,320	2,300	1,615	1,810	790	1,630	1,380	1,110	1,020

Arms Imports by Supplier During 1985-1989 in $Millions Current

	Total	USSR	U.S.	France	U.K.	PRC	FRG	Other Warsaw Pact	Other Europe	Middle East	Other East Asia	Latin America	Other
Red Sea													
North Yemen[a]	1765	1600	20	0	0	0	5	40	0	40	20	0	40
South Yemen[a]	1400	1400	0	0	0	0	0	0	0	0	0	0	0
Sudan	330	0	100	0	0	50	0	20	20	70	0	0	70
Ethiopia	3805	3600	0	0	0	20	0	60	10	0	110	0	5
Somalia	160	0	5	0	0	0	30	0	0	150	0	0	0
Red Sea Total	7460	6600	125	0	0	70	35	120	30	260	130	0	115

Table VIII-2

Trends in Forces in the Red Sea Area - Part Two

Military Manpower

	67	73	75	77	79	81	83	85	87	89	91
Red Sea											
North Yemen[a]	10	31	42	40	36	30	22	28	43	62	65
South Yemen[a]	10	12	19	20	20	23	25	27	40	88	
Sudan	20	35	50	50	65	87	86	65	59	65	72
Ethiopia	45	50	144	228	250	240	240	240	300	250	65
Djibouti	1	2	2	2	3	3	3	3	4	5	3
Somalia	16	25	30	53	54	54	48	43	50	47	8
Red Sea Total	102	155	287	393	428	487	424	406	486	517	426

Major Military Equipment

Country	Main Battle Tanks							Combat Aircraft						
	73	79	82	84	88	90	92	73	79	82	84	88	90	92
Red Sea														
North Yemen[a]	30	232	714	664	664	715	1270	28	11	75	76	83	87	100
South Yemen[a]	50	260	470	450	480	480	-	20	109	114	103	114	94	-
Djibouti	0	0	0	0	0	0	20	0	0	0	0	0	0	4
Ethiopia	50	624	790	1020	750	1300	300	37	100	113	160	143	120	68
Sudan	130	150	190	173	175	215	215	50	36	30	34	45	53	50
Somalia	150	80	140	240	293	290	270	100	25	55	64	63	56	50
Sub-Total	410	1346	2304	2447	2362	3000	2075	235	281	387	437	448	410	272

B. Yemen[1]

Year	Manpower (1,000s)	Tanks	Aircraft	Defense Spending $ Millions	Arms Imports $ Millions	Arms Exports $ Millions
1967						
YAR	10	12	6	7	10	-
PDRY	10	10	3	26	2	-
1973						
YAR	31	30	28	24	3	-
PDRY	12	50	28	31	42	-
1982						

[1] The military manpower, force strength, and equipment estimates in this section are made by the author using a wide range of sources, including computerized data bases, interviews, and press clipping services. Most are impossible to reference in ways of use to the reader. The force strength statistics are generally taken from the latest edition of the International Institute for Strategic Studies Military Balance (IISS, London), in this case, the 1991-1992 edition. Extensive use has also been made of the annual editions of the Jaffee Center for Strategic Studies, The Military Balance in the Middle East (JCSS, Tel Aviv), especially the 1990-1991 edition and working materials from the coming edition. Material has also been drawn from computer print outs from NEXIS, the United States Naval Institute data base, and from the DMS/FI Market Intelligence Reports data base. Other sources include the Military Technology "World Defense Almanac for 1991-1992," published in early 1992; country reports of the Economist Intelligence Unit (EIU); Foreign Affairs Division, "Middle East Arms Control and Related Issues," Washington, Congressional Research Service, 91-384F, May 1, 1991; and Middle East Economic Digest, "MEED Special Report: Defense," Volume 35, December 13, 1991.

Weapons data are taken from many sources, including computerized material available in NEXIS, and various editions of Jane's Fighting Ships (Jane's Publishing); Jane's Naval Weapons Systems (Jane's Publishing); Jane's Armor and Artillery (Jane's Publishing); Jane's Infantry Weapons (Jane's Publishing); Jane's Military Vehicles and Logistics (Jane's Publishing); Jane's Land-Base Air Defense (Jane's Publishing); Jane's All the World's Aircraft (Jane's Publishing); Jane's Battlefield Surveillance Systems, (Jane's Publishing); Jane's Radar and Electronic Warfare Systems (Jane's Publishing), Jane's C^3I Systems (Jane's Publishing); Jane's Air-Launched Weapons Systems (Jane's Publishing); Jane's Defense Appointments & Procurement Handbook (Middle East Edition) (Jane's Publishing); Tanks of the World (Bernard and Grafe); Weyer's Warships (Bernard and Grafe); and Warplanes of the World (Bernard and Grafe).

Other military background, effectiveness, strength, organizational, and history data are taken from Mark N. Katz, Yemeni Unity and Saudi Security," Middle East Policy, Vol. 1, No. 1, 1992, pp. 117-135; Lij Imru Zelleke, The Horn of Africa, A Strategic Survey, Washington, International Security Council, 1989; John Bennet, "The Military Balance and Internal Security in the Horn of Africa," student paper for NSS/Security Problems of the Middle East, Georgetown University, 1990; Norman Cigar, "Soviet-South Yemeni Relations: The Gorbachev Era," Journal of South Asian and Middle Eastern Studies, Summer, 1989, pp. 3-38; John Byington, "The Military Balance and Internal Security in the Horn of Africa," student paper for NSS/Security Problems of the Middle East, Georgetown University, 1990; Stephen Page, The Soviet Union and the Yemens: Influence in Asymmetrical Relationships, New York, Praeger, 1985; Richard F. Nyrop, The Yemens: Country Studies, Washington, Department of the Army, 1985; Kirk Campbell, "Yemen", Washington, Congressional Research Service, 91-540F, July 10, 1991; Mark Katz, "Camels and Commissars," The National Interest, Winter 1988/1989, No. 14, pp. 121-124; the relevant country or war sections of Herbert K. Tillema, International Conflict Since 1945, Boulder, Westview, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992; various annual editions of John Laffin's The World in Conflict or War Annual, London, Brassey's, and John Keegan, World Armies, London, Macmillan, 1983; Anthony H. Cordesman, "The Military Forces of the Yemens, Armed Forces, July, 1988, pp. 302-305; The Gulf and the Search for Strategic Stability, Boulder, Westview, 1984, and The Gulf and the West, Boulder, Westview, 1988.

YAR	22	714	75	435	420	-
PDRY	25	470	114	162	303	-
1988						
YAR	62	715	83	280	400	-
PDRY	88	480	114	380	380	-
1991	65	1,270	100	1,000	-	-

Yemen was unified on May 22, 1990, and is now a country of some 527,970 square kilometers, about twice the size of Wyoming. It shares a 1,458 kilometer border with Saudi Arabia, and a 288 kilometer border with Oman. It has a 1,906 kilometer coastline on the Red Sea, and controls the Bab el Mandeb, the eastern exit to the Red Sea, and the strategic island of Socottra in the Gulf of Aden. Both its border with Saudi Arabia and Administrative Line with Oman are disputed.

The population of Yemen is about 10,062,000, with a population growth rate of about 3.2%. It is about 90% Arab and 10% Afro-Arab, with a few Indians and Somalis. The north is a mix of Sunni and Shi'ite Muslim, and many key tribal leaders are Shi'ites of the Zaidi sect, which dominate the government. The current president of Yemen, Ali Salleh, is a Zaidi. The south is largely Sunni Muslim, with some Christians and Hindus. More than half of all the inhabitants of Yemen, inculding most of the south, are Sunnis of the Shafi sect.[2]

Military Developments in Yemen

Yemen was formed out of North and South Yemen, and the two Yemens took very different routes to unification. North Yemen was loosely governed by the Turkish empire after 1517, although the Imam's of the Zaidi sect controlled the country and had considerable authority. North Yemen received full independence from the Turkish Empire in 1918, as a result of World War I.

In contrast, Britain seized the port of Aden and the surrounding Aden Protectorate (a group of quasi independent Sheikdoms), to secure the routes to India and create a coaling station in the early 19th Century, and ruled the area from India until the late 1800s. In spite of claims to the region by North Yemen, neither the people of Aden or of the various tribal protectorates showed much interest in nationalism until the 1930s, and even then, such nationalism had its origins in the politics of Hindus and Muslims that Britain brought over as workers from India.

North Yemen was governed after World War I by an Imam from the Hamid al-Din family, which had succeeded in making the Imamate of the leading Zaidi sect hereditary, rather than elected, in 1891. In the period after 1918, the Imam Yahya sought to establish

[2] CIA, World Factbook, 1991, pp. 341-342.

central state control over the tribes in North Yemen and expand his territory. He was checked by Saudi forces in 1934, however, and lost the territory of the Asir to Saudi Arabia. The Imam Yahya was forced to sign a treaty with Saudi Arabia in 1936 that recognized Saudi control over the Asir, but left several other border issues unsettled.

The Imam Yahya was not a popular leader and never fully succeeded in controlling the two main tribal groups in North Yemen: the Zaidi and Shafai. He was assassinated during a military coup attempt in February, 1948. Although Abdullah al-Wazir briefly seized power, Yahya's sons successfuly fought a short civil war against al-Wazir, and the Imam Yahya succeeded by his son Ahmad. Ahmad was an erratic leader prone to violence and mood swings, and who became addicted to morphine.

He did attempt some reforms. He tried to create a modern non-tribal army, and joined North Yemen to the UAR in March, 1958, but ultimately succeeded in doing little more than creating an increasingly politicized and pro-Nasser palace guard. He also aliented key tribes like the Hashid by executing their leaders. When Ahmad died on September 18, 1962, his son Mohammid al-Badr claimed the Imamate. Eight days later, however, Colonel Abdullah al-Sallal -- the head of the Imam's personal guard -- seized power and proclaimed the creation of the Yemeni Arab Republic (YAR). The Imam's son fled the capital and raised many of the Zaidi tribes in his support. Al-Sallal organized his own forces, obtained the support of key Shaifi tribes as well as few Zaidi groups, and turned to Egypt for money and arms.

From 1962 to 1967, a bloody tribal civil war took place in which Imam Badr's forces were backed by Saudi Arabia, Jordan, and the conservative tribes, and the socialist government formed by Sallal was backed by Nasser and Egyptian troops. This led to a number of incidents on the Saudi border, and the Egyptian air force bombed targets in Saudi Arabia on several occasions between November, 1962 and May, 1967. By the time the Six Day war began between Israel and the Arabs, some 20,000 Yemenis had died, some killed by the Egyptian use of poison gas. Egypt had taken serious casualties, and the cost of the war had led it to a gradual reduction of its forces in Yemen.

The crisis before and after the 1967 war made Nasser desperate for money. In August, 1967, Saudi Arabia agreed to provide aid in return for the exile of Sallal and the removal of Egyptian troops. Egypt agreed to refuse supporting Sallal and withdrew all of its forces by October 16, 1967.

The Imam's forces besieged Sanaa, but divided into squabbling groups before they could seize the capital. Sallal's forces then gradually drove the Imam's forces back towards the Saudi border. They were driven out of their last stronghold in Sada and failed to recapture the town with Saudi aid. Although the YAR's air force bombed targets near the

Saudi town of Najran, the Saudis eventually worked out an agreement between the rebel and Sallal that effectively recognized the Yemeni Arab Republic, in return for the creation of a consultative council that brought together most of the feuding tribes. This brought an end to the Imamate and the monarchy.

The Struggle for Independence in South Yemen

Unlike the north, the south had to fight for independence. This fight began in December, 1947, in a series of riots and attacks on the Yemeni Jews. While this revolt was not directed against the British, it showed Marxist and Arab nationalist forces that they could exert power against the British. North Yemen also began to provide arms and money to anti-British factions and fighting started between various tribal groups in 1952. The RAF started replying with air raids in May, 1953, and Britain had to commit troops in June, 1955. After about four years of confused tribal fighting, and occasional clashes with forces of North Yemen, the British pacified most of the tribal areas.

By 1960, tribal levies did most of the fighting on the British side, but Britain's military victories did little to halt the rise of nationalism and Marxism in Aden, and the various sheiks who rule in the tribal protectorates remained isolated and became increasingly ineffective in controlling their territories. The fighting resumed again in 1961 and took on a new character after Sallil seized power in North Yemen. Britain backed the forces of the Imam Badr, and Sallil and Egypt began to provide arms and money to a pro-Nasser group called the National Front for the Liberation of South Yemen (FLOSY).

The British tribal forces and the RAF were able to contain FLOSY during 1962. In January, 1963, however, Britain made the mistake of combining the tribal protectorates and Aden Colony into the South Arabian Federation. The federation was unpopular in both Aden and the protectorates and started a new uprising in which Marxists played an increasingly important part. Between April, 1964 and October, 1965, the fighting reached the point where it became clear that Britain could not re-exert control without deploying major forces. At the same time, Britain was involved in a major effort to reduce its military commitments east of Suez. Britain announced its intention to withdraw in February, 1966, and the war then became a struggle between FLOSY and the far more radical National Liberation Front (NLF).

Britain attempted to back some of the traditional tribal leaders in preserving the South Arabian Federation, and carried out another offensive in 1966. This offensive achieved little, however, and Britain withdrew back to camps near the city of Aden in June, 1967, and prepared to give up the colony. This left FLOSY and the NLF to fight for control of Aden and the surrounding tribal areas, and the NLF emerged the decisive victor. Britain left Aden and the South Arabian Federation on November 29, 1967, and the

NLF proclaimed the creation of the People's Democratic Republic of Yemen (PDRY) the next day.

Some 300,000 members of the Front for the Liberation of Occupied South Yemen (FLOSY) fled to the YAR, where they became a key source of friction between the two countries for the next two decades. While both the YAR and PDRY were led by regimes which had come to power proclaiming the need for a unified Yemen, these regimes were sharply divided in character and leadership, and the rhetoric of units disguised a reality of bitter military rivalry.

Although the two countries began what became an intermittent series of unification talks in November, 1970, the YAR and PDRY disputed many parts of their border, including the control of Karaman Island. The FLOSY forces that the NLF had driven out of the PDRY showed no interest in the unity talks, and launched a series of raids from their bases in the YAR into the PDRY. In October, 1971, the PDRY retaliated by attacking FLOSY positions in the YAR. This produced a series of pendular battles on each side of the border. YAR units crossed into the PDRY in September, 1972. The PDRY invaded the YAR's border regions in October. Kuwait and the Arab League persuaded both countries to accept a cease-fire in November, 1972, and the YAR and PDRY jointly declared that the would begin new unity talks.

This pattern of rhetoric, conflict, and rhetoric went on for well over a decade. The YAR and the PDRY continued to feud, and fought more minor border wars. at the same time, their governments were destablized by a long series of tribal rivalries, coup attempts successful coups, assassinations, and other internal divisions. The PDRY was generally the aggressor, and attempted to force "unification" with the YAR on several occasions,. The PDRY also had serious military clashes with Saudi Arabia, and unsuccessfully backed the Dhofar rebels in Oman from 1967-1975.[3]

The Rise of Ali Abdallah Salih in North Yemen

It was a successful assassination attempt that brought Ali Abdallah Salih to power in the YAR. On June 24, 1978, the PDRY ambassador met with President Ahmad al Ghasmi of the YAR to discuss unification. The ambassador of the PDRY was supposed to be carrying a private message from the President of the PDRY, but the sealed case that held this "message" actually contained a bomb that killed them both

It is still impossible to determine exactly what role Salih played in the assassination of one of his predecessors -- President Hamdi -- or whether he gave the PDRY any

[3] It is difficult to establish a fixed time period for the Dhofar rebellion. It can be argued that the rebellion began in 1964. It was in 1967, however, that large flows of arms began through the PDRY. These were first provided by the PRC and then by the USSR, most moving through a supply base in Hauf in Yemen.

encouragement in killing Ghasmi. It is equally impossible to determine what role Saudi subsidies played in destablizing the political situation in the YAR. In any case, Salih's rise to power created a "president" that not only managed to survive, but one who eventually became the president of a united Yemen. While Salih never was able to unite all of the YAR's tribes, or extend government control into all the rural areas, he did obtain the support of the powerful Hashid and Bakil tribes in the north, and brought a degree of order that the YAR had not experienced since the fall of the Imams.

The PDRY did not enjoy such stability. From 1969 on, bitter rivalries took place between various factions in the NLF, which resulted in a victory of hard-line leftists. During 1970, all officers and political figures with any ties to the British or Sheiks in the region were purged, and this was followed with what became a series of tribal purges as the leftist government attempted to create completely loyal rural areas. The net result, however, was Marxist-Tribalism, where ideology combined with tribal ties to fuel the rivalry between various leftist leaders.

It is impossible to summarize all the complex shifts that took place in PDRY's relations with Oman, the Dhofar rebels, Saudi Arabia, and the YAR during this period, but the result was constant intrigue and violence. It was also a complex rivalry between three of the PDRY's leaders: Salim Rubayya Ali, Abdul Fattah Ismail, and Ali Nasr Muhammad. This rivalry played itself out over nearly the next twenty years, although Rubayya Ali was executed in 1978, after Ismail took power in a coup following the assassination of President Ghasmi of the YAR.

The assassination and the resulting changes in leadership in both countries helped trigger another round of fighting between the YAR and PDRY. Ismail supported a Marxist opposition group in the YAR called the National Democratic Front (NDF) and provided it with arms and training areas in the PDRY. In February, 1979, NDF forces invaded the YAR and seized positions near Ibb and Taiz. Regular YAR army forces then counterattacked and moved against NDF positions in the PDRY. The PDRY sent its own army into the YAR. Both countries seemed poised on the edge of a major war until Syria and Iraq helped mediate a cease-fire on March 19, 1979 with the aid of money from Kuwait and Saudi Arabia. In what had virtually become a tradition, Presidents Salih and Ismail then declared their intention to seek unification.

Civil War in the PDRY

While little real progress took place towards unification, the PDRY did seem to become more stable when an increasingly extreme Abdul Fattah Ismail was forced into exile in April, 1980. Ali Nasr Muhammad became president, and proved to be far more pragmatic than Ismail. Unfortunately, this very pragmatism became a problem. It improved

the PDRY's relations with its neighbors and its economy, but it also alienated extreme leftists in the leadership like vice president Ali Antar. Even though Muhammed coordinated virtually all of his decisions with Moscow, Ismail was allowed to remain in exile in the USSR and to keep in touch with his supporters in the PDRY. From 1983 onwards, these hard-liners conspired to bring Ismail back and to overthrow Muhammed.[4]

The hard-liners succeeded in engineering the return of Ismail in February, 1985, and he became secretary of the ruling party. Other power struggles expanded the Politburo from 13 to 16 members ,and the central committee from 47 to 77. On January 13, 1986, the struggles between the Ismail and Muhammed factions led to civil war, and intensive street fighting began throughout Aden. Various elements of the armed forces took different sides, but the navy backed Ismail and started firing into the city. This allowed the pro-Ismail forces to gradually win the fighting. Aden suffered major damage from the fighting, as many as 10,000 civilians were killed, and 4,500 foreigners had to be evacuated, although the damage to civilians was brought under partial control when the Soviet advisors controlling the munitions depots refused to provide either side with added weapons and munitions.[5]

Once the Ismail faction clearly came to dominate the fighting, Muhammid flew to Ethiopia and asked Mengistu to rush in added arms and possibly troops. Mengistu did not give him this support and Muhammid was forced to returned to the PDRY without the help he needed. Although he attempted to rally his supporters in the south and the east, he was unsuccessful and had to flee to the YAR. Only then did Ismail's supporters announce that Ismail had died during the fighting. It is not clear exactly how Ismail died, but news of his death was evidently kept secret to prevent riots by his supporters.

The Soviet Union then intervened by forcing the surviving factions to accept a moderate named Haydar Abu Bkr el Attas as president. Attas was one of the few leaders of the PDRY that had not taken sides between the Muhammid and Ismail factions. He also had relatively good relations with some of the leaders in Kuwait and Saudi Arabia, and seems to have been a sincere supporter of unification.

