

Military Balance 1971

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1 PREFACE

The Military Balance introduces this year much new material. There are tables which give comparative figures for the last 20 years for the armed forces, defence expenditure and Gross National Product of major countries. The characteristics of the world's tanks are set out. Included as part of the European balance is a comparison of the new ship deliveries to the NATO and Warsaw Pact navies between 1961-70. There is a special section showing forces outside their parent country and the countries in which they are stationed. Other new features are tables of short-range nuclear delivery vehicles and of arms production in countries with significant and growing, but not all-embracing, defence industries. Certain items have been omitted, to save space or because last year's entries remain essentially up to date. The Latin American countries are a case in point: they have been excluded this time but it is the intention to return to them next year. An index is included (see p. 83) to give guidance to features appearing in one or more, but not all, of the last four issues (including this one). The Institute assumes full responsibility for the facts and judgments which the document contains. The co-operation of governments has been sought and in many cases received. Not all countries have been equally co-operative in producing information and some figures have been estimated. The Institute owes a considerable debt to a number of its own members and consultants who have assisted in compiling and checking material. Manpower figures given are those of regular forces, although an indication of the size of para-military forces, militia or reserve forces has been given in the sections dealing with individual countries. Figures for defence expenditures are the latest available and are generally exclusive of military aid. A glossary of the abbreviations that have been used in the text will be found overleaf. On the facing page are notes explaining the bases for the conversion of national currency figures into dollars and giving the strengths of some military formations. This study examines the facts of military power as they existed in July 1971. No projections of force levels or weapons beyond 1971 have been included, except where explicitly stated. The material should not be regarded as a comprehensive guide to the balance of strategic power; in particular it does not reflect the facts of geography, vulnerability or efficiency, except where these are touched upon in the appendix on the NATO-Warsaw Pact balance. The Military Balance is complemented by another annual publication, Strategic Survey, published each spring, which reviews the most significant issues of international security and conflict in the previous calendar year and describes the major developments in strategic and defence policy and in weapons throughout the world.

September 1971

2 The United States and the Soviet Union

Whatever their other commitments or capabilities, the primary mission of American armed forces remains the deterrence of a strategic attack, necessarily with nuclear weapons, upon the United States. The principal object of that deterrence is the only other 'super-power', the Soviet Union, with China as a subsidiary object of potentially increasing importance. Conversely, although less explicitly, Soviet strategic nuclear forces appear to be designed primarily to deter an American strategic attack upon the Soviet Union. The strategic forces and weapons of both super-powers have capabilities which, at least in theory, go beyond reciprocal deterrence, to the point of offering some prospect of limiting the damage which either would suffer should a strategic nuclear war occur. They also provide means of deterring lesser nuclear powers. In terms of intentions, however, it seems that deterrence of each other represents the first priority for both countries. Soviet and American representatives have been engaged since November 1969 in an effort to agree upon the mutual limitation of strategic nuclear forces. These Strategic Arms Limitation Talks (SALT) have not yet produced any formal agreement, although the governments issued a statement on 20 May 1971 in which they spoke of working out an agreement during the remaining months of the year which would limit the deployment of anti-ballistic missile (ABM) systems and which would also include 'certain measures' of limitation on offensive weapons. Meanwhile, the expansion or modernization of strategic nuclear forces has continued on both sides. The Soviet Union, having matched the American total of offensive strategic missiles, has continued to deploy additional inter-continental, ballistic missiles (ICBMs) on land, to construct additional ballistic-missile submarines and to develop more effective weapons for its offensive forces. At the same time, the United States has embarked upon an extensive modernization of its strategic offensive weapons which, over the next four years, will add considerably to the number and effectiveness of the nuclear warheads which its own land-based and sea-based forces can deliver. Both countries have also pursued attempts to deploy an effective ABM system: the Soviet Union by improving the small system which it already has, the United States by starting deployment of the Safeguard system which was announced in 1969. With an estimated total of 1,510 ICBM (about 100 of which are positioned in MR/IRBM fields, and may, therefore, be intended for possible use against targets other than the United States), the Soviet Union has now surpassed the United States ICBM force of 1,054. Soviet deployment has, however, slowed down considerably since the beginning of 1970 and may have reached, or be approaching, its planned level. A number of underground silos of a new type have been observed, but it is not clear whether these are intended to fire a new ICBM (of which no other evidence has been reported) or to provide added protection for missiles of existing types, and especially for the large SS-9 missile. If, as seems possible, the latter is the case, this improvement of the silo for the SS-9 system will