Attas, faced major problems. By the time he took power, the PDRY was a nation with a devastated economy and military forces, and which had suffered a total of 13,000-17,000 dead -- including both military and civilians -- and up to 65,000 men had fled to

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[4] Other hard-liners included Defense Minister Qassem, Deputy Prime Minister Ali Badeeb, Construction Minister Fadil Abdullah, and Local Government Minister Ali Al Beedh. For a detailed description of the war, see John Laffin, The War Annual I, London, Brassey's, 1986, pp. 143-147.

[5] There were then about 2,000 Soviet advisors, as many as 10,000 Soviet military personnel, and 400 Cubans in the PDRY.

the YAR.[6] He also took power at a time when Gorbachev was ending the kind of expansionism that had provided the PDRFY with some much aid in the past. Although the PDRY provided the USSR with operating areas for its IL-38 May naval reconnaissance aircraft, secure operating facilities, and exercise areas for its naval infantry to carry out landing exercises on the Island of Socottra, the USSR refused to provide the massive additional economic aid that the PDRY needed to rebuild its military forces and economy. Gorbachev concluded that the PDRY had become more of a strategic liability than a strategic asset, and gradually phased out the USSR's military presence.

These Soviet actions helped lead to the breakdown of Marxist authoritarianism in the PDRY, and the collapse of its economy. Industry and trade virtually halted, and farmers refused to send food to Aden and other cities at the government's prices.[7] These some changes, however, helped create a political climate where the long series of efforts to create a united Yemen took on new meaning.

Unification negotiations that had previously done little more than lead to new conflicts took on a different character, and the leadership elites of the YAR and PDRY gradually agreed plans to merge the two countries. After at least three centuries of separation, and a quarter century of tension and conflict, the Republic of Yemen came into existence on May 22, 1990.

The Unification of Yemen

The agreement that led to unification worked surprisingly well, and Yemen held its first real popular election a year later. A two day referendum was held on May 15-16, 1991 to vote on the 128 article constitution that had been approved by the new unity government. Approximately 1.36 million voted out of roughly 4 million eligible voters, and more than a million people approved the new constitution. It was a striking step forward in political development, although scarcely one without problems.

The first of these problems was deciding on the political power to be given to each of the existing regimes, and the shape of the interim government. The leaders of the People's Democratic Republic of Yemen (PDRY) and the Yemeni Arab Republic (YAR) agreed to full popular elections in November, 1992. In doing so, they agreed to a fundamental change in the leadership of the country after the elections which strongly

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[6] Some estimates put the dead as low as 5,000+. Time, January 9, 1989, pp. 35-36; Fred Halliday, "Moscow's Crisis Management, The Case of South Yemen," Middle East Report, #151, March-April 188.

[7] New York Times, October 20, 1989, p. A-5; November 23, 1991, p. A-2; The Middle East, April, 1989, pp. 18-19; Time, January 9, 1989, pp. 35-36; Kirk Campbell, "Yemen", Washington, Congressional Research Service, 91-540F, July 10, 1991.

favored the north. The YAR had had a total population of nine million, plus up to two million expatriates, versus a maximum of two million in the PDRY. The YAR also had military forces that had not suffered from the shock of civil war, and most of the new country's oil reserves.

At the same time, the new interim government reflected a careful balancing act between north and south. Saleh became the first president, while the former secretary-general of the PDRY's Socialist Party, Ali Salem Al-Baidh, became vice-president. The ruling Presidential Council had three northerners and three southerners, and the cabinet had twenty ministers from the north and nineteen from the south. The new parliament had 301 seats, 159 of which were filled with members from the YAR's Shura Council, 111 from the PDRY's Supreme People's Council, and 32 from other political parties.

The second problem was the rise of new political parties. Salleh's People's General Conference (PGC) became the largest political party after unification, and continued to reflect many of the the religious and tribal factions in the former YAR. Almost immediately, however, new parties arose in the north which relfected tribal divisions or which favor a more Islamic structure of government.

The PDRY's Communist Party was renamed the Yemen Socialist Party (YSP), but could not shake off its past history. It gained little support in the north, and suffered from internal rivalries that had grown out of the civil war, and tensions with former PDRY exiles. A number of leading YSP members were attacked or assassinated during 1991 and early 1992.

Almost immediately after unification, new parties emerged that opposed both the PGC and YSP, and opposed the new constitution because it called the Sharia (Islamic law) the "main", rather than "sole" source of law. The Al-Islah, a religious party opposed to Yemen's secular constitution, seemed to emerge as the second largest party in the country. Its leader, Abdullah bin Hussain Ahmar, was not an extreme fundamentalist but did call for a conversion of the legal system to Islamic law. Another major Islamic party emerged in the south -- the League of the Sons of Yemen led by Abdulrahman al-Jifri. It called the consitutional referendum illegal and called for immediate popular elections. Similar opposition emerged from powerful tribal leaders, like Sheikh Abdullah Bin Hussein al-Ahmar of the Hashid tribal confederation.

By September, 1992, there were at least 17 political parties contending for power -- most far more Islamic than either of the two parties that had formed the interim government. This posed the risk that Yemen's experiment in democracy would lead to the same secular-Islamic split that was affecting many other nascent democracies in the Arab

world. Some experts also believed that Al Islah was heavily financed by the Saudis' who were attempted to revive the power of conservative northern tribal leaders.

The third problem was that unification at the top of the political structure still left considerable uncertainty as to the direction the new country would take. While a unified military command was created, the country initially kept two currencies, airlines, and sets of military forces.

There were many divisions in custom and legal practice. Northerners, who showed no reluctance to use narcotic like Qat, opposed the existence of a brewery in the south. Former exiles from the PDRY promptly began to sue for recovery of land and property that have been seized by the PDRY. Laws in the PDRY that had protected the right of women to equal employment, equal treatment during divorce, and choice of their husband were quietly rescinded, while some question arose over the legal rights of women to inherit and control property.[8]

There were, however, advances as well as problems. Unification led to political liberalization and reform. The collapse of Marxism in the PDRY led to the disbandment of much of the secret police, or mukhabarat, and to a less corrupt legal system and more rights for women. President Salleh retained his internal security system, and Iraqi security advisors, but the north also liberalized after unification.

Open political debate took place and only involved sporadic violence. Some 50 newspapers and publications appeared -- reflecting every possible range of opinion. While civil rights and the rule of law scarcely improved to Western standards, they became better than at any time since independence.[9]

The political uncertainties the new republic faced were compounded by external events which offset any initial benefit that unification might have had in solving the two countries' economic problems. Unification created a united Yemen with a gross national product of around $5.3 billion, but with a per capita income of only $545. The PDRY's economy was in ruins, and the YAR's economy had grown by only average of 2-3% since the mid-1970s. As a result, economic growth had fallen far below the average rate population growth, which was well in excess of 3%.[10] A steady drop in living standards

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[8] Kirk Campbell, "Yemen", Washington, Congressional Research Service, 91-540F, July 10, 1991, pp. 3-4; Christian Science Monitor, May 21, 1992, p. 5; Washington Post, July 29, 1992, p. A-19; Los Angeles Times, June 1, 1992, p. A-2; London Financial Times, August 13, 1992, p. 4.

[9] Economist, December 9, 1989, p. 42, March 3, 1990, p. 40; Washington Times, December 27, 1989, p. A-2; Philadelphia Inquirer, December 2, 1989, p. 14A, December 17, 1989, p. 26A; The Middle East, May, 1988, pp. 23-26; The Middle East, December, 1991, pp. 37-38.

[10] CIA, World Factbook, 1991, pp. 341-342.

had taken place, and Yemen had the highest rate of debt per capita in the Middle East -- offset only Yemen's reliance on a parallel economy and remittances from foreign labor.

Yemen's only real hope of economic development was oil. Oil had been discovered in the Marib/Al-Jawf basin in 1984 and exports had begun in 1987. As of January 1, 1992, Yemen had estimated proved oil reserves of 4 billion barrels, and gas reserves of 7,000 billion cubic feet. Although on significant production took place during the 1980s, Yemen produced at a rate of about 190,000 to 200,000 million barrels per day during 1990 and 1991, and earned some $900 million in oil revenues between mid-1990 and the end of 1991. More importantly, Yemen's exports had the potential to grow to 600,000 to 800,000 barrels a day by the mid to late 1990s.[11]

This dependence on oil, however, created new problems. The PDRY's and YAR's search for oil led to border clashes with Saudi Arabia and Oman over rights to oil drilling in the border area during the late 1980s, and these clashes continued after unification. Fighting sometimes became serious along the Saudi-Yemen border, and led to casualties in the Saudi Frontier Force on several occasions. There were reports that Saudi Arabia had taken several Yemenis prisoner in 1987, and of clashes near Ifrine in northern Hadramhaut province in June, 1989.

This fighting reduced outside Arab aid to Yemen, and tensions increased sharply in 1990. Yemen accused Saudi Arabia of paying Yemeni tribes to disrupt Yemen's unification in May, 1990, and Yemen supported Iraq when it invaded Kuwait in August, 1990. Salih seems to have seen Iraq as a potential counterbalance to Saudi Arabia, and had relatively close ties to Iraq when the Gulf War began. He was using Iraqi security advisors, had received some military aid from Iraq, and had joined with Iraq, Egypt, and Jordan in forming the Arab Cooperation Council in 1990.

Saudi Arabia and Kuwait quickly retaliated. Saudi Arabia and Kuwait ceased all aid to Yemen, and U.S. aid was cut from $42 million in FY1990 to less than $4 million in FY1991, and $6 million in FY1992. Saudi journalists accused Yemen of plotting with Iraq in September, 1990, and Riyadh Television Service allowed individuals identified as Yemeni tribal sheiks to broadcast an attack the included the phrase, "We also condemn the Yemeni authority of the Sanhani ignoramus Ali Abdullah Salleh, that parasitical and

[11] Yemen had probably additional proven reserves of 2 billion barrels in 1990. Its reserve to production ratio was 57/1. *OJJ Special*, Oil and Gas Journal, December 30, 1991, pp. 43-49; Other estimates indicate it has 4 billion barrels of proven reserves and 2 billion barrels of probable reserves. See Joseph P. Riva, Jr. of the Congressional Research Service, writing in the Oil and Gas Journal, September 23, 1991, p. 62. New York Times, November 23, 1991, p. 2; Joseph P. Riva, "Persian Gulf Oil: Its Critical Importance to World Oil Supplies," Conrgressional Research Service 91-220 SPR, March 5, 1991, pp. 3-4; The Middle East, December, 1991, pp. 37-38; New York Times, June 7, 1992, p. A-7.

ignorant leader." Saudi Arabia announced the deployment of Saudi troops near the border in October, 1990.

Yemen responded by demanding that the 1936 Treaty be redrawn to rectify the borders and halt Saudi control of Yemeni lands outside Taif. In November, Saleh announced over the Sanaa Domestic Service that Yemen's unification, "is the sign of a pan-Arab awakening embodying the dreams of the Arab masses in a borderless great Arab homeland, a unified nation." This reference to a borderless nation seemed to be a direct reference to the rationale Saddam Hussein had used for annexing Kuwait.[12]

Saudi Arabia expelled many of its Yemeni workers. Up to 800,000 Yemeni workers -- about half the total expatriates -- were forced to leave the southern Gulf countries during and after the Gulf War. This deprived Yemen of up to $350 million per month in worker remittances. This raised unemployed to at least 27% by mid-1991, and to as high as 40% by the fall of 1992. Yemen could only meet about 20% of its foreign debt commitments during 1990 and 1991 on a foreign debt that totaled some $7.8 billion -- about 66% of which was owed to Eastern European countries.

The resulting economic impacts were particularly serious in the south, which had no previous experience in controlling a market economy. Food prices in the south rose by 150% to 400%. They also severely limited what Yemen could do to absorb or aid refugees from Somalia, which began to experience a massive famine by mid-1992.

While Yemen submitted a bill to the UN for $1.6 billion for its share of the damages caused by the Gulf War, it obtained no support from its Arab neighbors and faced a future where many its workers might not be allowed to return to Saudi Arabia or the other southern Gulf countries. Yemen also faced new problems on its border.

Saudi troops occupied the Al-Baqah border post in Yemen in April, 1991. While Salleh asked President Mubarak to intercede with Saudi Arabia in October, 1991, this had little effect. Saudi Arabia responded by reviving claims based on disputes as to where the former Turkish border had run between the 17th and 18th parallels, and which included about 25% of the territory of the former PDRY.

Saudi Arabia stepped up its efforts to influence the Yemeni elections. It encouraged Yemenis in the area to acquire Saudi passports, and in May, 1992, it sent letters to the six leading oil companies in Yemen that (a) claimed that 12 of the 20 concessions Yemen had granted to foreign oil firms were in Saudi territory, (b) warned the oil companies that they were working in disputed territory, and (c) stated that Saudi Arabia intended to reassert its rights. This Saudi warning did not affect the operations of

[12] Taken from work by Jonathan S. Mark, a student at Georgetown.

Hunt Oil, which was pumping all of the 180,000 barrels per day being produced in the Marib area. It did, however, affect the exploratory operations of British Petroleum, Phillips, ELF-Acquitaine, and Atlantic Richfield.

While Saudi Arabia agreed to border talks with Yemen in September, 1992 -- after intervention by Oman and the U.S. -- it was far from clear that such talks could resolve the situation either quickly or on a lasting basis.[13]

Military Expenditures and Arms Transfers

The military expenditures and arms transfers of the YAR and PDRY serve as little more than a memorial to violence and waste. Both states spent far more of their limited resources on military expenditures and arms transfers than their economies and peoples could afford.

The YAR generally won the race to build up the largest forces. It was an Arab socialist state, but also the more conservative and pro-Western of the two Yemens. It quickly learned to play East off against West, and to exploit the PDRY's radicalism in seeking aid from the Arab world. As a result, it, benefited from Saudi aid and some Western aid and arms sales, although it got most of its weapons and military aid from the USSR.

ACDA estimates that the YAR's military budget was $107 million in 1978, $320 million in 1979, $278 million in 1980, $393 million in 1981, $537 million in 1982, $551 million in 1983, $434 million in 1984, $379 million in 1985, $368 million in 1986, $379 million in 1987, $641 million in 1988, and $618 million in 1989.[14] This estimate could put the YAR's military spending at anywhere from 7-13% of the GNP, and 22-39% of Central Government expenditures.

The IISS puts Jordanian military spending at $713.35 million in 1986, $745.5 million in 1987, and $762.8 million in 1988. These expenditure levels are about one-eighth those of Israel during the same period, and one fifth those of Syria. The IISS estimates that Jordan spent $467 million in 1989, $571 million in 1990 and $587 million in 1992.[15]

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[13] Some estimates put the loss of remittances at a maximum of $800 million per year. Kirk Campbell, "Yemen", Washington, Congressional Research Service, 91-540F, July 10, 1991; New York Times, November 23, 1991, p. 2; Middle East Report, May-June, 1991, pp. 26-41; Christian Science Monitor, May 21, 1992, p. 5; Reuters, May 19, 1991, BC cycle; Agence France Presse, May 20, 1991; Xinhua General News Service, May 22, 1992, Item 0522206; Boston Globe, July 25, 1992, p. 2; Middle East News Network, August 19, 1992; Washington Post, July 29, 1992, p. A-19, July 12, 1992, p. A-20; Los Angeles Times, June 1, 1992, p. A-2; London Financial Times, August 13, 1992, p. 4; Chicago Tribune, July 12, 1992, p. I-15; New York Times, June 7, 1992, p. A-7, June 27, 1992, p. A-4; Washington Times, June 27, 1992, p. A-3.

[14] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table I.

[15] IISS, Military Balance, 1987-1988, 1988-1989, 1989-1990, and 1991-1992.

As for arms imports, ACDA estimates that the YAR imported $110 million worth of arms in 1978, $480 million in 1979, $575 million in 1980, $1,000 million in 1981, $420 million in 1982, $490 million in 1983, $80 million in 1984, $230 million in 1985, $280 million in 1986, $400 million in 1987,$430 million in 1988, and $420 million in 1989.[16]

These arms imports came principally from the former Soviet Union. ACDA estimates that the YAR's arms imports during 1979-1983 totaled $2,355 million, with $1,200 million from the USSR, $200 million from the U.S., $30 million from France, $10 million from West Germany, $5 million from Italy, $250 million from Romania, $10 million from Poland, and $65 million from other countries.[17] During 1984-1988, the YAR got $1,420 million worth of arms imports, with $1,300 million from the USSR, $30 million from the U.S., $5 million from the UK., and $90 million from other countries.[18]

ACDA changed its way of reporting arms sales by source in 1992. This new style of reporting does not, however, indicate any reduction in dependence on the USSR. North Yemen imported a total of $1,765 million worth of arms during 1985-1989, with a total of $1,600 million from the Soviet Union, $20 million from the U.S., $5 million from West Germany, $40 million from other Warsaw Pact countries, $40 million from other Middle Eastern countries, $20 million from other East Asian states, and $40 million from other developing countries.[19]

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[16] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table II.

[17] Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, 1985, pp. 98, 134, 140, 146.

[18] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1989, Washington, GPO, 1990, p. 118; Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1986, Washington, GPO, 1987, p. 143.

[19] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, pp. 133-134.

The regime in the PDRY was so extreme that few nations would deal with it, and virtually all of its military aid and arms sales came from the Soviet bloc. ACDA estimates that the PDRY's military budget was $97 million in 1978, $87 million in 1979, $101 million in 1980, $135 million in 1981, $156 million in 1982, $171 million in 1983, $197 million in 1984, $198 million in 1985, and $211 million in 1986, $207 million in 1987, and $217 million in 1988.[20] The PDRY's military spending seems to have been equivalent to about 14-21% of its GNP, and at 22-37% of Central Government expenditures, but the USSR may have offset many of the operating costs of PDRY military forces.

The PDRY's arms imports fluctuated from year to year, depending on Soviet policy. They ranged from a peak of $775 million in 1983 to levels of around $300 million annually during the late 1980s. ACDA estimates that the PDRY imported $350 million worth of arms in 1978, $500 million in 1979, $700 million in 1980. $500 million in 1981, $250 million in 1982, $775 million in 1983, $330 million in 1984, $390 million in 1985, $110 million in 1986, $300 million in 1987, $380 million in 1988, and $230 million in 1989.[21]

These uncertainty in some ACDA estimates is indicated by the fact that ACDA estimates that the PDRY took delivery on $1,510 million worth of arms during 1979-1983. This included $1,500 million worth of arms from the Soviet Union and $10 million from other countries.[22] ACDa also estimates, however, that the PDRY took delivery on $1,510 million worth of arms during 1984-1988, and that this total also included $1,500 million worth of arms from the Soviet Union and $10 million from other countries. $1,420 million worth of arms during 1984-1988, with $1,300 million worth of arms coming from the USSR.[23] ACDA changed its way of reporting arms sales by source in 1992. This source indicates that the PDRY imported a total of $1,400 million worth of arms during 1985-1989, with all $1,400 million coming from the Soviet Union.[24]

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[20] It is almost impossible to estimate PDRY military expenditures with any accuracy after 1986. Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table I.

[21] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table II.

[22] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1985, Washington, GPO, 1985, pp. 133-134.

[23] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1989, Washington, GPO, 1990, pp. 117-118.

[24] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, pp. 133-134.

The Military Forces of Yemen [25]

Most of these military expenditures and arms imports have been wasted. The PDRY never organized effective regular military forces, and its political struggles made most of its senior commanders more interested in politics than military leadership. The PDRY often got more arms than it could effectively operate, and lost much of its military equipment during its civil war. The YAR did somewhat better, but never could fully absorb the equipment it got from the Soviet bloc. The YAR never got enough equipment, training, and support from the West to develop modern forces.

Nevertheless, the military build-up in both countries left a unified Yemen with major military assets to draw upon. It also seems to have been able to spend about $1,000 million on military forces in 1990, and $1,060 million in 1991.[26] As a result, some estimates indicate that Yemen now has a total military force of some 105,000 men. There is considerable doubt , however, as to how many of these forces should be counted as full time actives. The IISS counts only 65,000 full time actives with a total of 45,000 conscripts, and that another 40,000 men are estimated to be part time or in reserve forces.

Depending on the source, Yemen's regular army has 65,000 to over 80,000 men, including part time manpower. It is organized into 34 main maneuver brigades, with a total of 9 armored brigades, 19 infantry brigades, 5 mechanized brigades, 2 airborne and commando brigades, five militia brigades, 7 artillery brigades, and two surface to surface missile brigades.

The Yemeni Army and Paramilitary Forces

The army is equipped with around 1,275 main battle tanks, including 725 T-55s and T-54s, 250 T-62s, 50 M-60A1s, and 250 T-34s. It has around 300 BMP and BMP-1 armored infantry fighting vehicles, and 335 armored reconnaissance vehicles -- including 125 AML-90s, 60 AML-245s, and 150 BDRM-2s. The army has 690 armored personnel carriers, including 90 M-113s and 600 older Soviet BTR-50s, BTR-60s, and BTR-152s. Many of these armored vehicles are deadlined, or have limited operational capability. Yemen conducts almost no armored maneuver training, and has limited ability to use its armor even in defensive roles. It has more armored vehicles than crews to operate them.

Yemen is equipped with anti-tank weapons and crew served weapons it can use somewhat more effectively. These include 12 TOW and 24 Dragon fire units, and large

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[25] Unclassified sources differ sharply as to the current actively equipment holdings of the Yemeni armed forces, and interviews provided little additional data on Yemen's forces. The most reliable source seems to be the International Institute for Strategic Studies. The figures for army, and air force equipment holdings are taken primary from this source. The data for the navy are taken primarily from Jane's.

[26] IISS, Military Balance, 1991-1992, pp. 123-124.

numbers of AT-3 Sagger anti-tank guided weapons. They include 40 T-12 100mm anti-tank guns, 75mm and 82mm recoilless rifles, LAW and other rocket launchers, and 460 mortars. (250 81mm, 110 120mm, and 100 160mm).

Yemen has no self-propelled artillery weapons, and relies on some 400-550 towed artillery weapons, ranging from 85mm to 155mm. Many are obsolete and there are at least six different calibers and nine different types -- including 100 D-44 85mm weapons; 35 M-101A1 105mm weapons; 30 M-1931 and M-1937, 150 D-30, and 980 M-1939 122mm weapons; 90 M-46 130mm guns, 40 D-20 152mm weapons, and 12 M-114 155mm weapons. Yemen has 20 SU-85 85mm and 70 SU-100 100mm assault guns. These armored self-propelled systems are obsolete and increasingly difficult to maintain.

Yemen also has large numbers of towed and self-propelled multiple rocket launchers, including 290 BM-21 122mm weapons, 50 BM-13 140mm weapons, and 35 BM-24 240mm weapons. It has 250 81mm, 110 82mm and 120mm, and 100 160mm mortars. Yemen's total mix of towed artillery and multiple rocket launchers gives it considerable firepower, but it lacks anything approaching effective training, and modern targeting, counter battery, fire control, and command and control equipment. Its wide mix of types also makes effective supply and maintenance difficult. Yemen has 12 FROG-7, 6 Scud B, and 17 SS-21 surface-to-surface missile launchers. Its missile strength and the operational status of these missile systems is unclear.

Yemen has a paramilitary Central Security Organization with up to 20,000 men, and a force of tribal levies with up to 20,000 men. The true strength of these two forces is unknown, however, and the figure of 20,000 men is probably both exaggerated and counts a large number of part time or reserve forces.

The Yemeni Air Force

The strength and readiness of the Yemeni air force is uncertain, although it seems to have about 2,500-3,500 men, 100-160 combat aircraft, and 20 armed helicopters. It evidently has four fighter-ground attack squadrons, with 1/11 F-5Es and 3/37 Su-20s and Su-22s. The F-5Es have limited operational readiness, and the attack capability and training of the S-20/22 forces is limited.

The Yemeni air force has four fighter squadrons with 47 MiG-21s, some MiG-17s, and some MiG-15 trainers. Some of these units are reasonably effective in day intercept roles, but overall capability is poor. There are 20 Mi-24 and Mi-35 armed helicopters. Their combat readiness is unknown. Yemen also has 27 transport aircraft -- including 3 An-12s, 1 An-24, 10 An-26s, 1 C-130Hs, 4 C-47s, 3 Twin Otters, 2 F-27s, and 2 Skyvan 3Ms. It has nearly 50 transport helicopters -- including 5 AB-212s, 2 AB-214s, and 40 Mi-8s.

Yemen does not have a modern or well organized air defense system. It does, however, have some radar and inter-site communications capability, and numerous Soviet-supplied surface-to-air missile batteries: While estimates differ sharply of the strength of these forces, they seem to include 80-100 SA-2 launchers, 20-25 SA-3 launchers, and 30-35 SA-6 launchers.[27] Yemen also has numerous anti-aircraft guns, including 52 20mm M-176s, 20 M-163 self-propelled Vulcans, 200 ZU-23 and ZSU-23-4 22mm weapons, 200 37mm M-1939s, and 120 57mm S-60s.[28]

The Yemeni Air Force and Navy

The Yemeni navy is adequate only for inshore and coastal patrol missions. It has roughly 1,500-2,000 men with main bases at Aden and Hodeida, and facilities at Al Muka, the Perim Islands, Al Mukalla, and Socatra. It has 25 to 27 combatants. These include 2 580-ton Tarantul I-class corvettes with one 76mm gun, two twin SS-N-2c Styx anti-ship missile launchers with 45 NM range, one quad SA-N-5 surface-to-air missile launcher, and ASW rocket launchers.[29] It also has six 245-ton OSA-II guided missile patrol boats with four SSN-2Bs and two twin 30mm guns.

In addition, Yemen has 8 coastal patrol boats, 19 inshore patrol boats, 1 Natya-class 790-ton ocean-going mine sweeper, and 6 Yevgenya-class 90 ton inshore mine sweepers. Many of these ships have inexperienced crews or limited operational availability, and while Yemen can lay mines, it would have serious problems in trying to sweep anything other than large magnetic mines.

Yemen does has relatively large amphibious lift capabilities: It as one 1 3,800-ton Ropucha-class LST capable of carrying 200 men and 9 tanks, 2 Polnocny class 800-ton LSMs capable of carrying 100 troops and 6 tanks, 2 145-ton LCUs, and 2 70 ton LCVPs. It does not, however, seem to have practiced an significant amphibious landings or to have conducted amphibious exercises. These ships seems to be used largely for transport purposes. It also has one support ship, two small harbor tankers, and 3 coastal patrol craft and one tug in its Customs Service.

Strategic Interests and Arms Control

The creation of new united Yemen has ended much of the internal strife in the Yemens, and reduced the border conflicts fomented by the Marxist-Tribalist government of the PDRY. The new government, however, owes its roots to two militaristic regimes and continues to deploy and arm much larger military forces than its economy can really

[27] Egyptian estimate. It is not clear how much of this equipment is operational.
[28] IISS estimate.
[29] The Styx is a sea skimmer at the end of its run, with IR or active radar homing, a 513 kilogram warhead, and a speed of Mach 0.9.

permit. It has not ended chronic mismanagement of the economy, dealt with the fact that drugs are the key crop in much of the country, or attempted to check a population growth rate substantially higher than the economy can sustain without far more attention to agricultural development. Smuggling and the drug trade consume nearly 20% of the GDP, and have created a parallel economy within Yemen.[30]

Further, Yemen must now live with the fact that it provided Iraq with political support after its invasion of Kuwait. It is unlikely that Saudi Arabia or Kuwait are going to re-admit Yemeni workers in the same numbers and with the same preferential treatment they were offered in the past, or provide any significant economic aid.[31]

Future border tensions and clashes with Saudi Arabia seem likely. While Salleh formed an interagency committee to try to reach a border settlement with both neighbors, and succeeded in reaching a settlement with Oman in 1992, the situation is very different in the case of Saudi Arabia. Saudi-Yemeni relations have deteriorated steadily since the Gulf War.[32] It is also impossible to rule out a secular-Islamic conflict, at least at a political level, and there is at least some possibility that unification will fail. Regardless of the very real progress that Yemen has made during the least two years, serious tribal, religious, and ideological rivalries can divide the country -- particularly if its economic problems continue or grow worse.

Yemen badly needs economic aid and development, but it is a state where there is little reason to encourage arms transfers of any kind. Yemen already has the forces it needs for defense -- particularly since the only threat is largely over border areas where Yemen has provoked most of the conflict. The past arms import levels of North and South Yemen totaled nearly $1 billion annually in two of the poorest nations on earth, and helped make a major contribution to the nation's lack of growth and development. Yemen does need economic aid, although it is unclear that its present government is capable of honestly or effectively using most aid unless it is tied to specific projects. It does not need arms.

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[30] New York Times, November 23, 1991, p. 2.

[31] New York Times, November 23, 1991, p. 2; Kirk Campbell, "Yemen", Washington, Congressional Research Service, 91-540F, July 10, 1991.

[32] BBC translation of Yemeni Republic Radio, Aden 1810, October 31, 1991; Platt's Oilgram News, October 15, 1991, p. 6..

C. Sudan [33]

Year	Manpower (1,000s)	Tanks	Aircraft	Defense Spending $ Millions	Arms Imports $ Millions	Arms Exports $ Millions
1967	20	37	19	44	3	-
1973	35	130	50	95	6	-
1982	86	190	30	270	240	-
1988	65	175	45	175	60	-
1991	72	215	50	320	-	-

The Sudan is one of the largest nations in Africa. It has a total area of 2,505,810 square kilometers, about one quarter the size of the U.S. Its strategic importance lies largely in its control of much of the war flow of the Nile, its 853 kilometer coastline on the Red Sea, and the fact it has boundaries with many other nations in Africa. It has a 1,165 kilometer boundary with the Central African Republic, a 1,360 kilometer boundary with

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[33] The military manpower, force strength, and equipment estimates in this section are made by the author using a wide range of sources, including computerized data bases, interviews, and press clipping services. Most are impossible to reference in ways of use to the reader. The force strength statistics are generally taken from interviews, and from the sources reference for each paragraph. They also draw heavily on his The Gulf and the Search for Strategic Stability (Boulder, Westview, 1984) and The Gulf and the West (Boulder, Westview, 1988).

Extensive use has also been made of the annual editions of the International Institute for Strategic Studies Military Balance (IISS, London), in this case, the 1991-1992 edition, and of the Jaffee Center for Strategic Studies, The Military Balance in the Middle East (JCSS, Tel Aviv), especially the 1990-1991 edition and working materials from the coming edition. Material has also been drawn from computer print outs from NEXIS, the United States Naval Institute data base, and from the DMS/FI Market Intelligence Reports data base. Other sources include the Military Technology "World Defense Almanac for 1991-1992," published in early 1992; Foreign Affairs Division, "Middle East Arms Control and Related Issues," Washington, Congressional Research Service, 91-384F, May 1, 1991; and Middle East Economic Digest, "MEED Special Report: Defense," Volume 35, December 13, 1991.

Weapons data are taken from many sources, including computerized material available in NEXIS, and various editions of Jane's Fighting Ships (Jane's Publishing); Jane's Naval Weapons Systems (Jane's Publishing); Jane's Armor and Artillery (Jane's Publishing); Jane's Infantry Weapons (Jane's Publishing); Jane's Military Vehicles and Logistics (Jane's Publishing); Jane's Land-Base Air Defense (Jane's Publishing); Jane's All the World's Aircraft (Jane's Publishing); Jane's Battlefield Surveillance Systems, (Jane's Publishing); Jane's Radar and Electronic Warfare Systems (Jane's Publishing), Jane's C^3I Systems (Jane's Publishing); Jane's Air-Launched Weapons Systems (Jane's Publishing); Jane's Defense Appointments & Procurement Handbook (Middle East Edition) (Jane's Publishing); Tanks of the World (Bernard and Grafe); Weyer's Warships (Bernard and Grafe); and Warplanes of the World (Bernard and Grafe).

Other military background, effectiveness, strength, organizational, and history data are taken from Anthony H. Cordesman, The Gulf and the Search for Strategic Stability, Boulder, Westview, 1984, and The Gulf and the West, Boulder, Westview, 1988; "Sudan: The Longest War," World & I, October, 1989; Lij Imru Zelleke, The Horn of Africa, A Strategic Survey, Washington, International Security Council, 1989; the relevant country or war sections of Herbert K. Tillema, International Conflict Since 1945, Boulder, Westview, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992; various annual editions of John Laffin's The World in Conflict or War Annual, London, Brassey's, and John Keegan, World Armies, London, Macmillan, 1983.

[33] CIA, World Factbook, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992.

Chad, a 1,273 kilometer boundary with Egypt, a 2,221 kilometer boundary with Ethiopia, a 232 kilometer boundary with Kenya, a 383 kilometer boundary with Libya, a 483 kilometer boundary with Uganda, and a 628 kilometer boundary with Zaire.

The Sudan had a population in late 1991 of about 27,220,000, with a growth rate of about 3.0%. It is deeply divided along ethnic lines. About 52% of the population is black, 39% in Arab, 6% in Beja, 2% is foreign, and 1% is other. The Arabs in the North are virtually all Sunni Muslims, as are many blacks, making the nation about 70% Muslim. About 20% of the population is Animist and 5% is Christian, virtually all blacks in the south. This had led to bitter divisions between Arab and non-Arab, and Muslim and non-Muslim and divided the north from the south.[34]

Military Developments in the Sudan

Britain forced unity on the northern and southern Sudan after 1899, although it continued to have to send troops into the south as late as 1928. This force unification has been a problem ever since. When Britain permitted limited local rule in 1955, a number of the southern black military units in the Equatoria Corps opposed unification, and domination by the Arabs in the north. Mutinies took place in the cities of Nazra and Juba, and black troops killed their Arab officers. Khartoum sent troops and put the uprisings down by force, but the black survivors of the mutiny created guerrilla forces that eventually banded together in a movement called the Anya-Nya or Land Freedom Army.[35]

The Sudan was given full independence in 1956, but this independence revealed another major problem in the Sudan. The Sudan was poorly governed when it gained independence and has never had effective leadership to this day. Chronic misgovernment wasted the Sudan's immense economic opportunities, and helped cause a series of full scale civil wars between the largely Arab-Islamic north, and tribal Christian-animist south. The result has been more than fourteen years of intermittent civil war, the destruction of the economy of much of the south, and the death of as many as one million people.

In the period immediately after independence, black elements that formed the Anaya-Nya movement gradually developed irregular forces, and sporadic raids and fighting occurred in the south. This fighting became more intense in 1958, when northern military leaders seized control over the government in Khartoum, under General Ibrahim Abboud. The military attempted to control the south through severe repression of black opposition, and Anya-Nya gained in power and evolved into movement called the Sudan African National Union (SANU) in 1963, under the leadership of Emilio Tafeng. SANU

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[34] CIA, World Factbook, 1991, pp. 293-294

[35] Herbert K. Tillema in International Conflict Since 1945, Boulder, Westview, 1991, pp. 104-105; Baltimore Sun, March 5, 1989, p. 14A..

set up base camps in Uganda and Zaire, and this provoked Khartoum to send more troops into the south and raid the SANU camps near Abo in Zaire in May, 1964. The result was a civil war that continued until 1972.

Abboud's military rule lasted until December, 1964, when he was replaced by a civilian government under Sadik al-Mahdi. Mahdi proved to be too weak to govern, however, and a period of instability followed in which various Marxist elements gained increasing power. The only benefit of the new civilian government was that it attempted to negotiate a peace settlement with the black leaders in the south, and it began negotiations with SANU in Khartoum in March, 1965, with Egyptian and Ugandan observers.

These negotiations failed, and the Egyptian and Sudanese governments seem to have bribed and pressured Milton Obote, the leader of Uganda, into suppressing the rebel camps in Uganda. Sudanese forces also crossed into Uganda in October and November, 1966 and attacked the SANU/Anya-Nya bases. They repeated these attacks in 1968, and while Uganda protested the 1968 invasion, it settled for a cash payment.

The Anya-Nya lacked effective military leadership and support until 1969, when Joseph Lagu emerged as a relatively strong leader, and Israel began to provide arms, money, and training support to put pressure on Egypt and the Sudan. Obote's fall from power and replacement by Idi Amin added a new dimension to the situation, and fighting continued along the Sudan-Uganda border throughout 1969-1972.

The government in the Sudan changed again, however, and the new government became more willing to negotiate. Colonel Gaafar Mohammed Nimeiri seized power in 1969. He originally used Marxist and socialist rhetoric and aligned himself with Egypt, Libya, and the USSR. He also ruthlessly suppressed any Islamic opposition and in 1970, he put down a Mahdist rebellion of the Antar sect with unusual violence even for the Sudan.

Nimeiri's position shifted in 1971, however, when a Communist coup captured him, but made the mistake of trying to use him as a figurehead. Nimeiri outmaneuvered the Communists and reasserted control. He then broadened his political base in the north, and began negotiations with the south. These negotiations brought an end to the civil war in March, 1972. Ethiopia negotiated a cease-fire between Nimeiri and what was now called the Southern Sudanese Liberation Movement that ended black military resistance by granting the south a considerable degree of autonomy.

Unfortunately, Nimeiri proved no better than his predecessors at managing the Sudan's economy and it degenerated steadily under his rule. The state attempted to manage crop prices in ways that often fixed the sale price lower than his costs of production. Similar state controls over virtually every aspects of the economy reduced a

state that was once supposed to be the bread basket of the Arab world to an economic basket case instead.

Nimeiri also could not maintain a stable political balance in a region where Libya and Ethiopia were becoming increasingly radicalized. In 1975 and 1976, he faced a new challenge from Qadhafi when Libya backed Mahdist supporters in a pro-Islamic coup. Nimeiri was only able to maintain control of Khartoum in 1976, because the Egyptian air force intervened on his behalf, and Egypt rushed in military supplies, and the fighting left over 1,000 dead.

Nimeiri then became involved in the complex Arab political maneuvering over Sadat's peace initiative and a low level border struggle with Ethiopia. While the struggle with Ethiopia was brought to a temporary halt in 1979, Nimeiri's other political problems became more complex. A series of coups in the semi-autonomous south left him uncertain as to whether the south would remain stable. At the same time, Qadhafi poured money into Mahdist training camps. This left Nimeiri with both a rising threat from Islamic fundamentalism and worsening economic problems.

Nimeiri responded by refusing to support the Camp David Accords, allowing more Islamic elements into his government, and making at deal with Qadhafi. At the same time, he accepted Saudi aid that was tied to his willingness to support an Islamic form of government. The end result, however, was that Nimeiri was forced to enforce a harsh interpretation of Islamic law over the entire country that drove much of the south into open rebellion.

In 1983, a young officer in the Sudanese Army named John Garang -- who had a degree in agricultural economics from the University of Iowa and had attended the infantry school at Fort Benning, Georgia -- formed a new Sudanese People's Liberation Army (SPLA) out of the anti-government elements that had supported the black Sudanese cause between 1955 and 1972. Garang proved to be a competent military leader and the SPLA soon evolved into a force capable of fighting a sustained civil war. Its military forces were called the Anyana, or "venom" of the viper."[36]

Post-Nimeiri Political Developments in the Sudan

Nimeiri's polices failed to keep him in power. He was overthrown by a military coup in April, 1985. This coup was led by General Abdul Rahman Swar ak Dahab. After a year of control by a Transitional Military Council, popular elections were held in April, 1986 that made Sadiq al-Mahdi premier of a coalition government. Although Al-Mahdi was now the head of the Umma, the Sudan's largest political party, he again proved to be

[36] Insight, April 17, 1989, p. 26.

a weak leader, and went through three coalition governments and a number of transitional governments in three years. He proved to be a dismal administrator in a nation where poor administration was the normal standard, did little to reduce the tensions between the Arab north and Christian and Animist south, and did nothing to end the abuses of Islamic law that Nimeiri instituted as part of his last bid to retain power.