match the testing of an SS-9 multiple warhead cluster, containing three re-entry vehicles, in which the Soviet Union has been actively engaged since 1968. The United States has made no effort to increase its total of ICBM launchers. It has, however, continued the replacement of Minuteman 1 missiles with Minuteman 3 missiles which began in 1970. Over 500 Minuteman 3 launchers, each of which carries three independently-targeted war-heads, are to be deployed, under present plans, by 1975. This will have the effect of doubling the number of targets at which the total Minuteman force can strike. Although the Soviet Union has continued to launch Y-class ballistic-missile submarines now at a rate of some 7-8 a year, it has not yet overtaken the United States in this field. It now has about 350 SLBMs in nuclear-powered submarines (of which some 320 are in modern Y-class boats), in contrast with the 656 launchers in the parallel American force. In terms of launcher totals, the Soviet Union's construction programme continues to bring it closer to the United States at a rate which could produce numerical equality by 1974. Moreover, the Soviet Union has been testing 2 a new SLBM which, with its estimated range of some 3,000 miles, would be comparable to the American Polaris vehicle. Meanwhile, the United States has begun to deploy the more advanced Poseidon SLBM, with at least 10 independently-targeted re-entry vehicles. The first submarine equipped with Poseidon became operational during early 1971; the completion of the planned programme for converting 31 boats would raise the total number of nuclear warheads deliverable by the American SLBM force from about 1,500 (capable of attacking 656 separate targets) to over 5,400 (capable of attacking some 5,000 separate targets). For the longer term, development work continues on an Undersea Long-Range Missile System (ULMS), which might replace the Poseidon submarines themselves at the end of the 1970s. In contrast with the quantitative reinforcement of their offensive missile forces, the Soviet Union and the United States have continued to allow their strategic bomber forces to dwindle. The number of American B-52 bombers in service has dropped to well below 500, while the Soviet force of Mya-4 Bison and Tu-20 Bear bombers is now estimated at 140 aircraft (with an additional 50 Bison tankers). On the American side, however, the effectiveness of the B-52 force is likely to be greatly increased by the introduction of the new Short-Range Attack Missile (SRAM), which has been ordered into production and which is expected to have an operational range of 60-75 miles. Each B-52 could carry up to 24 SRAM, while the proposed B-1 bomber, prototype development of which is under way, would, if produced, be able to carry some 32 SRAM when it became operational in about 1978. The total number of nuclear weapons deliverable by the American strategic bomber force is thus likely to rise sharply during the next five years. The Soviet Union has shown no apparent interest in matching this particular effort. The prototype of a new variable-geometry ('swing-wing') bomber has been observed, but it is not clear that, even if produced, it would have an effective inter-continental capability, and there have been no reports of any attempt to develop air-to-surface missiles for it (or for existing Soviet bombers) of a type comparable to SRAM. The Soviet Union, with some 10,000 anti-aircraft missiles (SAM) and 3,000 interceptor aircraft, has devoted a great deal more effort to territorial air defence than the United States, although the latter has continued development of its Over-the-Horizon-B (OTH-B) radar system, designed to detect attacking aircraft at great range, and of an Airborne Warning and Control System (AWACS), designed to track aircraft flying below the coverage of other radar systems. Both countries have continued to devote efforts