Equally important, al-Mahdi did nothing to create a stable peace with the south and would not obtain agreement on a peace settlement supported by his main coalition partners, the Democratic Unionist Party, because of opposition by the fundamentalist National Islamic Front. He also did little to organize effectively to deal with a famine that began in the south in 1988 and that eventually killed nearly 250,000 people.[37]

Mahdi's failure to negotiate effectively with Garang, and tolerance of massacres of the Dinka and Nuer tribes in the south by government armed tribes like the Rizeigat, led to growing tension with the army. Although Mahdi finally agreed to the peace settlement the army demanded, and tried to get $250 million worth of arms Libya to please the armed force, these efforts came too late to save him and prevent Garang from going on a full scale offensive.[38]

In June, 1989, al-Mahdi was overthrown by a military junta led by Lt. General Omar Hassab ak-Bashir - who had been an associate of General Dahab when the latter overthrew Numeiri. Bashir initially appeared to have an interest in pragmatism and in a peace settlement with the south, but the new junta had an unstable and increasingly extreme Islamic fundamentalist character, and did little to try bring peace or economic recovery.[39]

In spite of Egyptian and Saudi efforts at moderation, the junta was increasingly influenced by Dr. Hassan al-Tourabi, an extreme authoritarian Islamic fundamentalist who headed an international movement called the International Muslim Brotherhood, and was firmly committed to eliminating the opposition in the south.[40] The Sudan converted its

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[37] Raymond W. Copson, "Sudan: Foreign Assistance Facts," Congressional Research Service IB-85065, February 18, 1992.

[38] The Southern region in the Sudan runs on an east-west line from areas north of Awil in the west to areas north of Malakal and Nasir in the east. World & I, Sudan: The Longest War," Washington Times, October, 1989, p, 192; "Bitter Historical Split Blocks Solution to Festering Crisis, Insight, April 17, 1989, p. 26; New York Times, November 14, 1988, p. A-10, March 26, 1989, p. A-5; Wall Street Journal, April 11, 1989, p. A-19; Washington Post, March 4, 1989, p. A-18, March 13, 1989, p. A-29; Los Angeles Times, February 26, 1989, p. I-1.

[39] The Cabinet Affairs Minister, Colonel Tayib Ibrahim Muhammad Khair, has emerged as Bashsir's hatchet man in these purges, and in many of the more violent efforts to suppress any opposition and the SPLA.. Christian Science Monitor, August 18, 1989, p. 6; Insight, April 17, 1989, p. 26; U.S. News and World Report, July 24, 1989, p. 32,37; Washington Post, July 1, 1989, p. A-12, July 8, 1989, p. A-22.

[40] Ironically, Tourabi is Mahdi's brother-in-law. Both are Western educated. Tourabi has law doctorates from the University of London and the Sudan, Mahdi is a graduate of Oxford. Financial Times, February

legal system to a fundamentalist interpretation of the Shar'ia on November 15, 1991, and proceeded to enforce this interpretation of Islamic law with considerable extremism and little attention to human rights. The government steadily reduced its tolerance for Christian and secular elements in the northern Sudan. Further, it attempted to add a new layer of laws a regulations relating to Islamic economics over the Sudan's crippling mix of state controls that had evolved out of "Arab socialism."[41]

As a result, the civil war in the Sudan became more serious. Arab tribes attacked Black Sudanese tribes in the border areas between Arab and black, creating a new theater of civil war.[42] The SPLA initially was more successful than the government, however, and the SPLA scored major new gains during the rainy seasons from 1988 to 1990 (May-October). It expanded its operations northward, besieged Juba, and seized the Sudanese Army outpost at Jaku, along the Sudanese-Ethiopian border. In 1990, the SPLA was able to hold positions near Kumuk and Gizen, and control over 100 outposts and villages in the Southern Sudan. The SPLA was also able to obtain better access to arms, although starvation and disease increased the number of civilian casualties among the black population it depended on for support.

In 1990, however, the situation began to change. Three factors favored the government. The first was the fall of President Mengistu Halle Mariam of Ethiopia, which deprived Garang of his strongest backer, much of has arms and supplies, and a sanctuary and communications base. The second was Iranian military aid to government in Khartoum, and the third was a major split within the SPLA.

In August, 1991, the SPLA divided into two main camps. One was led by Garang, who was a member of the Dinka tribe, and continued to advocate a unified secular Sudan. The other faction was led by Commander Reik Machar, and was formed by SPLA officers in the Nasir who were members of the Neur tribe. This new group became the so-called Black Faction of the SPLA, which advocated complete independence. Reik accused Garang of being a dictator and leading a rule of terror within the party. Reik and other Nasir officers set up their own SPLA camps and sometimes allied themselves with Khartoum in fighting Garang. The Black Faction was sometimes joined by the Anya Naya II, which was a smaller faction that split off of the SPLA and which developed ties to Khartoum.

13, 1992, p. 4; Washington Post, March 21, 1992, p. A-20.

[41] The Middle East, June, 1991, p. 24; Wall Street Journal, January 31, 1991, p. A-14; Washington Post, March 7, 1992, p. A-18.

[42] New York Times, January 5, 1990, p. A-2, January 7, 1990, p. A-12.

Garang might have been able put down the rebellion within the SPLA if the Black Faction had not turned to Khartoum. Only a critical airlift of arms from Khartoum to Leer saved Reik from Garang's forces in November, 1991. The arms shipment gave Reik the time he needed to rebuild his forces, however, and to then go on the offensive. The Black Faction advanced though the Dinka area of Bor and Kongor, and the fighting killed thousands of Dinka civilians.

The divisions in the SPLA gave the government forces time to reorganize and Iranian aid gave them superiority in firepower. They broke the SPLA siege, and went on the offensive. By mid-April of 1992, government forces had scored major gains in the south. They had seized enough territory so that the SPLA could no longer maintain secure areas, and the UN had to cease all humanitarian aid for the roughly 1.5 million refugees in what had been SPLA-controlled territory. Government forces then seized Shambe, about 662 miles south of Khartoum, which the SPLA had used a central supply point and to intercept river traffic between government held strong points and towns. By May, government forces were attacking Ngangala, only 60 miles from the main SPLA headquarters in Torit.

Government forces still sometimes took heavy losses, but their offensive did not halt with the start of the rainy season in May, and Iran increased its arms shipments. Some estimates indicate that the Khartoum government received several hundred tons of ammunition, up to 50,000 Heckler and Koch G3 automatic rifles, artillery, and five dismantled PRC-made F-6 fighters. In mid-May, Garang had to move part of his headquarters out of Torit to Kajo Kaji, some 75 miles away. This centered SPLA operations close to the west bank of the Nile on the border with Uganda. It also seriously undercut his potential negotiating leverage with Khartoum.

While Saudi Arabia provided Garang with limited aid, government forces took Kapeota in late May and Torit on July 14, 1992. This seizure of Torit drove much of Garang's force into the bush. It marked a possible turning point in a war that had now lasted nine years, cost at least 500,000 lives, and created over a million refugees.

At the same time, Garang's force retreated largely intact and government forces had won similar victories in the past. While Garang had definitely lost much of the south he was also strong enough to besiege Juba in late August, 1992, and force the UN to cut off aid flights to that city. Khartoum continued to take thousands of casualties, and broadened the draft law to raise its total regular forces in the south from 80,000-100,000 to 120,000-140,000.

The prospects for any kind of peace were also limited by the fact that Khartoum did little to aid reconciliation with the south. Both the army and the government's militia --

the 6,000-8,000 man Popular Defense Force -- were guilty of widespread abuses of southern Sudanese. The government drove some 500,000 Christian and Animist refugees from the south out of the slums of Khartoum into poorly organized camps in the desert that offered only an uncertain hope of survival. Islamic law was enforced with growing ruthlessness. Schools, law enforcement, and civil service offices were purged of non-Muslims, and many Christian churches were closed. The government mandated Islamic dress in the north, and the south was left with a devastated economy that the government did little to aid.

The UN estimated by the fall of 1992 that some 7.6 million people need drought and famine aid, but the government was so poor that it had to remove most of its subsidies on food and fuel. Even in the north, the power grid, irrigation systems, and public transport often broke down. The north-south rail system could only carry 10% of the volume it had carried in 1989. The government also lacked the funds to make payment on the Sudan's foreign debt, or to raise inflation in a country that had already experienced 120% inflation since the start of the year.[43]

Sudanese Military Relations With Iran and Other Islamic States

These pressures inevitably led the Sudan to seek foreign military support. Bashir first turned to Iraq for aid and arms -- and opposed the UN Coalition effort in 1990 and 1991, and then turned to aid from Iran once Saddam Hussein was defeated. The details of the Sudan's relations with Iraq are controversial. There are unconfirmed reports that Iraq sent 2,000-7,000 troops and artillery to aid the Sudan to help defend Juba in the southern Sudan in 1990, provided the Sudan with surface-to-air missile launchers, and deployed Mirage F-1 aircraft to the Sudanese base at Wadi Sayyidana north of Khartoum.[44]

In any case, the Sudan's alignment with Iraq ended when Iraq suffered a shattering defeat at the hands of the UN Coalition. In spite of official Sudanese denials, the Sudan then allied itself with Iran. While estimates differ, Iran seems to have shipped some $20 million to $40 million worth of arms to the Sudan in 1991. In addition to the arms shipments described earlier, Iran may have sent up to 90 PRC-made tanks, artillery, small arms, 1,000 RPGs, ammunition, spare parts, and possibly anti-ship missiles.

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[43] Economist, April 25, 1992, p. 46; Christian Science Monitor, February 7, 1992, p. 7, May 8, 1992, p. 6; Guardian Weekly, September 15, 1991, p. 16; New York Times, April 15, 1992, p. A-3, June 1, 1992, p. A-6, June 3, 1992, p. A-4, June 8, 1992, p. A-8; Washington Times, April 16 ,1992, p. A-2, May 25, 1992, p. A-2, May 29, !992, p. A-2, July 15, 1992, p. A-11, July 19, 1992, p. C-3, August 29, 1992, p. A-2; Philadelphia Inquirer, August 31, 1992, p. A-10; Baltimore Sun, March 20, 1992, p. 5-A; Jane's Defense Weekly, May 9, 1992, p. 806.

[44] Yossel Bodansky and Vaughn S. Forrest, "Iran's Shadow Over the Red Sea," House of Representatives, Task Force on Terrorism and Unconventional Warfare, February 3, 1992, p. 1.

Iran provided training and aid to Nafei Ali Nafel, the head of the Sudan's intelligence service. Ali Falahan, the head of Iran's secret services. Mohhsen Rezai, the head of its Revolutionary Guards, visited the Sudan on several occasions, and a major delegation headed by President Rafsanjani visited the Sudan on December 17, 1991. These visits were followed by unconfirmed reports that Iran sent 1,000 to 2,000 Revolutionary Guards to assist the Sudan's military forces in 1991, and seems to be providing aid to the Sudan in transforming its militia into a Revolutionary Guards type force.

The Sudan also strengthened its ties to Islamic fundamentalists in Algeria, Egypt, Jordan, Dubai, Morocco, and Tunisia. This led a number of experts to feel that Iran is working with the Sudan in operating training camps and bases for Islamic extremist groups from many Middle Eastern countries. According to some reports, there were up to 30 Iranian-Sudanese military training and Islamic education camps in the Sudan by 1992. This Iranian-Sudanese cooperation with such movements is difficult to document but seems to include Palestinian extremist groups like the Abu Nidal Organization, Popular Liberation Front for the Liberation of Palestine, Islamic Jihad for the Liberation of Palestine, and Lebanese Hizbollah. [45] As a result, fundamentalism in the Sudan seems to have reached a level too extreme for Qadhafi. He cut back on cooperation with the Sudan in various training camps and international efforts, and withdrew some officers and troops from the Sudan because of his fear of Islamic subversion.[46]

Military Expenditures and Arms Transfers

The impact of civil war and misgovernment on the Sudan is especially tragic because it is one of the world's poorest countries, with a per capita income of about $330. Civil war and chronic mismanagement of the economy have led to a steadily declining GDP, where the true scope of the decline is almost impossible to measure because of the lack of adequate statistics and the failure to cost the catastrophic degeneration of much of the nation's infrastructure. Although 80% of the population is in agriculture, it produces only 35% of the GDP, and output is extremely uncertain because of poor local management, lack of investment, chronic water problems, and government interference.[47]

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[45] New York Times, December 31, 1991, p. A-7, January 26, 1992, p. A-12; Washington Post, March 2, 1991, p. A-17, January 31, 1992, p. A-13, March 12, 1992, p. A-21; Washington Times, February 28, 1992, p. F-1; Philadelphia Inquirer, January 16, 1992; Financial Times, February 13, 1992, p. 4; Yossef Bodansky and Vaughn S. Forrest, "Iran's Shadow Over the Red Sea," House of Representatives, Task Force on Terrorism and Unconventional Warfare, February 3, 1992..

[46] For a list of camps, locations, and specific movements using facilities in the Sudan, see Yossef Bodansky and Vaughn S. Forrest, "Iran's Shadow Over the Red Sea," House of Representatives, Task Force on Terrorism and Unconventional Warfare, February 3, 1992; The Estimate, April 10, 1992, p. 5; Christian Science Monitor, March 31, 1992, p. 5; Washington Times, March 6, 1992, p. A-10; Washington Post, March 12, 1992, p. A-21.

[47] CIA, World Factbook, 1991, pp. 293-294.

In spite of these problems, military forces have consumed at least 15% of the GDP, and probably 20-25% if all paramilitary and factional forces could be counted. The Sudan's formal defense budgets ranged from $130 million to $270 million annually during the 1980s, but have never reflected the true cost of its arms imports or its civil wars. ACDA estimates that the Sudan's military budget was $156 million in 1978, $279 million in 1979, $302 million in 1980, $317 million in 1981, $442 million in 1982, $230 million in 1983, $236 million in 1984, $220 million in 1985, $201 million in 1986, $313 million in 1987, $286 million in 1988, and $339 million in 1989.[48] The IISS puts the Sudan's military spending at $460-570 million in 1989, and $320 million in 1990.[49]

The Sudan's arms imports have fluctuated from year to year, ranging from a peak of $240 million in 1982 to levels of around $40 million to $60 million annually during the late 1980s. ACDA estimates that the Sudan imported $120 million worth of arms in 1978, $100 million in 1979, $100 million in 1980. $150 million in 1981, $240 million in 1982, $100 million in 1983, $110 million in 1984, $40 million in 1985, $50 million in 1986, $80 million in 1987, $90 million in 1988, and $80 million in 1989.[50]

The Sudan has increasingly turned to the Third world for arms as its government has shifted to Islamic extremism. During 1979-1983, its arms imports totaled $640 million, of which $110 million came from the U.S., $10 million each from France and the UK., $270 million from West Germany, $10 million from Italy, $70 million from the PRC, $60 million from Poland, and $100 million came from a variety of other countries.[51] During 1984-1988, when Nimeiri had begun his shift towards Islamic fundamentalism, the Sudan got only $350 million worth of arms imports, with $120 million from the U.S., $30 million from France, $30 million from the PRC, $10 million from the U.K., and $160 million from other countries.[52]

The data involved, however, are contradictory. ACDA changed its way of reporting arms sales by source in 1992. According to this new style of reporting, the Sudan imported a total of $330 million worth of arms during 1985-1989, with a total of

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[48] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table I.

[49] IISS, Military Balance, 1987-1988, 1988-1989, 1989-1990, and 1991-1992.

[50] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table II.

[51] Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, 1985, pp. 98, 131, 140, 146.

[52] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1989, Washington, GPO, 1990, p. 115; Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1986, Washington, GPO, 1987, p. 143. Some estimates put the value of Soviet arms transfers from 1977 to 1990 at roughly $11 billion.

$100 million from the U.S., $50 million from the PRC, $20 million from other Warsaw Pact countries, $20 million from other European countries, $70 million from other Middle Eastern countries, and $70 million from other developing countries.[53] These data are not compatible with the early ACDA reporting which covers virtually the same period.

The Sudan's Military Forces

The Sudan has enough total manpower to support massive military forces. The CIA estimated that there were 6,177,000 males in the age group from 15 to 49 in 1991, 3,792,00 males fit for military service, and 307,000 males reaching military age every year.[54] The IISS estimated in late 1991 that there were a total of about 1,507,000 males and 1,426,000 women in the age group from 18-22 years, 1,253,000 males and 1,186,000 women in the age group from 23-32 years, and 1,900,000 men and 1,834,000 women in the age group from 23 to 32 years.[55]

The Sudan's civil war, collapsing economy, and reduced military expenditures and arms transfers place severe limits on the Sudan's military forces, however, and these problems are compounded by purges, political divisions, and corruption within the military forces. The Arab or Khartoum government military forces in the north have approximately 140,000 to 180,000 men, with about 70,000 trained regulars. They also include a 500 man national guard, a 2,500 man border guard (with 10 battalions), and a Popular Defense Force with 15,000-20,000 men.

The army is organized into six regional commands or infantry divisions, with 1 armored division headquarters, 1 airborne division, 1 Republican Guard brigade, 2 armored brigades, 1 mechanized infantry brigade, 17 infantry brigades, 1 paratroop brigade, 1 reconnaissance brigade, and 1 air assault brigade. Major support forces include 3 artillery regiments and 1 engineer division.

The army does have substantial equipment holdings -- including 230 main battle tanks. with 200 T-54/T-55s, 20 M-60A3s, and 10 Type 59s. Its other armored vehicles include 70 Type 62 light tanks, and 6 AML-60, 15 Saladin, 50 Ferret, and 30 BDRM 1/2 armored reconnaissance vehicles. It has a wide assortment of 286 APCs, including 40 BTR-50 and BTR-152s, 30 OT-62/OT-64s, 36 M-113s, 80 V-100s and V-150s, and 100 Walids. Sudanese forces, however, have little functional training in armored warfare, and can only conduct light mechanized infantry or largely static defensive operations. Overall maintenance and training standards are bad.

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[53] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, pp. 133-134.
[54] CIA, The World Factbook, 1991, pp. 200-201.
[55] IISS, Military Balance, 1991-1992.

The Sudan has roughly 150 artillery weapons. Its towed artillery includes 18 M-101 and 6 Model 56 105mm weapons; 4 D-74, 24 M-198, and 42 Type 54/D-30 122mm weapons; 27 M-46 and Type 59-1 130mm weapons; 4 D-20 152mm weapons, and 12 M-114A1 155mm weapons. It has 6 AMX Mark 3 155mm self propelled weapons, and 4 BM-21 122mm rocket launchers. It has large numbers of 81mm mortars, and at least 36 M-43 and M-49 120mm mortars. It also has 18 M-1942 76mm and 20 M-1944 100 mm anti-tank guns. The Sudan can employ this artillery in static fire, but has little capability to switch fires, manage mobile operations or combined arms, or effectively target its weapons.

The Sudan lacks modern anti-tank weapons. It relies on anti-tank guns, and only has 4 obsolete Swingfire launchers. It does, however, have large numbers of rocket launchers and some M-40A1 106mm recoilless rifles. It has large numbers of towed unguided anti aircraft guns, ranging from 20 to 100mm, and some self-propelled M-163 20mm weapons. It has little training and organization to use these weapons effectively. Its only mobile surface-to-air missiles consist of SA-7s and some aging Redeyes. Overall readiness standards are poor, and 33-50% of the equipment in the Arab forces at best has limited operational capability.

The air force has about 6,000 men, including the air defense force. It has 51 combat aircraft and two armed aircraft. It is organized into fighter ground-attack units with 7 F-5Es, 2 F-5Fs, !0 J-5s and 9 J-6s. Its fighter forces have 8 MiG-21s, 3 MiG-23s, and 6 J-6s; Its COIN forces have 3 BAC-167s and 3 Jet Provost Mark 55s; 2 C-212s in a reconnaissance role, and 2 Mi-24 attack helicopters. Training and readiness standards are poor, and many of the aircraft are not combat effective. It also has a significant number of training aircraft, and fairly large numbers of transport aircraft. Its fixed wing transport assets include 5 AN-24s, 5 C-130Hs, 4 C-212s, 2 DHC-5Ds, 6 EMB-110Ps, 1 F-27, and 2 Falcon 20/50s. Its transport helicopters include 11 AB-412s, 15 IAR/SA-330s, 4 Mi-4s, and 14 Mi-8s.