to developing means of defence against ballistic missiles. The Soviet Union, which completed deployment around Moscow of 64 ABM launchers for its Galosh missile in 1970, has been testing an improved ABM missile and may be ready to begin its deployment. It does not appear, however, to have modified the basic orientation of its ABM system, whose missiles and radars are deployed in a manner which suggests a strong bias towards defence against an attack by American ICBM. The United States has begun work on three sites for its Safeguard ABM system, each containing long-range Spartan and short-range Sprint missiles for the protection of a part of the Minuteman force against ICBM or SLBM attack, the first of which could be operational at the end of 1974. Funds have also been requested for a fourth site, either at an additional Minuteman field or at Washington, D.C., as well as for the continuation of development work on an alternative system, known as Hard Site,* for the more economical and less vulnerable defence of Minuteman. On both sides, however, continued deployment of ABM launchers now depends heavily upon the outcome of the SALT negotiations. The manpower strength of American conventional forces has declined from the 1968 peak of over 3.5 million to the 'pre-Vietnam' level of 2.7 million and is well on the way towards the 1972 target of 2.5 million. At the same time, withdrawals from Vietnam and South Korea and the re-deployment of units from Japan have marked the further contraction of American military deployment in Asia. No parallel manpower reductions or deployment changes have been apparent in the Soviet case. As far as navies are concerned the American tendency to reduce the active ship strength, while improving its quality, has been generally followed by the Soviet Union. Both navies have reduced overall numbers while continuing with modernization (see p. 82 for some comparative figures of new construction). This would replace the Safeguard Missile Site Radars (MSR) with a large number of smaller and cheaper radars.

2.1 THE UNITED STATES

Population: 208,100,000.

Military service: selective service for two years.

Total armed forces: 2,699,000.

Estimated GNP 1970: \$977 billion.

Defence budget 1971-72: \$78,743 million.

2.1.1 Strategic Forces

2.1.2 (A) OFFENSIVE

ICBM: 1,054 (Strategic Air Command - SAC). 400 Minuteman 1. 500 Minuteman 2. 100 Minuteman. 54 Titan 2.

SLBM: (US Navy) 656 in 41 SSBN: 4 with Poseidon (4 more are converting). 27 with Polaris A-3. 10 with Polaris A-2.

Aircraft (SAC) Bombers: 520 70 FB-111 in 4 squadrons. 150 B-52 C/F in 10 squadrons. 210 B-52 G/H in 14 squadrons. 90 B-52 in active storage.

Tankers: 420 KC-135.

Strategic Reconnaissance: SR-71; 2 squadrons.

2.1.3 (B) DEFENSIVE

North American Air Defense Command (NORAD), with its headquarters at Colorado Springs, is a joint Canadian-American organization. American forces under NORAD are Aerospace Defense Command (ADC) and Army Defense Command (ARADCOM); combined strength 80,000.

Aircraft

Interceptors: 522.

(i) regular: 11 squadrons with F-106.

(ii) National Guard: 5 squadrons with F-101; 12 squadrons with F-102; 1 squadron with F-104.

AEW aircraft: 3 squadrons with EC-121.

SAM (i) regular: 2 battalions with HAWK; 5 squadrons with 170 Bonmarc B. A reform of the selective service system is being worked on.

1 July 1973 has been set as the target date for reaching zero draft calls. t

New obligational authority for FY 1971-72; expected outlay is \$76,000 million. + Characteristics of missiles and aircraft are given in Table 2 on p. 57. § 2 squadrons of B-52, and about 100 KC-135 are based in South-East Asia. II Excluding Canadian.

(ii) National Guard: 27 batteries with Nike- Hercules. Radar and tracking stations - a chain including: the Ballistic Missile Early Warning System (BMEWS),- with stations in Alaska, Greenland and England. the 'forward scatter' Over-the-Horizon radar- system." the Pinetree line. the 33 radar Distant Early Warning Line (DEW). Surveillance and tracking of objects in North American air space is co-ordinated by the Semi- Automatic Ground Environment (SAGE) Sys- tem. Fourteen locations are combined with Back-Up Interceptor Control (BUIC) stations. A system (474N) of seven radar stations on the East, West and Gulf Coasts of the United States is designed specifically for the detection of submarine-launched missiles.

2.1.4 Army: 1,107,000.

3 armoured divisions. 1 cavalry division. 4 infantry divisions (mechanized) 2 infantry divisions 2 airborne divisions. 1 cavalry brigade. 3 independent infantry brigades. 1 airborne brigade. 5 armoured cavalry regiments. 5 special forces groups. 30 SSM batteries. About 200 independent aviation units with 11,600 aircraft, incl 9,000 helicopters. M-48 and M-60 med tanks; M-60 AIE2 med and M-551 Sheridan It tanks with Shillelagh; M-107 175mm SP guns, M-109 155mm and M-110 203mm SP howitzers; Honest John, Sergeant and Pershing SSM; HAWK and Nike-Hercules SAM; the Chaparral| Vulcan air defence system; and the TOW ATGW system.

2.1.4.1 RESERVES:

- (i) Army National Guard: 400,000 men capable, in five weeks from mobilization, of providing 8 full divisions and some smaller units to round out regular formations, and 36 SAM batteries with Nike-Hercules.
- (ii) Army Reserves: average paid training strength 260,000, organized in 21 brigades. In addition 48,000 undergo short tours of active duty. IT This radar-system can detect ICBM regardless of the direction or trajectory of their launch.

2.1.5 Marine Corps: 212,000.

3 divisions (19,000 men), each supported by: 1 tank battalion and 1 SAM battalion with 24 HAWK. M-48 and M-103 tanks; 105mm SP howitzers; 105mm and 155mm howitzers; 175mm guns. 3 Air Wings; 540 combat aircraft. 14 fighter squadrons with F-4 (with Sparrow and Sidewinder AAM). 12 attack squadrons, with A-6A and A-4. 1 close-support squadron with AV-8A Harrier. 3 recce squadrons with RF-4B and RF-8A. 45 AH-1 Cobra gunship helicopters. 6 heavy helicopter squadrons with CH-53A. 9 medium helicopter squadrons with CH-46A. 3 assault transport squadrons with C-130. RESERVES: Average paid training strength 49,500, plus paid training tours for a further 560. They form a reserve division and an associated air wing, which includes 4 squadrons with F-8, 5 squadrons with A-4, 2 squadrons with CH-53 and 3 squadrons with CH-46.

2.1.6 DEPLOYMENT:

Ground forces, Army and Marines, were deployed as -follows at the beginning of July 1971:

- (i) Strategic Reserve - 1 armd div; 1 cav div; 1 airborne div; 1 mech inf div; 2 marine divs; 1 marine bde; 1 armd cav regt.
- (ii) To reinforce 7th Army in Europe - 1 mech inf div (less 1 bde)* 1 armd cav regt; 1 Special Forces gp.

- (iii) Other - 1 inf bde; 1 airborne bde; 1 armd cav regt; 2 Special Forces gps. Hawaii - 1 inf bde; 1 marine div (less 1 bde). Germany
- (iv) 7th Army - two Corps incl: 2 armd divs; 2 armd cav regts; 2 infantry divs (mech); 1 infantry bde (mech).
- (v) West Berlin: 1 infantry bde. Italy - Task Force with HQ elements and 1 SSM bn. South Vietnam - 1 inf div; 1 airborne div; 1 cav bde; 1 mech bde. South Korea - 1 infantry div. Okinawa - 1 Special Forces gp. Continental United States Navy: 623,000 Aircraft carriers Submarines, attack: 53 nuclear-powered (40 with Subroc), and 46 diesel-powered.
- (vi) Anti-submarine: 3. Essex-class, each with 52 aircraft and helicopters, incl A-4C for air defence, S-2E for long-range search and SH-3 helicopters.
- (vii) Attack: 15. 1 nuclear-powered (USS Enterprise, 76,000 tons), 8 Forrestal-and Kitty Hawk-class (60,000 tons), 3 Midway-class (52,000 tons) and 3 Hancock-class (33,000) tons. Each normally carries an air wing of 70-85 aircraft organized in: 2 fighter sqns with F-4 (F-8 in the Hancock- class); 2 light attack sqns; 1 AWW sqn with A-6; and AEW, tanker and reconnaissance aircraft. Light attack aircraft include A-4 and A-7 (the A-7 due eventually to replace the A-4). RA-5C are used for reconnaissance (RF-8G in the Hancock-class). E-2A and E-1B are used for AEW, and a few KA-3B as tankers. This division is dual-based and its heavy equipment is stored in West Germany. Figures for manpower include SSBN force (see p. 3).