The small Sudanese navy was established in 1962, and operates in both the Red Sea and the Nile. It has about 500 men, and bases at Port Sudan on the Red Sea and Khartoum on the Nile. Most of its older ships have had to be withdrawn from service, and it has very poor ability to maintain and operate its remaining vessels. It now has two ex-Iranian 130-ton Kadir coastal patrol craft armed with 1 20mm Oerlikon gun each, and four Yugoslav 20 ton Type 15 inshore patrol craft armed with 1 20mm Oerlikon gun, and four ex-Iranian 10 ton gun boasts armed with 12.7mm machine guns that it uses for river warfare. It also has two 410 ton Yugoslav DTM-221 utility landing craft, and two CASA

C-212 maritime aircraft with search radars. It is unclear that these aircraft are fully operational.[56]

The black Sudanese People's Liberation Army (SPLA) in the south had about 55,000 men, before it divided into warring factions in 1991. The current manpower and equipment holdings of the SPLA are difficult to estimate. They seem to consist largely of small arms, although some armor, artillery, and gun boats have been captured from the Arab forces. The SPLA also has large numbers of mortars, rocket launchers, automatic weapons, light anti-aircraft guns, and SA-7 surface-to-air missiles. It is unclear whether the SPLA still has effective bases in Ethiopia, or how much support it is getting from other African countries.

Strategic Interests and Arms Control

The end of the Cold War leaves East and West with no reason to encourage arms transfers to any faction in the Sudan, and every reason to use political and economic pressure to halt military aid from Iran, Saudi Arabia, and other Islamic states. The issue in the Sudan is not Islam, but extremism and racism. It is unclear that the Sudan's government can use economic aid without a massive shift in policy, although aid can be helpful on a purely humanitarian basis. As for peacemaking efforts, they now seem likely to fail unless they are based on permanent partition of the country.

[56] Estimate based primarily on Jane's Fighting Ships, 1991-1992, pp. 511-512.

D. Ethiopia [57]

Year	Manpower (1,000s)	Tanks	Aircraft	Defense Spending $ Millions	Arms Imports $ Millions	Arms Exports $ Millions
1967	45	20	11	29	13	-
1973	50	50	50	62	13	-
1982	240	790	30	358	575	-
1988	250	750	45	440	725	-
1991	65	300	50	536	-	-

Ethiopia occupies an important strategic position in the Horn of Africa. It is a large country of about 1,221,900 square kilometers, or slightly less than twice the size of the state of Texas. Its strategic importance consists largely of its 1,094 kilometer coastline on the Red Sea. It also has 5,141 kilometers in land boundaries. These boundaries include a

[57] The military manpower, force strength, and equipment estimates in this section are made by the author using a wide range of sources, including computerized data bases, interviews, and press clipping services. Most are impossible to reference in ways of use to the reader. The force strength statistics are generally taken from interviews, and from the sources reference for each paragraph.

Extensive use has also been made of the annual editions of the International Institute for Strategic Studies Military Balance (IISS, London), in this case, the 1991-1992 edition, and of the Jaffee Center for Strategic Studies, The Military Balance in the Middle East (JCSS, Tel Aviv), especially the 1990-1991 edition and working materials from the coming edition. Material has also been drawn from computer print outs from NEXIS, the United States Naval Institute data base, and from the DMS/FI Market Intelligence Reports data base. Other sources include the Military Technology "World Defense Almanac for 1991-1992," published in early 1992; Foreign Affairs Division, "Middle East Arms Control and Related Issues," Washington, Congressional Research Service, 91-384F, May 1, 1991; and Middle East Economic Digest, "MEED Special Report: Defense," Volume 35, December 13, 1991.

Weapons data are taken from many sources, including computerized material available in NEXIS, and various editions of Jane's Fighting Ships (Jane's Publishing); Jane's Naval Weapons Systems (Jane's Publishing); Jane's Armor and Artillery (Jane's Publishing); Jane's Infantry Weapons (Jane's Publishing); Jane's Military Vehicles and Logistics (Jane's Publishing); Jane's Land-Base Air Defense (Jane's Publishing); Jane's All the World's Aircraft (Jane's Publishing); Jane's Battlefield Surveillance Systems, (Jane's Publishing); Jane's Radar and Electronic Warfare Systems (Jane's Publishing), Jane's C^3I Systems (Jane's Publishing); Jane's Air-Launched Weapons Systems (Jane's Publishing); Jane's Defense Appointments & Procurement Handbook (Middle East Edition) (Jane's Publishing); Tanks of the World (Bernard and Grafe); Weyer's Warships (Bernard and Grafe); and Warplanes of the World (Bernard and Grafe).

Other military background, effectiveness, strength, organizational, and history data are taken from Theodore Dagne, "The Horn of Africa: A Trip Report," Congressional Research Service 91-823, November 15, 1991; Lij Imru Zelleke, The Horn of Africa, A Strategic Survey, Washington, International Security Council, 1989; Anthony R. Tucker, Ethiopia's Intractable Wars," Armed Forces, July, 1989, pp. 321-325; Lt. Colonel David R. Mets, "The Dilemmas of the Horn", Proceedings of the Naval Institute, April, 1985, pp. 49-57; Samuel Makinda, "Shifting Alliances in the Horn of Africa", Survival, January/February, 1985, pp. 11-19 Anthony H. Cordesman, The Gulf and the Search for Strategic Stability, Boulder, Westview, 1984, The Gulf and the West, Boulder, Westview, 1988; Anthony H. Cordesman and Abraham Wagner, The Lessons of Modern War, Volume II, Boulder, Westview, 1989; the relevant country or war sections of Herbert K. Tillema, International Conflict Since 1945, Boulder, Westview, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992; various annual editions of John Laffin's The World in Conflict or War Annual, London, Brassey's, and John Keegan, World Armies, London, Macmillan, 1983.

459 kilometer border with Djibouti, a 861 kilometer border with Kenya, a 1,600 kilometer border with Somalia, and a 2,221 kilometer border with the Sudan. The border with Somalia is disputed, particularly control of the Ogaden region which is largely Somali. Ethiopia has also, however, had border problems with Ethiopia and may not have totally given up a claim to Djibouti.[58]

Ethiopia is one of the poorest countries in Africa, and is deeply divided along ethnic and religious lines. It had a total population in mid-1991 of about 53,191,000, with a growth rate of 3.1% The population was about 40% Oromo, 32% Amhara and Tigrean, 9% Sidamo, 6% Shankella, 6% Somali, 4% Afar, 2% Gurage, and 1% other. It was about 40-45% Muslim, 35-40% Ethiopian Orthodox, 15-20% animist, and 5% other. It is linguistically divided into Amharic, Tigrinya, Orominga, Guaranginga, Somali, Arabic, and English.[59]

Ethiopia's Military Development

Modern Ethiopia emerged from a series of conquests by Ethiopian emperors during the period from 1855 and 1913, and from the Emperor Menelik's victory against Italy at the battle of Adowa in 1896, one of the first major defeats of a colonial army. Haile Selassie became regent in 1916. He took Ethiopia's first steps to create modern military forces a year later, when he created the Imperial Bodyguard and began to send young officers to Western military schools like St. Cyr. He imported foreign military officers to train his army after he became emperor in 1930, and set up a military academy at Holeta in 1934.

Ethiopia was far from ready to defend against itself against a full scale Western invasion, however, and Mussolini's invasion in October, 1935 pitted an Italian army with modern armor and poison gas against Ethiopian forces still armed largely with small arms. After Mussolini's victory, Haile Selassie was forced into exile and did not return until Britain liberated Ethiopia in 1941.

The course of this liberation changed the map of Africa, and led to many of modern Ethiopia's internal problems. The British seized all of Italy's colonies in Africa, and Emperor Selassie's political maneuvering eventually led to the inclusion of a largely Muslim Eritrea and Tigray into Ethiopia. Both had previously sought full independence, and fighting against unification with Italy had begun in Eritrea during 1949-1950.[60] When Britain arranged for the transfer of Eritrea to Ethiopia, this created popular resentment

[58] CIA, World Factbook, 1991, pp. 94-95.
[59] CIA, World Factbook, 1991, pp. 94-95.
[60] Ironically, Ethiopia funded many of the Eritrean nationalist groups at this time in an effort to prevent any reunion of Eritrea with Italy.

which eventually led to the formation of the Ertirean Liberation Front and Ethiopian Peoples Liberation Front in 1958, and finally to a rebellion against Ethiopian rule.

Somewhat similar problems occurred in the Ogaden region. Britain, France, and Italy had divided the Somali tribal territory in the Horn of Africa in the 19th Century, and Italy seized the tribal area of the Haud and Ogaden and made them part of the colony of Italian East Africa. After World War II, Britain transferred these areas to Ethiopia when it granted British and Italian Somalia independence in June, 1961. It did so although the Ogaden was ethnically Somali, and the population of the Ogaden almost certainly favored unification with Somalia. As result, unification led to an immediate tribal revolt which Ethiopia crushed with troops.

Somalia responded by providing the Somali nationalists in the Ogaden with arms, bases, and training. This led to new fighting in 1963, after Ethiopia attempted to tax the Somali herdsmen in the area. In June, Somali nationalists in the Nassir Allah movement started to attack Ethiopian government installations in the Ogaden. Somali troops joined the guerrillas in November, and both countries moved troops to their border. Ethiopia conducted air strikes on Nassir Allah bases in Somali in January, 1964, and scattered border fighting went on until the Sudan mediated a cease-fire on March 30, 1964.

During this period, Ethiopia's military forces dominated the region. They were not strong by Middle East standards, but they were comparatively well organized and equipped by the standards of the Horn of Africa. Britain trained and organized these forces from 1941 to 1951, creating a force of 10 infantry battalions, an armored car regiment, and an artillery regiment. In 1951, the U.S. replaced Britain and began to provide aid under the Truman Doctrine. In 1953, the U.S. deployed a military advisory group that remained in Ethiopia until 1977.

The U.S. and Britain were not Ethiopia's only advisors. Swedes help set up the Ethiopian Air Force and Norwegians the navy. Indian officers staffed the military academy that was set up at Harar in 1958, and run according to the model of Sandhurst. The U.S. was, however, the largest single supplier of advice and arms and obtained use of a large communications station at Kagnew in return.

This foreign support did not ensure the loyalty of Ethiopia's troops to the emperor. While they fought in Korea and served with UN forces in the Congo in the early 1960s, they became increasingly politicized while remaining divided along ethnic and tribal lines. In 1960, the 6,000 man Imperial Bodyguard and 26,000 man army became heavily involved in a coup attempt against the emperor and were extensively purged. Plots and coup attempts continued from 1960 to 1974, and a number of senior and junior officers were executed. This situation was made worse by gross corruption within the emperor's

court and senior command, and by poor wages and living conditions for junior officers and NCOs.

Further, the armed forces reacted to a growing rebellion in Eritrea and Tigray which increasingly exposed the emperor's lack of leadership and ability to appoint effective commanders. The new fighting was largely the emperor's fault. When Eritrea had been joined to Ethiopia in 1952, this was supposed to be part of an federation agreement that gave it considerable autonomy. Eritrean nationalists had formed an Eritrean Democratic Front (EDF) in 1955, with a Muslim and tribal base.

The EDF might have remained a largely political movement, but Hailie Sallasie unilaterally abrogated the autonomy agreement in 1962, and declared Eritrea to be a province. As a result, the EDF shifted to become an active military movement. The EDF was renamed the Eritrean Liberation Front (ELF) and shifted to armed resistance. This fighting increased steadily as the ELF got support from Egypt, Cuba, and the PRC. By 1967, the ELF was strong enough to directly attack Ethiopian regular forces. This led Ethiopia to attack the tribal and other population groups supporting the ELF and drive many into the Sudan. Ethiopia then raided across the border and minor clashes took place between Ethiopian and Sudanese troops during March, 1967 to March, 1968.

This fighting intensified again in 1970, when elements that formed the Marxist Popular Liberation Front broke with the ELF, and the Ethiopian army was confronted by two groups fighting for Ethiopia independence. Both movements established training areas and supply centers in the Sudan, and the Eritrean movement acquired a steadily larger number of trained guerrillas. Emperor Selassie showed no ability to deal with these threats, and blocked virtually every other type of reform. He tried to preserve a feudal system that made no real allowance for economic or land reform.

In 1974, a group of young officers reacted to the Emperor's failures by starting an uprising in Borena that triggered a creeping coup. The military forces divided over what should be done, and an Armed Forces Coordinating Committee was set up to try to resolve the differences within the army. This Coordinating Committee gradually came under radical control, and the military finally seized power by setting up a Provisional Military Administrative Council or Derg. Senior ministers were removed from office and the emperor was deposed in September. In November, the more radical elements included in the Coordinating Committee launched a coup within the military and executed some 60 top ministers and generals.

The Rise of Mengistu

This coup brought Brigadier-General Tefri Bante, the head of Derg to power. He, in turn was assassinated in a February, 1977 coup launched by Lt. Colonel Mengistu Haile

Mariam. Although the nature of the new Mengistu regime was initially uncertain, and its leadership was divided, the Derg became steadily more extreme. Mengistu proved to be a radical Marxist who was fully capable of consolidating power in his own hands -- eliminated 12 of the 15 men who originally joined him in organizing the coup against Bante. In 1978, Mengistu systematically executed virtually any political, military, or civil leader who appeared to oppose him. This Derg terror continued until 1987. It alienated the Ethiopian Christian population (35-40%) and under cut the army, while solidifying the Muslim population (40-45%) in opposition to the government.

These shifts in Ethiopia's leadership triggered a complex shift in relations in the Horn of Africa during 1974-1979. The U.S., which had been Ethiopia largest military supplier, ceased all aid and its advisors left the country. This isolated Ethiopia and left it in a position where it desperately needed outside aid. After the Dergue came to power, Somalia began to organize the Ogaden rebels into an actual army. They were trained and equipped as Somali troops, wearing Somali uniforms without the normal badges and insignia. These guerrilla forces invaded Ethiopia in June, 1977. When their offensive stalled in July, Somalia launched a full scale invasion. Ethiopia retaliated with air raids into Somali territory, but the Ethiopian army performed extremely poorly. By October, Somalia had conquered most of the Ogaden.

Mengistu responded by appealing to the Soviet Union for aid. While the USSR was then Somalia's main source of military support, it decided Ethiopia was the greater prize, and rushed in military equipment -- including large numbers of T-54s, some 600 other armored vehicles, 400 artillery pieces, and BM-21 multiple rocket launchers -- and deployed some 17,000 Cuban troops and tank crews from the PDRY. By March, 1978, the USSR had built up a greatly expanded Ethiopian army of some 40,000 Ethiopia regulars, and 80,000 irregulars -- and this force had driven the Somali army back across its borders. Cuban troops then took up defensive positions on the Somali border, which they maintained until October, 1979.

Somalia reacted by breaking with the Soviet Union in November, 1979, and turning to the U.S. for aid. It also continued its support for the Ogaden rebels, and Somali troops supported the rebels in new raids on Ethiopia in 1980. Ethiopia replied with scattered air raids, after a year of confused fighting, Ethiopian troops invaded the Balemballe area in Somalia in June, 1982. They also raided Lalwale in Somalia in 1984. By this time, the Ethiopians had a massive advantage. Ongoing arms deliveries had led to the creation of a massive Soviet-supplied and Cuban supported Ethiopian army, but the U.S. never attempted to arm or supply Somalia to carry on its war. As a result, Ethiopia continued to win its military battles.

Ethiopia also helped arm rivals to Somalia's dictator, Siad Barre, and helped create the rebel movements like the Somali National Movement and Somali Salvation Democratic Front that eventually drove Barre from power. Ethiopia did, however, reach an accommodation with Somalia in 1978, after a new round of fighting in the Todghere region in February, 1987. By this time both Barre and Mengistu faced sufficient internal problems at home so they were willing to sign an agreement on April 3, 1988, that demilitarized their border and allowed them to resume diplomatic relations.[61]

Part of the reason that Ethiopia signed the agreement was its growing internal problems. Mengistu's efforts to back Marxist movements in neighboring states led to an increasing confrontation with the Sudan after 1974, and the Sudan responded by providing additional arms to ELF and PLF -- now referred to as the (Islamic) Eritrean People's Liberation Forces (EPLF). At the same time, a new armed liberation movement had emerged in Tigray, the coastal province just to the east of Eritrea, called the Tigray People's Liberation Forces (TPLF). By February, 1976, the fighting with this movement had escalated to a new civil war.

Ethiopia responded with air strikes on the rebel bases in the Sudan. Rather than intimidate the Nimeiri, however, these raids provoked him. Nimeiri shifted from covert support of the rebels to a formal recognition of Eritrean independence in January, 1977. This led to at least one border clash between Ethiopian and Sudanese troops in April, 1977, and more intense fighting in Eritrea and Tigray. The fighting produced serious casualties on both sides, and the impact on the civilian population was made worse after 1984 by recurrent famine.

These civil wars not only led to further Soviet arms deliveries, they led to the sustained deployment of Cuban troops. Roughly 12,000 to 18,000 Cuban forces were deployed during the period between 1977 and 1984-1986. The Cubans refused to directly support Ethiopia against the EPLF and TPLF, but their presence greatly aided the Ethiopian government by reducing the need to deploy troops against Somalia. Cuba also deployed up to 9,000 troops to help the Derg secure control of the region around capital of Adis Ababa. at the same time, Ethiopia increasingly became involved in backing groups that opposed Nimeiri, and provided money and arms to the Sudan People's Liberation Movement, a Marxist group in the Sudan.

Thanks to the steady flow of Soviet aid, Ethiopia became one of the largest military powers in the Red Sea area. The Mengistu government received more than $6 billion in Soviet bloc arms between 1977 and 1990, and signed agreements for $1 billion

[61] Herbert K. Tillema in International Conflict Since 1945, Boulder, Westview, 1991, p. 97.

more. It also received Israeli military assistance after 1988, largely as part of an Israeli effort to block the successful emergence of new Arab mini-states on the coast of the Red Sea.

The extent of Soviet involvement in Ethiopia during the 1980s is indicated by the fact the USSR made new major arms deliveries to the port of Aseb to help Ethiopia in its 1985 campaign against the Eritrean rebels, including T-55 tanks, APCs and AFVs, and more MiG-23 fighter bombers. Direct Soviet logistic and advisory support was the only reason that Ethiopia was able to deploy some 50,000 troops in less than three weeks in August, 1985, and could capture the key town of Barentu in spite of the fact it was the rainy season.[62] Soviet advisors also helped Ethiopia carry out air raids on Eritrean camps in the Sudan in August, 1987.

Military Expenditures and Arms Transfers

A review of Ethiopian military expenditures and arms transfers helps put the scale of this Soviet effort in perspective. Ethiopia's annual defense budgets are hard to analyze because most estimates ignore arms transfers and only deal with national expenditures. It is clear, however, that military expenditures rose from $120 million in 1978, to around $400-$430 million annually in 1987 and 1988.

ACDA estimates that Ethiopia's military budget was $120 million in 1978, $254 million in 1979, $321 million in 1980, $331 million in 1981, $357 million in 1982, $363 million in 1983, $389 million in 1984, $382 million in 1985, $388 million in 1986, $432 million in 1987, $512 million in 1988, and $763 million in 1989.[63] This would put Ethiopia's military spending at about 8-10% of the GNP, and at 23-38% of Central Government expenditures. The IISS estimates that Ethiopia spent $472 million in 1989, and $536 million in 1990.[64] The Soviet Union subsidized a large part of these military expenditures.

The Soviet Union provided massive arms transfers, which surged whenever Ethiopia got into military trouble. ACDA estimates that Ethiopia imported $1,500 million worth of arms in 1978, $330 million in 1979, $775 million in 1980. $430 million in 1981, $575 million in 1982, $975 million in 1983, $1,200 million in 1984, $775 million in 1985,

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[62] Soviet Military Power, 1986, GPO, Washington, 1986, p. 134, and Soviet Military Power, 1987, pp. 134-135.

[63] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table I.

[64] IISS, Military Balance, 1987-1988, 1988-1989, 1989-1990, and 1991-1992.