2.1.7 Other surface ships:

1 nuclear-powered guided-missile cruiser. 3 guided-missile cruisers. 4 guided-missile light cruisers. 1 gun cruiser. 2 nuclear-powered guided-missile frigates. 28 guided-missile frigates. 29 guided-missile destroyers. 92 gun/ASW destroyers. 6 guided-missile destroyer escorts. 51 destroyer escorts, 4 radar-picket escorts. (Guided missiles in service are Tartar, Talos and Terrier SAM and Asroc and Subroc ASW). 81 amphibious warfare ships, incl 7 LPH. 52 landing craft. 42 ocean minesweepers. 178 logistics, operational support and small patrol ships.

2.1.8 Shore-based aircraft

24 maritime patrol sqns with 216 P-3. Transports include C-47, C-54, C-118, C-119, C-130 and C-131.

2.2 DEPLOYMENT:

Fleets: 1st (Eastern Pacific), 2nd (Atlantic), 6th (Mediterranean), 7th (Western Pacific). RESERVES: Average paid training strength 127,000 plus paid training tours for a further 3,500. Training Fleet: 16 submarines. 30 destroyers. 6 ocean minesweepers. 13 coastal minesweepers. 35 squadrons of fixed-wing aircraft incl A-4 and A-7 fighters; P-2 and P-3A maritime patrol aircraft and 4 helicopter squadrons. 5 Air Force: 757,000; 6,000 combat aircraft.* The General Purpose Forces include:

- (i) Tactical Air Command: 110,000; about 1,000 aircraft normally based in the United States. 23 F-4, 4 F-105, 1 A-7D and 4 F-111 fighter squadrons. 9 tactical reconnaissance squadrons with RF-4C. 16 assault air-lift squadrons with C-130E. 4 STOL air-lift squadrons with C-7 and C-123. 2 electronic warfare squadrons. 7 special operations sqns with A-37, AC-119, C-123K and AC-130.
- (ii) US Air Force Europe (USAFE): 50,000, controlling 3rd Air Force (Britain), 16th Air Force (Spain), 17th Air Force (West Germany), and a Logistics Group in Turkey. 21 fighter squadrons (and 4 in USA on call to USAFE) with 5F-100, F-4C/D/E and F-111E. 5 tactical reconnaissance squadrons with 85 RF-4C. 2 transport squadrons with C-130.
- (iii) Pacific Air Forces (PACAF): 120,000, controlling: 5th Air Force: over 25,000 (bases in Japan, Korea and Okinawa) with F-4, RF-4C and C-130. 13th Air Force: about 32,000 (responsible for the Philippines, Taiwan and Thailand, and all joint planning under SEATO), with F-4, F-105,

RF-4C and C-130 (of which 160 F-4, a few F-105 and 40 RF-4 fly from Thailand). 7th Air Force: 33,500 (the air component of the Military Assistance Command Vietnam, co-ordinating the operations of the Vietnamese Air Force). 200 F-4C and A-37 fighter-bombers. 40 RF-4 reconnaissance aircraft. 150 A-1E, A-37A, AC-119, AC-130 and C-123 counter-insurgency aircraft. 75 C-7A assault airlift aircraft. A large number of observation and liaison aircraft, and helicopters. (iv) Military Airlift Command (MAC): 90,000. 18 heavy transport squadrons with 35 C-133, 260 C-141 and 25 C-5A. 24 medical tpt, weather recce and SAR sqns.

RESERVES: (i) Air National Guard: 89,000; 1,500 aircraft in 16 fighter-interceptor, 28 tactical fighter and attack, 11 tactical reconnaissance, 3 tactical air support, 4 special operations, 7 tanker and 22 air transport squadrons. (ii) Air Force Reserve: average paid training strength of 48,400 plus training tours for a further 2,600; 400 aircraft in 36 squadrons incl 2 C-119, 13 C-124 and 18 C-130 tpt sqns (the others have tactical support, special operations and SAR roles).

2.3 THE SOVIET UNION

Population: 245,700,000.

Military service: Army and Air Force, 2 years; Navy and Border Guards, 3 years.

Total armed forces: 3,375,000.

Estimated GNP 1970: \$490 billion.^t

Defence budget 1971: 17,854 million roubles (\$39.7 billion). 0.40-0.50 roubles = \$1.+

2.4 Strategic Forces

- (A) OFFENSIVE (Strategic Rocket Forces (SRF) - 350,000)^{ll} * Figures for manpower include strategic air forces. ^t An explanation of the valuation of GNP was given in The Military Balance 1970-1971, pp. 10-12, together with a note on the exchange rate used for military expenditure. For another, much discussed, view on this exchange rate see The Technological Base of Soviet Military Power, by Michael Boretsky, a Paper submitted in September 1970 to the Subcommittee on Foreign Economic Policy of the US Congressional Joint Economic Committee. See Survival, October 1971. The official exchange rate is 0.9 roubles ICBM: about 1,510. 220 SS-7 and SS-8. 280 SS-9. 950 SS-11 (about 100 have been sited in IRBM/ MRBM fields and may have a variable range capability). 60 SS-13 (solid-fuelled). IRBM and MRBM: about 700. 100 SS-5 IRBM. 600 SS-4 MRBM.

The rouble figure represents the declared budget of the Ministry of Defence and does not include certain expenditures such as the cost of nuclear warheads, research and development expenditure on advanced weapons systems, and the military elements of the space programme, which are believed to be included in the budget of other ministries. Total military expenditure could be of the order of \$55 billion. § Characteristics of nuclear delivery vehicles are given in Table 1 on p. 55. II The Strategic Rocket Forces are a separate Service, with their own manpower. 6 (IRBMs and MRBMs are sited near the southern, eastern and western borders of the USSR: about 70 cover targets in China and Japan; and about 630 targets in Western Europe.) SLBM: 440 in 61 submarines (Navy). 20 SSBN each with 16 SS-N-6 missiles. 10 SSBN and 16 diesel each with 3 SS-N-5 missiles. 12 diesel each with 3 SS-N-4 missiles. 3 diesel each with 2 SS-N-4 missiles. Aircraft (Long Range Air Force*). Long-range Bombers: 140. 100 Tu-20 Bear and 40 Mya-4 Bison. Tankers: 50 Bison. Medium Bombers: 700. 500 Tu-16 Badger and 200 Tu-22 Blinder.

- (B) DEFENSIVE Air Defence Command (PVO-Strany) is a separate command of anti-aircraft artillery and surface- to-air missile units, using an early-warning system based on radar, and fighter-interceptor squadrons for identification and interception; total strength 500,000 (250,000 from Army and 250,000 from Air Force). Aircraft: about 3,200. Interceptors: mostly MiG-19, MiG-21 and Su-9 with a few MiG-17 still in service. Newer aircraft include the Yak-28P and Tu-28, and more recently, the Su-11 and MiG-23. Many of these aircraft carry AAM.

2.4.1 Anti-Ballistic Missiles (ABM)

AEW aircraft: some modified Tu-114 with the designation Moss. About 75 per cent is based on European USSR, with most of the remainder in the Far East; in addition, it has staging and dispersal points in the Arctic. Galosh: 64 launchers for these multi-stage missiles are deployed around Moscow. They are believed to have a range of over 200 miles and to carry a nuclear warhead in the megaton range.

SA-1: An early vintage AA missile. SA-2: about 8,000. A 2-stage boosted AA missile, slant range (from launch to contact with target) about 25 miles, effective between 3,000 and 80,000 ft. SA-3: A 2-stage missile, probably intended for short-range defence against low-flying aircraft, to supplement SA-2. It has a slant range of about 15 miles.

SA-4: An air-transportable, mobile AA missile with solid-fuel boosters. They are twin mounted on tracked carriers and assigned to ground forces in the field.

SAM SA-5: A 2-stage boosted missile developed in a long-range AA role.

SA-6: A triple-mounted missile on a tracked vehicle. It is entering service as a defence against low-flying aircraft to supplement SA-4 in the field forces.