$330 million in 1986, $1,000 million in 1987, $700 million in 1988, and $900 million in 1989.[65]

Ethiopia's total arms imports during 1979-1983 totaled $1.9 billion, of which virtually all came from the Soviet Union. ACDA estimates that $1.8 billion came from the USSR, $20 million came from Italy, $10 million came from Czechoslovakia, and $60 million came from a variety of other countries.[66] Similarly, the Soviet military aid effort to Ethiopia provided $3.9 billion worth of arms during 1984-1988, out of total imports of $4.1 billion. The rest consisted of $20 million from the PRC, $30 million from Italy, $20 million from Czechoslovakia and $130 million from other countries.[67] ACDA changed its way of reporting arms sales by source in 1992, According to this new styles of reporting, Ethiopia imported a total of $3,805 million worth of arms during 1985-1989, with a total of $3,600 million from the Soviet Union, $20 million from the PRC, $60 million from other Warsaw Pact countries, $10 million from other European countries, $110 million from other East Asian states, and $5 million from other developing countries.[68]

The Soviet Union did get some things in return. Ethiopia provided the only potential Soviet naval base in the Red Sea, on the island of Dahlak. The USSR deployed a 8,500 ton floating dry dock, floating piers, helipads, fuel and water storage, a submarine tender, and other repair ships. Soviet guided missile cruisers, and nuclear submarines occasionally called at Dahlak for service, and Soviet IL-38 May aircraft operated from Dahlak until they were destroyed by Eritrean rebels in May, 1984. These facilities, however, were scarcely worth the steadily rising price of Soviet aid to Ethiopia.[69]

The Collapse of the Mengistu Regime

The massive Soviet military aid effort also could not save the Mengistu regime. A combination of the political and economic backlash from prolonged civil wars, economic mismanagement, famine, ideological extremism, and the actions of a ruthless police state steadily undercut Mengistu and the Derg. This was made worse by human suffering. Partly because of actions by the government, at least 300,000 people died of famine in 1984-

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[65] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table II.

[66] Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, 1985, pp. 98, 131, 140, 146.

[67] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1989, Washington, GPO, 1990, p. 115; Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1986, Washington, GPO, 1987, p. 143. Some estimates put the value of Soviet arms transfers from 1977 to 1990 at roughly $11 billion.

[68] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, pp. 133-134.

[69] Department of Defense, Soviet Military Power, 1985, pp. 123-129; Soviet Military Power, 1986, GPO, Washington, 1986; Soviet Military Power, 1987, pp. 134-135.

1985, and at least that many died again during 1987-1990. The rains failed totally in 1989 and came too late in 1990.

In spite of President Mengistu's belated efforts to declare Ethiopia a Democratic Republic in September, 1987, and to offer limited autonomy to various rebel groups, the Eritrean People's Liberation Front (EPLF) and Tigray People's Liberation Front (TPLF) continued to fight Ethiopian forces and inflicted major defeats. In March, 1988, the EPLF broke through the government lines south of Nafka, and crushed the Ethiopian garrison at Afbet. Ethiopia lost thousands of soldiers and the EPLF captured large amounts of weapons and supplies. In January, 1989, the TPLF captured virtually all of Tigray Province.

While the EPLF continued seek independence, the TPLF sought power over the rest of Ethiopia. It expanded its ties to other tribal and ethnic groups, particularly the Ethiopian People's Democratic Front, and renamed itself the Ethiopian Peoples Revolutionary Democratic Front (EPRDF). It later included the Ethiopian People's Revolutionary Party (EPRP), and Ethiopian People's Democratic Front (EPDM), a largely Amhara splinter group of the EPRP. The TPLF also improved its cooperation with the EPLF and the largely Muslim Oromos in the Oromo Liberation Front (OLF).[70]

These changes in the rebel forces steadily improved their military effectiveness and produced increasingly higher casualties among Mengistu's forces. They also steadily isolated the Mengistu government, whose main support came from the Christian Amharas, who were only 25% of the population. This helped lead Mengistu to take unpopular measures like the forced conscription of 13 to 14 year olds. At the same time, Mengistu's problems were made worse by famine and near famine in much of the country.

The steady degeneration of the situation helped lead to a major coup attempt against Mengistu in May, 1989. The coup took place while Mengistu was in Berlin, and involved General Tesfaye Gebre Kidan, a former minister of defense; Colonel Tesfaye Wold Selassie, the interior affairs minister; the commander of the Air Force; commander in chief of the army; the commander of the country's largest army units, and thousands of troops. The coup attempt failed, however, because the Minister of Defense remained loyal to Mengistu and was able to rally superior forces, and the rebels were never able to taker

[70] Theodore S. Dagne, "Recent Political Developments in Ethiopia and Somalia," Congressional Research Service 91-452F, May 31, 1991, and "Ethiopia: New Thinking in U.S. Policy," Congressional Research Service 91-489F, June 18, 1991. For good discussions of Soviet and Ethiopian strategy in the Horn see Lt. Colonel David R. Mets, "The Dilemmas of the Horn", Proceedings of the Naval Institute, April, 1985, pp. 49-57; and Samuel Makinda, "Shifting Alliances in the Horn of Africa", Survival, January/February, 1985, pp. 11-19.

key strong points like the main radio station and airport. As a result, most of the coup's leaders were shot.

Mengistu again tried to obtain popular support by taking a more moderate stance, but did so far too late to have any hope of compromise with the rebel factions or of uniting the armed forces.[71] Mengistu faced another critical problem. The USSR began to slowly phase out aid to Ethiopia in the late 1980s, as Gorbachev's reforms made it less and less willing to indulge in pointless ideological adventures in the Third World. Coupled to the final withdrawal of Cuban troops, this left Mengistu dependent on forces that lost the willingness and capability to fight. While Israel attempted to replace Soviet and Cuban aid to both free the Ethiopian Jews and limit Arab influence in the Red Sea, there was little Israel could do.[72]

The Fall of Mengistu

Mengistu did launch a counter-attack against the EPRDF in early 1990, but the attack failed and its net effect was simply to weaken the military forces opposing the EPLF. In February, 1990, the EPLF captured the port of Massawa, and surrounded some 120,000 government troops in Asmera. The EPLF and EPRDF then regrouped and organized for a major offensive. In February, 1991, the EPRDF launched a major offensive and captured the provinces of Gondar and Gojjam, giving it control over much of Ethiopia's grain supply. It then advanced deep into Wollo and Shoa provinces.

These offensives virtually isolated the Mengistu government from most of the provinces outside the capital by May, 1991, and it was forced to pull its remaining troops back to the capital. While the U.S. tried to mediate an orderly transfer of power from Mengistu to the EPRDF and other opposition parties, Mengistu gradually lost control over his armed forces, and Mengistu fled to Zimbabwe. and the EPLF seized the remaining forces of the government's Second Army in Eritrea and took control of the provincial capital of Asmera.

As a result, the remnants of Mengistu regime under caretaker President Tesfaye Gebre Kidan collapsed on May 28, 1991, and the Ethiopian People's Democratic Front

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[71] New York Times, May 18, 1989, p. A-3; Washington Post, May 17, 1989, p. A-25, May 18, p. A-41, May 19, p. A-29, May 20, 1989, p. A-17.

[72] Israel may well have provided Ethiopia with cluster bombs, as well as air force and army advisors. See Anthony R. Tucker, Ethiopia's Intractable Wars," Armed Forces, July, 1989, pp. 321-325; Anthony R. Tucker, "Conflict in the Horn of Africa," Jane's Defense Weekly, December 17, 1988, p. 1557; Economist, February 24, 1990, pp. 40-41; New York Times, January 1, 1989, p. E-4, January 21, 1990, p. 1; February 14, 1990, p. A-15; Miami Herald, February 25, 1990, p. 17-A; Washington Post, September 9, 1989, p. A-11, November 7, 1989, p. A-21, February 10, 1990, p. A-17; Washington Times, October 12, 1989, p. 8, December 11, 1989, p. A-8; Philadelphia Inquirer, February 9, 1990, p. 13A; Insight, November 6, 1989, p. 34; Aradom Tedla, "Eritrea -- Waiting for the World to Act," The World and I, March, 1989, pp. 130-139.

(EPRDF) took control in the capital of Addis Abba. One day later, Issayas Afeworke, the Secretary General of the Eritrean People's Liberation Front (EPLF) announced the formation of a provisional government in Eritrea with the goal of setting up a referendum that would eventually lead to an independent country of Eritrea. The majority of the Ethiopian navy fled to Saudi Arabia with the collapse of the regime, although three OSA-class missile patrol boats were sunk. Part of the air force and several army helicopters fled to Djibouti.

Ethiopia After Mengistu

After Mengistu's fall, the Ethiopian People's Revolutionary Democratic Front (EPRDF) allowed the Eritrean People's Liberation Front (EPLF), under Issaias Afwerki, to form an interim government in Eritrea, and then formed a government in Ethiopia.[73] The EPRDF showed unusual wisdom in creating this new government. It brought some 20 different factions into a national unity government in early July, 1991.

While the leader of the EPRDF, Meles Zenawi, became president, he did not attempt to rule by force and attempted conciliation. The EPRDF also gave the predominantly Muslim Oromos in the Oromo Liberation Front (OLF), four cabinet posts and 12 seats in the Council of Representatives, to try to reduce Muslim separatism,. This was an unusual sharing of power, although the EPRDF kept the offices of prime minister, Minister of Defense, and Minister of Foreign Affairs, and 32 seats in the Council of Representatives. During its first year, the new government seemed committed to making good on its promise of democratic elections in 1993, to trying to unite the country, and to economic reform.

In the spring of 1992, however, the capital still had to be patrolled by troops from the Ethiopian People's Revolutionary Democratic Front (EPRDF), and serious ethnic divisions existed within all of Ethiopia's 14 provinces. The EPRDF dominated the government in the capital, but its largely Muslim Trigrean leaders were distrusted by the Amharan Christians which made up most of the population in Addis Abba.

More serious divisions emerged between the EPRDF and the Oromos. Clashes took place between EPRDF and Oromo forces in the OLF in the spring of 1992 which had to be resolved by a formal cease-fire to allow the smooth flow of aid. Some Oromos supported the creation of a separate Oromo state -- and this raised serious issues for the future because the Oromos made up 40-50% of the population versus 25% Amhara, 12% Tigrean, 6% Somali, 6% Sidamo, and 4% Afar. Unity talks between the EPRDF have had little success and the OLF does not recognize the Oromo People's Democratic

[73] Washington Post, August 17, 1991, p. A-16.

Organization (OPDO), which is the Oromo part of the EPRDF, as having any real legitimacy.

These problems became even more serious when the transitional government held elections in June, 1992. The elections attempted to create a common political structure for some 80 tribes in 30 political parties, contending for power in 14 different provinces. The OLF and a number of other parties claimed that the EPRDF was rigging the election, and Nadhi Gammada, the political head of the OLF accused the EPRDF or being a new colonizer. The OLF then boycotted the elections when they were held on June 21, 1992 and sent its 15,000 man militia out of the encampent areas assigned as part of the peace accord and into the country.

The outside observers invited by the government differed sharply over the handling of the election and the validity of Oromo charges that its candidates had been arrested and their offices had been shut down. There was no question, however, that the election led to new clashes between OLF and EPRDF forces, and new fighting erupted in the south.

By mid-July, at least 10 parties from the south had formed a Democratic Alliance of Southern Peoples. The Alliance was calling for the annulment of the elections, and threatened that its 10 members of the 87 member Council of Representatives would renounced their seats. They accused the EPRDF of pulling its troops out their encampment areas, and claimed that unfair elections were held in the Afar and Somali areas as well as in the Oromo region. While the government announced the creation of a board to correct election errors on July 27, the future of Ethiopia's government was far from clear.

The new government faced a number of additional challenges. In addition to the OLF and at least three other Oromo liberation movements, there were at least seven opposition parties to the EDRDF and a total of 29 other liberation movements.

The government had to repatriate some 200,000 Ethiopian refugees from Djibouti, Kenya, Somalia, and the Sudan. It had to repatriate the former soldiers of the Mengistu regime, demilitarize the various armed forces in the country, and repair an economy and infrastructure shattered by war and famine. While Ethiopia's economy grew by 3.8% during 1986-1990, as a result of Mengistu's gradual move away from Marxism, this growth did little to offset a long prior period of negative growth and the shattering cost of the war that followed.

The debates following the election also did little to resolve the future of the Amharas, who now faced an end to Christian domination of the country. Although they still made up about 25% of the population, they now had to live in a nation that was ruled

by Muslims, and in country surrounded by states where there is a rising tide of Islamic fundamentalism.

Ethiopia also faced the question of its future relations with the EPLF and other Eritrean liberation movements. The Eritrean People's Liberation Front had been fighting since 1961, and seemed committed to seeking full independence when an agreed referendum takes place in 1993. Eritrean independence, however, could cut Addis Abba and the rest of Ethiopia off from its ports at Massawa and Assab on the Red Sea, and leave Tigray without any port of its own. Assab handled 70% of Ethiopia's trade before the war. Many of Ethiopia's non-Eritrean leaders opposed such independence and might consider force to prevent it. At the same time, the new government that came to power in May, 1991 included 24 different groups from Ethiopia's many nationalities and did not seem capable of coherent military action.[74]

Ethiopian Military Forces

Like the Sudan, Ethiopia has immense manpower resources to drawn upon, but civil war, economic problems, and ethnic divisions limited the growth of its military forces long before the fall of the Mengistu regime. The CIA estimated in late 1991 that there were 11,718,000 males in the age group from 15 to 49, 6,072,000 males fit for military service, and 609,000 males reaching the military age of 18 annually.[75] The IISS estimated in late 1991 that there were a total of about 2,887,000 males and 2,799,000 women in the age group from 18-22 years, 2,446,000 males and 2,389,000 women in the age group from 23-32 years, and 3,778,000 men and 3,696,000 women in the age group from 23 to 32 years.[76]

At their peak, Ethiopian forces totaled about 319,000 men. It is almost impossible to estimate the present military strength of the key factions in Ethiopia, although the EPRDF seems to have about 65,000 men -- some 55,000 of which are part of the Tigray Liberation Army. The remainder belong to the Oromo People's Democratic Army and smaller groups. The EPLF seems to have another 60,000 men. Some elements of the former Ethiopian forces are still in tact.

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[74] Time, July 15, 1991, pp. 34-35; Africa News, December 23, 1991, pp. 18-19, **July 6, 1992, p. 6**; Economist, September 14, 1991, pp. 44-45; Christian Science Monitor, June 19, 1992, p. 2, June 26, 1992, p. 6; Washington Times, June 20, 1992, p. A-9; Washington Post, June 22, 1992, p. A-11, June 24, 1992, p. A-24; Agence France Presse, July 15, 1992; BBC, July 30, 1992, ME/1446/ii; Theodore S. Dagne, "Ethiopia: The STruggle for Unity and Democracy," Congressional Research Service 92-507F, June 20, 1992.

[75] CIA, The World Factbook, 1991, pp. 200-201.

[76] IISS, Military Balance, 1991-1992.

The total inventory of military equipment in Ethiopia before the collapse included at least 1,300 T-54, T-55, and T-62 tanks; 250 BMP-1 and BDRM armored fighting vehicles; 1,100 armored personnel carriers; 700 towed artillery weapons; 6 self-propelled artillery weapons, large numbers of multiple rocket launchers; and massive amounts of small arms and squad served weapons like recoilless rifles and anti-tank launchers. The Navy had two frigates, 20 patrol craft and light combatants, and 5 amphibious vessels. The air force had 120 combat aircraft (78 MiG-21MF and 37 MiG-23BN) and 20 armed helicopters.[77]

Estimates differ sharply on the equipment that survived the last year of the war. In 1992, Ethiopia seem to have 300 T-34s, T-54s, T-55s, T-62s, and M-47. It also seemed to have 350 other armored vehicles, including BDRMs, BMPs, BTR-60s, BTR-152s, and M-113s. There were probably over 400 towed artillery weapons, but any such number is speculative. These weapons included D-44 85mm weapons, D-30 122mm weapons, M-46 130mm weapons, BM-21 multiple rocket launchers, and large numbers of 81mm, 82mm, and 120mm mortars.

There were large numbers of AT-3 Saggers anti-tank guided weapons, and 82mm and 107mm recoilless rifles. There were over 300 anti-aircraft guns, ranging from 23mm to 100mm, and including some radar guided self-propelled ZSU-23-4 23mm weapons. The army also retained control over Ethiopia's 20 SA-2 and 30 SA-3 launchers, which generally were not affected by the fighting, and over substantial numbers of SA-7s and SA-9s.

The Navy had 3,500-4,000 men before Mengistu's fall. It had two 1,180 ton Petya II class frigates armed with 4 76mm guns and 10 406mm torpedo tubes. Its smaller combat ships included two 250-ton Turya-class hydrofoils armed with two 57mm guns and 4 533mm torpedoes; four 245-ton Osa II-class guided missile patrol boats armed with Styx missiles; two 200-ton Soviet MOL-class fast attack torpedo boats; three 118-ton Swift large patrol craft; and four 50-ton Zhuk-class coastal patrol craft. Its support ships included a 2,800 ton training ship. with 1 127mm gun; two 800-ton Polnochny B-class LTCs, one 670-ton French Edic class LTC, two 995-ton Chamo class LCLS, four Soviet T-4 class LCVPs, a coastal tanker, and four 11.5 ton coastal patrol craft.

Many of these ships fled to Yemen and Saudi Arabia, or were scuttled, after Mengistu lost power. Many of the ships that did not escape were not operational. The navy bases at Massawa and Asseb suffered substantial damage during the fall of the ports in the spring of 1991.

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[77] Based upon the IISS, Military Balance, 1990-1991.

Like the navy, the air force broke up during the collapse of the Mengistu regime, and only about 50% of its aircraft were operational before the rebels triumphed in their spring, 1991, offensive. In 1992, there about 68 fighter aircraft left in the country, including 50 MiG-21MFs and 18 MiG-23BNs. There are also some 18 Mi-24 attack helicopters. Fixed wing transport assets seemed to include 6 An-12s, 2 DH-6s, 2 L-100-300s, 3 U-17s, and 1 Yak-40; rotary wing aircraft include 1 IAR-330, 30 Mi-8s, 3 UH-1s, and 2 Mi-14s, It is unclear how many are operational.[78]

Strategic Interests and Arms Control[79]

It is unclear whether the situation in Ethiopia will degenerate into yet another civil war. What is clear is that the end of the Cold War has ended any need for the U.S. or any other outside states to build a major military relationship with Ethiopia, and no case can be made for further major arms transfers.

The last thing Ethiopia needs is more killing. If current developments in Ethiopia do anything, they create a good case for U.S. and Western aid and support for democracy and economic reform. Even before the collapse of the central government in 1991, the nation's GNP was only about $6.6 billion for a population of 53 million. Per capita income was only about $130. The economic situation has deteriorated ever since, and there is certain to be a recurrent risk of famine unless Ethiopia can shift from civil strife to meeting its people's needs. [80]

[78] Based upon the IISS, Military Balance, 1991-1992.

[79] Much of the political analysis in this section is based on Theodore Dagne, "Ethiopia: War and Famine," Congressional Research Service IB90049, August 5, 1991, "Recent Political Developments in Ethiopia and Somalia," Congressional Research Service 91-452F, May 31, 1991, "Ethiopia: New Thinking in U.S. Policy," Congressional Research Service 91-489F, June 18, 1991, and "The Horn of Africa: A Trip Report," Congressional Research Service 91-823, November 15, 1991; also see Jennifer Parmelee, "Battle Won, Eritrean Leader Looks Ahead to Life After Independence," Washington Post, August 17, 1991, p. A-16, "Ethiopia Plies Democracy, Contentiously," Washington Post, October 22, 1991, p. A-8, and "Ethiopia Begins the Road to Recovery,: Washington Post, February 2, 1992; Herbert Lewis, "Beginning Again," Africa Report, September-October, 1991, pp. 59-67; and Jane Perlez, "A New Chance for a Fractured Land," The New York Times, September 22, 1991.

[80] CIA, World Factbook, 1991, pp. 94-95.

E. Djibouti[81]

Year	Manpower (1,000s)	Tanks	Aircraft	Defense Spending $ Millions	Arms Imports $ Millions	Arms Exports $ Millions
1967	-	-	-	-	-	-
1973	-	-	-	-	-	-
1982	4	0	0	-	-	-
1988	4	0	0	26	-	-
1991	3	0	0	29	-	-

Djibouti is a small former French colony located on the southern coast of the Red Sea. It has a territory of about 22,000 square kilometers, a little smaller than the state of Massachusetts. It has a 314 kilometer coastline on the Red Sea, a 459 kilometer border

[81] The military manpower, force strength, and equipment estimates in this section are made by the author using a wide range of sources, including computerized data bases, interviews, and press clipping services. Most are impossible to reference in ways of use to the reader. The force strength statistics are generally taken from interviews, and from the sources reference for each paragraph. They also draw heavily on his The Gulf and the Search for Strategic Stability (Boulder, Westview, 1984) and The Gulf and the West (Boulder, Westview, 1988).