2.4.2 Army: 2,000,000 (including elements in the Air Defence Command).

102 motorized rifle divisions. 51 tank divisions. 7 airborne divisions. Tactical nuclear missile units are organic to formations. T-10 heavy tanks; T-62 and T-54/-55 medium tanks; PT-76 amphibious reconnaissance tanks (most Soviet tanks are equipped for amphibious crossing by deep wading, and many carry infra-red night-fighting equipment). At full strength, tank divisions have 325 medium tanks and motorized rifle divisions 175. SP assault guns (in AB divs only); 100mm, 122mm, 130mm, 152mm and 203mm guns; 57mm, 85mm, 100mm, 120mm and 130mm ATk guns; Scud Scaleboard FROG SSM, mounted on modified tank chassis and wheeled launchers; Shaddock cruise SSM; Snapper, Swatter and Sagger ATGW. The Soviet Army also has a considerable air defence capability, including SAM. Anti-Aircraft Artillery 14.5mm, 23mm, 57mm guns and ZSU-57-2 twin-barrelled and ZSU-23-4 four-barrelled SP guns on tank chassis. Central and Eastern Europe: 31 divs of which 20 divs (10 tank) are in East Germany; 2 tank divs in Poland; 4 divs (2 tank) in Hungary; and 5 divs in Czechoslovakia. Central USSR (between the Ural Mountains and Lake Baikal): 8 divs. Southern USSR (Caucasus and West Turkestan): 28 divs. Sino-Soviet border area: 33 divs (10 tank) incl 2 divs in Mongolia. The 31 divisions in Eastern Europe are maintained at or near combat-strength, as are about 15 of those in the Far East. The other divisions in the Far East are probably in the second category of readiness: below combat-strength, but not requiring major reinforcement in the event of war. Most of the remaining combat-ready divisions are in European USSR, while the divisions in central USSR would mostly require major reinforcement, as would 10 of the divisions in southern USSR.

2.4.3 DEPLOYMENT:

European USSR: 60 divs. 7 Outside the Warsaw Pact area (mostly as instructors and advisors). 1,000 in Cuba, 15-20,000 in Egypt, 1,000 in Sudan, 1,000 in Syria, 1,500 in Algeria and 1,000 in North Vietnam. Navy: 475,000 (incl Naval Air Force 75,000). Submarines (excluding ballistic-missile vessels): Attack: 25 nuclear-powered; 210 diesel-powered. Cruise-missile: 35 nuclear-powered and 25 diesel-powered (with 4-8 300-mile range msls).

2.4.4 Surface ships

2 ASW helicopter cruisers with SAM and up to 20 KA-25 helicopters. 2 Kresta II-class cruisers with (horizon-range) surface-to-surface cruise missiles (SSCM) and SAM. 4 Kresta I-class cruisers with SSCM and SAM. 4 Kynda-class cruisers with SSCM and SAM. 8 Sverdlov-class and 2 older cruisers (1 with SAM). 1 Krivak-class destroyer with SSCM and SAM. 6 Kanin-class destroyers with SAM. 3 Krupny-class destroyers with SSCM. 4 Kildin-class destroyers with SSCM. 17 Kashin-class destroyers with SAM. 9 modified Kotlin-class destroyers with SAM. 23 Kotlin-class destroyers. 40 Skory- and modified Skory-class destroyers. 105 other ocean-going escorts. 250 coastal escorts and submarine chasers. 110 Osa- and 30 Komar-class patrol boats with SSCM. 250 fast patrol boats. 180 fleet minesweepers. 125 coastal minesweepers. 105 landing ships and numerous landing craft. Some trawlers are used for electronic intelligence. All submarines and the larger surface vessels not fitted with SSM are equipped for minelaying. A proportion of the destroyers and smaller vessels may not be fully manned. Shore-based aircraft Bombers: 500, most based near the north-west and Black Sea coasts of the USSR. 300 Tu-16 with Kipper or Kelt ASM. 100 Tu-16 reconnaissance and tanker aircraft (replacement of the reconnaissance version with the Tu-22 Blinder has begun). 50 Il-28 torpedo-equipped light bombers. 50 Tu-20 long-range naval reconnaissance. Other aircraft and helicopters - 500. 75 Be-12 ASW amphibians. 25 Il-18 May ASW aircraft. 200 Mi-4 and Ka-25 ASW helicopters. 200 miscellaneous transports. Naval Infantry - about 15,000. DEPLOYMENT: Arctic, Baltic, Black Sea and Far East Fleets.