Extensive use has also been made of the annual editions of the International Institute for Strategic Studies Military Balance (IISS, London), in this case, the 1991-1992 edition, and of the Jaffee Center for Strategic Studies, The Military Balance in the Middle East (JCSS, Tel Aviv), especially the 1990-1991 edition and working materials from the coming edition. Material has also been drawn from computer print outs from NEXIS, the United States Naval Institute data base, and from the DMS/FI Market Intelligence Reports data base. Other sources include the Military Technology "World Defense Almanac for 1991-1992," published in early 1992; Foreign Affairs Division, "Middle East Arms Control and Related Issues," Washington, Congressional Research Service, 91-384F, May 1, 1991; and Middle East Economic Digest, "MEED Special Report: Defense," Volume 35, December 13, 1991.

Weapons data are taken from many sources, including computerized material available in NEXIS, and various editions of Jane's Fighting Ships (Jane's Publishing);
Jane's Naval Weapons Systems (Jane's Publishing); Jane's Armor and Artillery (Jane's Publishing); Jane's Infantry Weapons (Jane's Publishing); Jane's Military Vehicles and Logistics (Jane's Publishing); Jane's Land-Base Air Defense (Jane's Publishing); Jane's All the World's Aircraft (Jane's Publishing); Jane's Battlefield Surveillance Systems, (Jane's Publishing); Jane's Radar and Electronic Warfare Systems (Jane's Publishing), Jane's C^3I Systems (Jane's Publishing); Jane's Air-Launched Weapons Systems (Jane's Publishing); Jane's Defense Appointments & Procurement Handbook (Middle East Edition) (Jane's Publishing); Tanks of the World (Bernard and Grafe); Weyer's Warships (Bernard and Grafe); and Warplanes of the World (Bernard and Grafe).

Other military background, effectiveness, strength, organizational, and history data are taken from Anthony H. Cordesman, The Gulf and the Search for Strategic Stability, Boulder, Westview, 1984, The Gulf and the West, Boulder, Westview, 1988, and Weapons of Mass Destruction in the Middle East, London, Brassey's/RUSI, 1991; Anthony H. Cordesman and Abraham Wagner, The Lessons of Modern War, Volume II, Boulder, Westview, 1989; Theodore Dagne, "The Horn of Africa: A Trip Report," Congressional Research Service 91-823, November 15, 1991; Lij Imru Zelleke, The Horn of Africa, A Strategic Survey, Washington, International Security Council, 1989; the relevant country or war sections of Herbert K. Tillema, International Conflict Since 1945, Boulder, Westview, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992; various annual editions of John Laffin's The World in Conflict or War Annual, London, Brassey's, and John Keegan, World Armies, London, Macmillan, 1983.

with Ethiopia, and a 58 kilometer border with Somalia. Both Ethiopia and Somalia have occasionally claimed part of Djibouti's territory.

Djibouti's security and politics are complicated by its demographics, Although France once called Djibouti the "French Coast of the Afars and Issas", it has always had a Somali majority. The French favored the Afars during the 1960s and 1970s, and this led to considerable tension between the two ethnic groups. Splits in the Afars elite brought the Issas to power in 1977, however, and they were able to create a single party state with a Issa (Somali) president and an Afar (Ethiopian) Prime Minister in 1979. Ever since, there have been opposition political parties in exile and Afars political movements designed to restore Afars control of the country or to expand Afars power.

The CIA estimates that it is currently about 60% Issa, 35% Afar, and 5% French, Arab, Ethiopian, and Italian. It is about 94% Muslim and 6% Christian.

Military Developments in Djibouti

Djibouti only exists because France sought the territory during 1897, in order to gain a port at the entrance to the Red Sea that would rival Britain's control of Aden. It has acquired new strategic significance, however, because it is the main French port and military base in the Gulf area, and because it is the port for the only rail link to Ethiopia's capital of Addis Abba.

Djibouti was one of the last colonies in Africa. It was granted local self-government in 1956, but a popular referendum indicated that the majority of the population wanted to remain a part of French territory in 1958. This led to problems with Somalia, when it became independent in 1960. Somalia claimed that French Somalia should become part of Somalia, although the French argued that Djibouti had an Afars majority. These tensions led to Somali riots against DeGaulle when he visited Djibouti in August, 1967, although another plebiscite indicated that the majority of the population still wanted to stay part of French territory.

From 1967 to 1976, France and the Afars took one side while Somalia and the Issas (Djibouti Somali) took another. French troops and police had to be used in 1970 and 1971 to suppress Issas' sponsored incidents, and civil violence became common after 1972. In February, 1976, Somalis that were part of a movement called the Front for the Liberation of the Somali Coast seized a school bus and took it to the border post near Loyoda. French troops clashed with Somali police when they attempted to prevent the French from recovering the bus.

In spite of these tensions, France gradually mediated an independence agreement that granted added rights to the Issas. As a result, Djibouti was given full independence in June, 1977, after elections supervised by French troops. The elections reversed the

previous pattern of power. The country came under the control of the Rassemblement Populaire pour le Progress, an Issas-dominated group that established a single party political system. This led to new violence in December when the Afars protested the rights given to the Issas. The leaders of the new state then realized they could only remain independent with French military aid, and France has played a key role in ensuring Djibouti's stability and security ever since.

Djibouti not only was too small to defend itself, it was extremely poor in resources. It had virtually no arable land and only 9% of its land could be used for grazing. This made its economic survival dependent on its status as a free trade area, and on the profits from French use of its facilities. As a result, it continued to supported a 1977 treaty that allowed French military forces to remain on its soil, and often aligned itself with the West.

In spite of the French presence, recurrent low level clashes took place between Issa and Affar after 1977. The government arrested a number of Afars in January, 1991, for what it charged was an attack on a military barracks. These arrests included Ali Aref Bourhan, a major opposition leader. These government actions led to Affars attacks on the northern towns of Obock and Tadjourah in November, 1991. The attacks involved thousands of Afars, and were led by the Front for the Restoration of Unity and Democracy (FRUD) -- an Afars group with ties to Afars in Ethiopia. The FRUD attacks caught the Aptidon government by surprise, and it demanded French intervention under the 1977 military agreement.

France initially argued that the matter was an internal affair and did not merit French intervention. The guerrilla war between Afars and Issa became so serious by January, 1992, however, that France offered to send troops to secure the Ethiopia-Djibouti forces. Djibouti then insisted on a French-Djibouti force which France rejected. Internal violence became so severe in Feburary, however, that France sent troops into threatened areas and assumed a peace keeping role.

The cause of the fighting is somewhat unclear. The Aptidon government has charged that the Afars are supported by pro-Mengistu Afars in Ethiopia. Ethiopian and Eritrean forces have been deployed to the border area to check Afars separatism, however, and the head of the Afars movement in the Zenawi government of Ethiopia is Ali Mira -- who returned from exile as a strong opponent of the pro-Mengistu factions of Ethiopia's Afars. There is little evidence of any Ethiopian military support for Djibouti's Afars.

French experts feel that the FRUD movement is largely native Afars and a natural reaction to the rigidty of Aptidon and the Issas in rejecting political reform, and a proper

sharing of power. Other experts disagree, and feel that while FRUD may lack active support from Ethiopia, but does consist of pro-Mengistu Afars now living in Djibouti. They also estimate that the FRUD can now mobilize more than 3,000 armed men. [82]

The political situation has also been affected by problems in the economy. Djibouti has suffered in recent years from a decline in the use of its facilities resulting from the civil war in Ethiopia, and a massive influx of refugees. In 1991, it had 40% unemployment, a declining growth rate, a GDP of only $340 million per year, and a per capita income of $1,030. Its total foreign debt was about $355 million, or more than its its annual GDP. Even so, Djibouti's citizens have an income six to eight times that of their neighbors in Ethiopia and Somalia. [83]

Some shifts in power seem inevitable. President Hassan Gouled Apitdon is expected to retire when his second term is over in 1993, and he seems to have selected Ismail Omar Guelleh, his nephew, as his successor. Guelleh is an Issa of the Mamassen clan, and seems to have the backing of the army and the security forces. He is not, however, popular with the French. As a result, Ismael Gueddi, the President's Chief of Staff is also a possible candidate. So are Muhammed Djama Elabe and Prime Minister, Barkat Gourad Hamadou, an Afar, and a number of other figures.

There is also at least some possibility that Ali Aref could reemerge as a major political figure. He was the main Afars political leader during the 1960s and 1970s. While Aref's dictartorial conduct led to splits between the Afars that brought the present Issa-led government to power, and Aref has since been accused of supporting assassination attempts against government leaders, it is possible that some Afars leader like Aref could gain significant support.

Any election, however, assumes that a relative peace exists between Afar and Issa, and that a one party state can adapt enough to give both ethnic groups a reasonable share of power. In spite of the FRUD insurrection, Aptidon has indicated that this may be possible. Although Djibouti became a one-party government in 1981, there has been considerable pressure to restore a multi-party system now that it is no longer threatened by the conflicts in Ethiopia and Somalia. Aptidon agreed to allow muti-party elections in June, 1992, and they may be held in September. The question is whether they will help end the civil war, or simply be an extension of the growing clashes between Afar and Issa.

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[82] Theodore Dagne, "The Horn of Africa: A Trip Report," Congressional Research Service 91-823, November 15, 1991, pp. 25-28; "Djibouti: Political Unrest-Prospects for Reconciliation," Congressional Research Service 92-537F, June 30, 1992.

[83] CIA, World Factbook, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992.

Djibouti's Military Forces

The U.S. government does not publish detailed statistics on Djibouti's defense expenditures, and arms transfers. According to the IISS, Djibouti spent about $29 million on defense in 1986, $34 million in 1987, $26 million in 1988, and $26 million in 1989.[84] The CIA estimates that Djibouti spent about $29 million annually of defense in recent years.[85]

Djibouti has limited military manpower. The CIA estimated in 1991 that there were 89,500 males in the age group from 15 to 49, and 52,000 males fit for military service.[86] The IISS estimated in late 1991 that there were a total of about 22,900 males and 22,400 women in the age group from 18-22 years, 18,900 males and 18,800 women in the age group from 23-32 years, and 29,100 men and 28,800 women in the age group from 23 to 32 years.[87]

Given its poverty and limited manpower base, it is not surprising that Djibouti's armed forces total only 3,400 men, including 600 men in the Gendarmerie. Its army has only 2,600 men, organized into North and South commands. Its combat units include an infantry battalion with mortar and anti-tank platoons, an armored squadron, a border commando company, and an airborne company. There is one support battalion.

The army has no tanks. Its other armor includes 45 armored reconnaissance vehicles, with 10 BDRM-2s, 4 AML-60s, 16 AML-90s, and 15 M-11 VBLs; and 10 BTR-60 APCs. Its artillery includes six M-56 105mm pack howitzers, 20 81mm mortars, and 4 120mm mortars. Djibouti has no modern anti-tank weapons, but has 18 106mm M-40A1 recoilless rifles, 6 120mm rocket launchers, and 70 73mm, 89mm, and LRAC rocket launchers. The army's only other equipment includes 5 M-693 23mm self-propelled anti-aircraft guns, two ZU-23s, and an unknown number of 40mm L/70 anti-aircraft guns.

Djibouti's navy consists of about 80 men with eight light patrol boats. These include one 30-ton Tecimar class coastal patrol craft with 12.7mm machine guns, and two 35-ton Plascoa-class coastal patrol craft armed with 1 GIAT 20mm gun and 1 12.7mm machine gun. It also has three Sea Riders, with are rigid inflatable craft.[88]

Djibouti's air force has 80 men and no combat aircraft or helicopters. Its only operational aircraft are six transport aircraft (2 C-212s, 2 N-2501s, 1 Cessna U206G and 1 Socata 235GT), and six transport helicopters (3 AS-355s, 2 SE-3130s, and 1 SA-330).

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[84] IISS, Military Balance, 1988-1989 and 1991-1992, sections on Djibouti.
[85] CIA, World Factbook, 1991, pp. 83-84.
[86] CIA, The World Factbook, 1991, pp. 200-201.
[87] IISS, Military Balance, 1991-1992.
[88] Estimate based primarily on Jane's Fighting Ships, 1991-1992, p. 155.

It does, however, have 18 aircraft and helicopters that defected from Ethiopia, including some MiG-23s, AN-12s, Mi-8s, and Mi-24s.

Strategic Interests and Arms Control

Djibouti supported the U.S. and the UN during the Gulf War, and allowed U.S. aircraft and ships to use its facilities. It has played a moderate role in the Horn, and for all its internal problems, is one of the more stable states in the region.

Djibouti relies on the French fleet, the French air force, and the deployment of French troops for its security. France normally keeps 4,000 men deployed in Djibouti, with one Foreign Legion regiment, one regular infantry regiment, and one fighter-ground attack squadron. It is uncertain how long France will maintain these forces, but Djibouti has no foreseeable hope of defending itself against either Ethiopia or Somalia. It also has considerable strategic importance as a staging point for any French forces helping to defend the Gulf, and to any power seeking a port to control the eastern entrance to the Red Sea.

Maintaining as much stability in Djibouti as ethnic conflict permits is in the interests of both the West and the region. This can best be accomplished through foreign aid, and by encouraging France to maintain its role in Djibouti, the Red Sea area, and the Indian Ocean. Any effort to build-up Djibouti's military forces **would do** little more than encourage civil war, and could not give Djibouti any real capability to defend against an unstable Ethiopia or Somalia.

F. Somalia[89]

Year	Manpower (1,000s)	Tanks	Aircraft	Defense Spending $ Millions	Arms Imports $ Millions	Arms Exports $ Millions
1967	16	18	12	8	-	-
1973	25	150	100	19	39	-
1982	54	140	55	50	130	-
1988	47	290	63	60	30	-
1991	8	270	50	19	-	-

[89] The military manpower, force strength, and equipment estimates in this section are made by the author using a wide range of sources, including computerized data bases, interviews, and press clipping services. Most are impossible to reference in ways of use to the reader. The force strength statistics are generally taken from interviews, and from the sources reference for each paragraph. They also draw heavily on his The Gulf and the Search for Strategic Stability (Boulder, Westview, 1984) and The Gulf and the West (Boulder, Westview, 1988).

Extensive use has also been made of the annual editions of the International Institute for Strategic Studies Military Balance (IISS, London), in this case, the 1991-1992 edition, and of the Jaffee Center for Strategic Studies, The Military Balance in the Middle East (JCSS, Tel Aviv), especially the 1990-1991 edition and working materials from the coming edition. Material has also been drawn from computer print outs from NEXIS, the United States Naval Institute data base, and from the DMS/FI Market Intelligence Reports data base. Other sources include the Military Technology "World Defense Almanac for 1991-1992," published in early 1992; Foreign Affairs Division, "Middle East Arms Control and Related Issues," Washington, Congressional Research Service, 91-384F, May 1, 1991; and Middle East Economic Digest, "MEED Special Report: Defense," Volume 35, December 13, 1991.

Weapons data are taken from many sources, including computerized material available in NEXIS, and various editions of Jane's Fighting Ships (Jane's Publishing); Jane's Naval Weapons Systems (Jane's Publishing); Jane's Armor and Artillery (Jane's Publishing); Jane's Infantry Weapons (Jane's Publishing); Jane's Military Vehicles and Logistics (Jane's Publishing); Jane's Land-Base Air Defense (Jane's Publishing); Jane's All the World's Aircraft (Jane's Publishing); Jane's Battlefield Surveillance Systems, (Jane's Publishing); Jane's Radar and Electronic Warfare Systems (Jane's Publishing), Jane's C^3I Systems (Jane's Publishing); Jane's Air-Launched Weapons Systems (Jane's Publishing); Jane's Defense Appointments & Procurement Handbook (Middle East Edition) (Jane's Publishing); Tanks of the World (Bernard and Grafe); Weyer's Warships (Bernard and Grafe); and Warplanes of the World (Bernard and Grafe).

Other military background, effectiveness, strength, organizational, and history data are taken from Anthony H. Cordesman, The Gulf and the Search for Strategic Stability, Boulder, Westview, 1984, The Gulf and the West, Boulder, Westview, 1988, and Weapons of Mass Destruction in the Middle East, London, Brassey's/RUSI, 1991; Anthony H. Cordesman and Abraham Wagner, The Lessons of Modern War, Volume II, Boulder, Westview, 1989; Lij Imru Zelleke, The Horn of Africa, A Strategic Survey, Washington, International Security Council, 1989; Peter Biles, "Filling the Vacuum," Africa Report, Nov/Dec 1991, pp. 35-37; Theodore Dagne, "The Horn of Africa: A Trip Report," Congressional Research Service 91-823, November 15, 1991; Edmond J. Keller, "A New Direction for U.S.-Somalia Relations, "The World & I, April, 1989, pp. 127-132; the relevant country or war sections of Herbert K. Tillema, International Conflict Since 1945, Boulder, Westview, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992; various annual editions of John Laffin's The World in Conflict or War Annual, London, Brassey's, and John Keegan, World Armies, London, Macmillan, 1983.

[89] CIA, World Factbook, 1991; Department of Defense and Department of State, Congressional Presentation for Security Assistance Programs, Fiscal Year 1993, Washington, Department of State, 1992.

Somalia achieved independence is a nation of 673,660 square kilometers, or slightly smaller than Texas. It had a 58 kilometer border with Afars and Issas (Djibouti), a 1,600 kilometer border with Ethiopia, a 682 kilometer border with Kenya, and a 3,025 kilometer coast line on the Gulf and Aden and the Red Sea. Somalia disputed all of these borders when it achieved independence and still does. It claims the Ogaden province in Ethiopia and much of its southern border area, has made tentative claims to Djibouti, and claims ethnic Somali territory in Kenya.[90]

Somali Military Developments

Somalia achieved independence in 1960, and was formed out of parts of the former British and Italian colonies in northwest Africa. Although the result was a nation formed largely out of Somali-speaking tribes, there was no real sense of national consiciousness on the part of many of tbhese tribes. They were divided into six clans and often contested for power. The leading four clans were all Sameli and included the Dir in the northwest, the Isaq in the north, the Darod in the central West, and Hawiye on the coast. The two lesser Sab clans include the Rahanwin and Digil.

In 1960, Somalia was ruled by the Hawiye and Darod clans, but an increasing number of Dir and Isaq clansmen came into government and the military forces after independence, and two key elements of the Darod clan (the Marehan and Mijerteyn) had long standing feuds that divided the clan. These shifts in the power of the various clans led to a long period of political unrest, culminating in the assassination of President Shirmake in 1969. They also contributed to a pattern of government based on nepotism and corruption that did little to aid the country's development.

In October, 1969, the army carried out a coup which brought Major General Siad Barre to power as a military dictator, governing through a Supreme Revolutionary Council (SRC). Barre saw scientific socialism as a means of unifying the clans, and declared Somalia a socialist state in 1970. Barre also played East off against West. He allowed the USSR to set up air and maritime facilities which included airfields at Uanle Uen, Hargeisa, and Galcao, a radar base at Agfoi, and maritime bases at Birkao and on several islands. In 1974, Somalia signed a Treaty of Friendship and Cooperation with the USSR, and this gave Barre access to large amounts of Soviet and Cuban weapons.

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[90] Estimates differ, but Somalia today seems to be about 85% Somali, with the rest mainly Bantu, There were about 30,000 Arabs, 3,000 Europeans, and 800 Asian in 1991. Virtually all Somalis are Sunni. The total population is around 6,709,000, with a growth rate of 3.3%. The CIA estimated that there were 1,601,000 males between the ages of 15 and 49, and 903,00 fit for military service. The IISS estimated in late 1991 that there were a total of about 353,000 males and 335,000 women in the age group from 18-22 years, 285,000 males and 290,000 women in the age group from 23-32 years, and 438,000 men and 454,000 women in the age group from 23 to 32 years.

Ironically, Barre initially attempted to destory the power of the clans as part of his socialist ethic, and used the military to conduct several education campaigns to reduce corruption and nepotism. As time went on, however, Barre began to exploit nepotism and clan allegiances as a way of obtaining personal control over the country and the SRC. He increasingly relied on his own Marehan clan, a sub-clan of the Darod family, and members of the Ogaden and Dulbahante, which are also sub-clans of the Darod.

Once he consolidated power, Barre attempted to use Somalia's new Soviet bloc equipment to conquer the Ogaden in 1977 and 1978, using a Somali trained, equipped, and supplied West Somali Liberation Front in the north and an Abo Liberation Front in the south. Both fronts were little more than extensions of the Somali army. He had great initial success, and reached the gates of Harar.

As has been discussed earlier, however, the Soviet Union chose to shift its alliances to the Marxist Mengistu government in Ethiopia. As a result, the USSR not only left Somalia and cut off military supplies, it provided Ethiopia with Cuban troops and pilots, and massive supplies of new weapons and equipment. By March, 1978, this allowed Ethiopia to shatter the Somali forces and drive them out of the Ogaden.

Ethiopia also actively subverted the various Somali clans, and this led to at least one coup attempt in 1978. Ethiopia helped found the Somali Salvation Democratic Front (SSDF) by providing money to members of the Majerteen clan. Officers of the Majerteen clan then attempted to assassinate Barree. Barre replied by ruthlessly killing their leaders, and then helped fund rival factions. This led to fueding which caused the collapse of the SSDF in the mid-1980s.

Military Expenditures and Arms Transfers

The Soviet shift to Ethiopia forced Barre to turn to the U.S. and the West for military support and aid, although he never received anything approaching the level of aid he sought. Somalia's annual defense budgets slowly rose from $14 million in 1973 to around $50 million in 1979, and then dropped below $60 million annually during the rest of the 1980s. ACDA indicates they reached $58 million in 1978, $58 million in 1979, $37 million in 1980. $48 million in 1981, $50 million in 1982, $47 million in 1983, $39 million in 1984, and $46 million in 1986.[91] The IISS has issued defense spending estimates of $83 million in 1986, $46 million in 1988, and $18.05 million in 1989.[92]

Somalia's arms imports fluctuated from year to year, and reporting on them is exceptionally uncertain. ACDA indicates they often exceeded defense expenditures, and

[91] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table I.
[92] IISS, Military Balance, 1991-1992, p. 64.

reached $240 million in 1978, $130 million in 1979, $200 million in 1980. $60 million in 1981, $130 million in 1982, $70 million in 1983, $90 million in 1984, $60 million in 1985, $20 million in 1986, $20 million in 1987, $30 million in 1988, and $30 million in 1989.[93]

Somalia's got little from the U.S. during the early 1980s. Its arms imports during 1979-1983 totaled $580 million, of which $30 came from the USSR, $5 million each from France and the UK., $410 million came from Italy, $50 million from the PRC, $10 million from Poland, and $70 million came from a variety of other countries.[94] This situation changed during the mid-1980s, although Somalia never got large amounts of arms from the U.S. by Middle East standards. During 1984-1988, Somalis got only $200 million worth of imports, with $60 million from the U.S., $10 million each from France and the PRC, $20 million from Italy, and $100 million from other countries.[95]

ACDA changed its way of reporting arms sales by source in 1992, According to this new styles of reporting, Somalia imported a total of $160 million worth of arms during 1985-1989, with a total of $50 million from the U.S., $10 million from France, $5 million from the PRC, $10 million from other Warsaw Pact countries, $20 million from other European countries, $10 million from other Middle Eastern countries, $5 million from other East Asian states, and $50 million from other developing countries.[96]

Somali Military Forces and the Impact of Civil War

None of these arms transfers dealt with the main problem Somalia faced, which was tribalism. From 1969 onwards, Barre used his control of the tribes in the south to suppress the Isaq clan in the north: While the Darods make up about 25% of the population, the Isaq make up another 20% of the nation's population and are a very powerful clan. They formed their own Somali National Movement in 1981, centered around the cities of Berbara, Borana, Burao, and Hargesia.

Barre's repressive efforts did as much to divide the country and create clan and tribal opposition as they did to solve his immediate military problems. He also progressivley favored his own Marehan sub-clan in appointments and in dealing with the

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[93] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, Table II The IISS has issued defense spending estimates of $83 million in 1986, $46 million in 1988, and $18.05 million in 1989.

[94] Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, 1985, pp. 98, 131, 140, 146.

[95] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1989, Washington, GPO, 1990, p. 115; Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1986, Washington, GPO, 1987, p. 143. Some estimates put the value of Soviet arms transfers from 1977 to 1990 at roughly $11 billion.

[96] Arms Control and Disarmament Agency (ACDA), World Military Expenditures and Arms Transfers, 1990, Washington, GPO, 1992, pp. 133-134.

country's series of economic crises. This increasingly left him dependent on the Marehan sub-clan with lesser support from the Dulbahante sub-clan. It also left him vulnerable to pressure from Ethiopia, which provided money to any clan or movement that would challenge Barre.

Siad Barre attempted to deal with this situation by ending his conflict with Ethiopia. An agreement to restore relations between Ethiopia and Somalia was signed on April 15, 1988, and appeared to offer both Mengistu and Siad Barre a way of eliminating a costly and pointless border war. However, the Somali National Movement (SNM), a predominantly Isaq group in the north rejected the agreement and launched an attack on the Barre government.

In late May, 1988, SNM guerrillas attacked government officials in Hargesia and Burao in the north. The Somali army then launched savage attacks on these cities and their civilian population during the rest of 1988 and 1989 in the area of Hargesia, Berbera, and Burao that killed at least 5,000 Isaq civilians, and some 350,000 Isaqs fled to Ethiopia.[97] At the same time, Barre launched a crack down in the south that alienated many of the southern clans. He also split with the Ogadeni sub-clan of his Darod clan because it objected to the peace agreement with Ethiopia. In 1989, he fired his Ogadeni Minister of Defense, and this led to the first open split within his army. In late 1989, Oamr Jess and about 200 Ogadeni soliders deserted from the Somali army.

Instead of reducing his opposition, Barre managed to alienate many of his former supporters without ending any of his existing opposition. In 1989, at least nine anti-Barre clan movements were established, and two new anti-Barre military groups were formed: The United Somali Congress (USC), a predominately Hawiye group, and the Somali Patriotic Movement (SPM), formed largely from tribes in the Ogaden.[98]

By this time, Barre was also in his 80's, and the nation's economy had virtually collapsed. He could not unite enough tribal groups in its support to maintain effective

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[97] Manchester Guardian Weekly, January 15, 1989, p. 10; Washington Post, September 10, 1989, p. A-28; General Accounting Office, "Somalia: Observations Regarding the Northern Conflict and Resulting Conditions," Washington, GAO/NSIAD-89-159, May, 1989; Kayode Soyinka, "The Collapse Born of Civil War," World Press Review, March, 1989, pp. 28-29; Bureau of Public Affairs, "The U.S. and Sudan: Peace and Relief," U.S. State Department, February, 1989; U.S. News and World Report, July 24, 1989, p. 32; Washington Post, February 19, 1990, p. A-21; Christian Science Monitor, October 23, 1989, p. A-15.

[98] Somalian clans do not occupy single parts of the country. The Dir dominate the area in the northwest near Djibouti and some enclaves along the coast near Mogadishu, the Isaq dominate the area from Ethiopia north to the Gulf of Aden. The Darod occupy the area of the Horn extending southwest deep in to Ethiopia, and also occupy the south of the country extending into Kenya. The Hawiye occupy the area north of the capital about half-way to the Horn and to the west to areas near Ethiopia. There are numerous other clans.

military forces. His efforts to assert control did little more than lead to a broader civil war, with some elements of the southern clans attacking Barre, along with elements of the Ogadenis who fled Ethiopia after their defeat fighting for Barre. As a result, Barre's control over the country weakened steadily during in 1989 and 1990.

The rebel United Somali Congress began to infiltrate Mogadishu in late 1990, preparing for an effort to seize the city. Barre countered by a house to house search in December, 1990, but this triggered the USC coup, rather than prevented it. The Barre forces then seem to have panicked, although they were larger and better equipped than the USC. As a result, the USC drove Barre and his Somali Revolutionary Socialist Party regime out of power. After four weeks of bloody fighting, which killed at least several thousand civilians, Barre and his advisors fled to his clan stronghold in the south. This left the USC in charge of the capital, and allowed the SMN to seize complete control in the north.[99]

While relations between the various anti-Barre groups had been relatively smooth until Barre's departure, the USC declared itself the government on January 27, 1991, without consulting any of the other anti-Barre groups. It announced that its head, Ali Mahdi Mohammed, was president. The SNM reacted in May, 1991, by declaring that northern Somalia was an independent country, and seceded.

At the same time, the USC alienated many of the clans in the south, which retreated to their own territorial strongholds. The Somali Patriotic Movement, which has heavy support from the Ogaden clan, formed its own enclave. At the same time, the USC divided between the supporters of Ali Mahdi and the supporters of head of the USC's military forces and its chairman, General Mohamed Farah Aideed. While both Mahdi and Aideed were Hawiyes, they belonged to different sub-clans (Mahdi is a Abgal and Aideed is a Habra Gadir) and split their clan as well as the USC.

In spite of repeated efforts to reconcile the factions within the USC, Somalia deteriorated into a state constant low level civil war. The Aideed faction gained control of Kismayu and became one of the strongest factions in Mogadishu while Mahdi became dependent on militia groups. At least six major armed factions emerged, including Barre, who operated out of his clan stronghold in southern Somalia near the Kenyan border.

By the fall of 1991, the Mahdi-Aideed rivalry within the USC led to constant fighting in the capital. At least several thousand more Somalians died in the fighting before an attempt was made to form a unity government in October, 1991. This government was

[99] Financial Times, April 15, 1991, p. 16; Christian Science Monitor, December 16, 1991, p. 8; Washington Post, November 22, 1991, p. A-36.

headed by a third leader, Prime Minister Omar Arteh Ghalib, and included 83 ministers and assistant ministers in an effort to include every faction. General Aideed rejected the unity government, however, and it failed to bring peace to the capital or the country.

Each faction continued to arm while the country's economy moved towards collapse, urban services broke down in Mogadishu, and food became scarce in many areas. The fighting between Mahdi and Aideed also grew more intense, and a February 14, 1992 cease-fire brokered by the UN did nothing more than lead Aideed to try to outmaneuver Mahdi by using the cease-fire to move his forces. Mogadishu became little more than the scene of fighting by warring gangs using artillery, machine guns, and 106mm recoilless rifles. Peace efforts by neutral clans did little more than reduce the use of artillery, and any benefits from the reduction in fighting had been countered by the fact the capital was in ruins and the population suffered from malnutrition and starvation. The situation in a would-be independent Somalialand in the north was little better. Berbera had lost much of its population, and Hargesia and Burao were in ruins, and SMN forces continued to clash with the USC.

The UN formed a UN Opertion in Somalia (UNOSOM) in April, 1992, in an effort to halt the fighting and guard relief workers. It had a 50 man unarmed peace monitoring group and a 500 man armed force to guard relief workers. The Un could do little to halt the fighting, however, and Aideed proved strong enough to force Barre into exile in Kenya in May. At the same time, no one proved strong enough to bring any kind of order, and a combination of total economic collapse, civil disorder, and drought began to bring famine. Some 4.5 million people out of Somalia's population of 6 million were living on the edge of starvation.

Repeated efforts to get Somalia's factions to allow the transit of outside aid failed during May to September, 1992. By the early summer, 1.5 million people were on the edge of starvation, and relief efforts were paralyzed by clan fighting and outright banditry. While the UN strengthened its forces, many Somalis fled the country and many died. The economic distribution system consisted of little other than looting and relief transfers, and many towns in the south literally starved to death. Guerilla warfare prevented agricultural efforts even where there was water, and at least 25% of the nation's livestock perished between January and July.

This led the country's acting prime minister, Omar Arteh Ghalib, to request a 10,000 man UN peace keeping force, but the UN could do little more than send 500 troops and increase the flow of supply. Aideed opposed a UN peacekeeping effort, and without his support, there was little any outside force could do to bring real order. Accordingly, the U.S. arranged an airlift based in northern Kenya designed to fly in aid to

individual cities and bypass armed areas and the chaos in the ports. This provided an increase in the flow of aid to the south an d the center of the country, but Somalia should no signs of order or recovery in September, 1992, and it was clear that even active outside military intervention could not prevent hundreds of thousands more deaths. [100]

Somalia's Military Forces Before Barre's Fall

Somalia's regular armed forces have been replaced with paramilitary forces loyal to Somalia's divided ethnic factions. Before the collapse of the Barre government, however, the Somali armed forces consisted of about 65,000 men, more than half of which were extremely low quality conscripts.

The Somali Army had a nominal strength of 60,000 men with 3 tank brigades, 44 mechanized and infantry brigades, 6 commando brigades, 3 field artillery brigades, 30 field artillery battalions, and 40 air defense battalions. Most of these "brigades" were about the size of reinforced battalions in other Middle East armies and many were severely under strength. Training was very limited, and the officer corps was highly political, corrupt, and tribally aligned.

The army had an inventory of some 290 tanks, including 30 Centurions, 120 M-47s, 30 T-34s, and 110 T-54/T-55s.[101] Its other armored vehicles include 10 M-41 and 10 PT-76 light tanks, and 30 BDRM,-2, 15 AML-90 10 Ferret, and 30 Saladin armored reconnaissance vehicles. It also had some 484 armored personnel carriers, including 64 BTR-40/50/60s, 100 BTR-152, 310 Fiat 6614/6616, and 10 Panhards. The army had very little armored warfare capability except in executing limited maneuvers using armor to support infantry operations. Its ability to conduct sustained operations with armored vehicles was very limited, and the mix of different types of vehicles from different supplier countries made these training, maintenance, and sustainability problems worse.

Somalia did have a comparatively largely number of towed artillery weapons and substantial stocks of artillery munitions. It had approximately 300 weapons at the time of the collapse of the Barre government, with 23 M-1944 100mm, 100 M-56 105mm, 92 M-1938/D-30 122mm, and 18 M-198 155mm weapons. It also had 120 81mm, 200 M-41

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[100] Economist, February 22, 1992, p. 33-34, July 18, 1992, p. 41, August 1, 1992, p. 36, August 15, 1992, p. 32 ; New York Times, January 30, 1992, p. A-2; April 4, 1991, p. A-3, February 27, 1992, p. A-3, July 19, 1992, p. A-1, July 20, 1992, p. A-3, July 25, 1992, p. A-1, August 15, 1992, p. A-1, August 30, 1992, p. A-12; Washington Post, January 11, 1992, p. A-1; February 15, 1992, p. A-28, February 16, 1992, p. A-44, June 7, 1992, p. A-32, July 4, 1992, p. A-1, July 20, 1992, p. A-12, August 24, 1992, p. A-13, August 29, 1992, p. A-1; Washington Times, January 24, 1992, p. A-9, May 1, 1992, p. A-16, August 18, 1992, p. 9; Theodore S. Dagne, "Somalia: A Country at War - Prospects for Peace and Reconciliation," Congressional Research Service, CRS 92-522F, June 15, 1992 .

[101] Army equipment data are based on the author's estimate adapted from the IISS, Military Balance, 1990-1991, p. 117.

82mm, and 50 M-1943 120mm mortars. Somalia had only minimal ability to maneuver its artillery, shift fires, carry out beyond visual range targeting, and conduct counterbattery operations. It could, however, conduct mass fire against area targets, and attack targets that could be visually located.

The army's other weapons included TOW and 100 Milan anti-tank guided weapons, with at least 20 of the TOW launchers mounted on vehicles. It had 300 LRAC 89mm rocket launchers, and 60 M-40A1 106mm recoilless rifles. Its air defense weaponry consisted of 20-50 SA-7 launchers, 50 ZU-32-2 and 4 ZSU-23-4 anti-aircraft guns, 160 M-1939/Type-63 37mm anti-aircraft guns, 20 S-60 57mm anti-aircraft guns, 24 KS-19 100mm anti-aircraft guns, and an unknown number of 20mm and 40mm anti-aircraft guns. The army had considerably better proficiency with these light weapons than with its heavy weapons, and often used its anti-aircraft guns as area fire weapons against light vehicles and infantry.

The small Somali navy was based at Berbera, Mogadishu, and Kismayu. It had 2,000 men and 2 245-ton Soviet Osa II class missile patrol boats with four SS-N--2 Styx missiles each, 4 200-ton Soviet Mol-class fast attack craft, and 1 Soviet 800-ton Polnochny class LCT and 1 Soviet 70 ton LCM. patrol ships and coastal combatants.[102]

The 2,500 men air force had 56 combat aircraft, including 10 MiG-17 and 4 Hunter attack aircraft, 22 J-6 and 8 MiG-21 air defense fighters, 1 Hunter FR-76 reconnaissance aircraft, and 6 SF-260W COIN aircraft. The air force also operated Somalia's larger surface-to-air missile systems, including 42 SA-2 and 9 SA-3 launchers. Its fixed wing transport aircraft included 3 An-2s, 3 An-24s, 2 An-26s, 4 BN-2s, 1 C-212, and 1 G-222. Its helicopters included 6 Mi-4s, 2 Mi-8s, 1 Agusta Bell 204 and 4 Agusta Bell 212s. In practice, the Air Force had only about 30%-40% of its aircraft operational -- almost all severely limited by low training and maintenance standards. It had only minimal capability to operate Somalia's air defense warning system and surface-to-air missiles.[103]

Somalia also had an 8,000 man national police force, a 1,500 man border guard force, and a People's Militia with a nominal strength of 20,000 men. These units had lost much of their strength long before the collapse of the Barre government.

Somalia's Military Forces After Barre's Fall

There is no way to know how many of these forces and weapons survive. The military equipment captured from the Siad Barre government, was divided between tribal factions, but much of it was rendered inoperable and much cannot be operated because of

[102] Estimate based primarily on Jane's Fighting Ships, 1991-1992, pp. 487-488.
[103] Statistics are extrapolated from the IISS, Military Balance, 1990-1991, p. 117.

a lack of skills and spare parts. It is also impossible to track the various military factions from day to day. Immediately after the overthrow of Siad Barre, the United Somali Congress had about 6,500 full time men under arms, divided between the Somali National Movement in the north and the various factions in the South. At least 30,000 men, however, were operating in part time forces or in support of the tribal factions.

The break-up of the anti-Barre factions soon after driving Barre out of the country led to a new civil war, and fighting between the factions that used much of the equipment captured from the Barre government. Scattered artillery fire took place throughout the capital, indicating that many of the simpler army weapons had fallen into factional hands, but there were few reports of any use of armor. Light army weaponry was widely dispersed, falling into both factional hands and those of private citizens who bought or stole weapons to defend themselves.

Strategic Interests and Arms Control

Somalia has lost most of its strategic importance with the end of the Cold War, and has degenerated into a state of civil war that needs every possible mediation and aid effort. As is the situation in the Sudan and Ethiopia, no case can be made for further arms transfers to Somalia. The present GDP is less than $1.7 billion and the per capita income under $210. There has been negative economic growth for at least four years, and the population growth rate is 3.3% in spite of famine and refugee deaths. Unfortunately, sufficient arms and ammunition exist to allow a Somali civil war to continue for some time even if no covert low level arms transfer occur to any of the factions involved.

G. The Problem of the Red Sea and the Horn

The Cold War, regional conflicts, and internal religious and ethnic conflicts, have turned Somalia and the Sudan into living hells, threaten fragile and divided governments in Djibouti and Ethiopia, and raise serious questions about the long term stability of Yemen. Hopefully, the end of the Cold War will end the era in which outside powers ignored the cost that building up local military forces and making major arms transfers exerted in human suffering.

Ethiopia, Somalia, the Sudan, and Yemen will be far better off as abandoned pawns than as the focus of superpower strategic interests. While Djibouti does benefit from the presence of France, the problem still arises as to whether France will push for a more stable and democratic government or allow tensions between Afar and Issa to fester because political pressure is strategically inconvenient.

What all five states have in common is that none need more arms or military support. In each case, local ethnic groups need to work out their own future, either as part of the same country or as new and divided nations. It must also be said, however, that each of these nations is largely a self-inflicted wound. East and West may have armed tribalism and religious hatred, but they did not create them. Further, political and economic reform must come from within, not be demanded in the form of aid. Unfortunately, the prospects of such reform are uncertain at best. Djibouti, Ethiopia, and Yemen all suffer from problems that their governments may or may not resolve. Somalia and the Sudan may well descend into near barbarism before civil exhausts their warring leaders into something approaching common sense.