2.4.5 Air Force: 550,000: 10,000 combat aircraft.

- (i) The Long Range Air Force (see p. 6).
- (ii) Tactical Air Force: altogether about 5,000 aircraft, incl light bombers, fighters, helicopters, transport and reconnaissance aircraft. Some obsolescent MiG-17, MiG-19 and Il-28 are still in service. The most notable high performance aircraft are the MiG-21J and Yak-28P Firebar fighters; the ground-attack Su-7; and the super-sonic light bomber Yak-28. Ground-attack aircraft are equipped with a variety of air-to-ground rockets. The variable-geometry Flogger may be about to enter service.
- (iii) Air Defence Command (see p. 6), and (iv) Naval Air Force (see above).

- (iv) Air Transport Force - about 1,700 aircraft. Il-14, An-24, some 800 An-12 and Il-18 medium transports and 10 An-22 heavy transports. There are in addition civil airliners of Aeroflot, some of which could be adapted to military use; these include about 275 long- and medium-range Tu-104, Tu-114, Tu-124 and Tu-134. About 800 helicopters in use with the ground forces including troop-carrying Mi-6 and Mi-8 and the heavy load-carrier Mi-10. The Mi-12, a very heavy load carrier, may soon enter service. The total helicopter inventory is probably around 1,750. Para-Military Forces: 300,000. 125,000 security troops; 175,000 border troops. There are also about 1.5 million members of the part-time military training organization (DOSAAF), who take part in such recreational activities as athletics, shooting and parachuting, but reservist training and refresher courses seem to be haphazard and irregular. However, DOSAAF assists in pre-military training being given in schools, colleges, and workers' centres, to those of 16 years and over.

3 The European Balance

3.1 THE WARSAW PACT

Treaties The Warsaw Pact is a multilateral military alliance formed by a 'Treaty of Friendship, Mutual Assistance and Co-operation', which was signed in Warsaw on 14 May 1955 by the Governments of the Soviet Union, Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Rumania. (Albania denounced the Pact in September 1968.) According to East European documentary sources the Pact is committed to the defence of only the European territories of the member states. The Soviet Union is also linked by bilateral treaties of friendship and mutual assistance with Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Rumania. All present members of the Warsaw Pact also have similar bilateral treaties with each other. The Soviet Union concluded status-of-forces agreements with Poland, East Germany, Rumania and Hungary between December 1956 and May 1957 and with Czechoslovakia in October 1968; all these remain in effect except the one with Rumania which lapsed in June 1958 when Soviet troops left Rumania. The essence of East European defence arrangements is not therefore dependent on the Warsaw Treaty as such.

3.1.1 Organization

The Organization of the Warsaw Pact has two main bodies. The first, the Political Consultative Committee, consists, in full session, of the First Secretaries of the Communist Party, Heads of Government and the Foreign and Defence Ministers of the member-countries. It met twice in the year up to July 1971, at which point there had been 17 meetings in all*. The Committee has a Joint Secretariat, headed by a Soviet officer, consisting of a specially appointed official from each country, and a Permanent Commission, whose task is to make recommendations on general questions of foreign policy for Pact members. Both these bodies are located in Moscow. The second body, the Joint High Command, is directed, according to the Treaty, 'to strengthen the defensive capability of the Warsaw Pact, to prepare military plans in case of war and to decide on the deployment of troops'. The Command consists of a Commander-in-Chief (C-in-C), a Defence Committee, made up of the six Defence Ministers of the Pact, which acts as an advisory body, and a Military Council. This body, which is modelled on a similar organization in the Soviet Armed Forces, meets under the chairmanship of the C-in-C, and includes the Chief of Staff (C of S) and permanent military representatives from each of the allied armed forces. (It seems to be the main channel through which the Pact's orders

are transmitted to its forces in peacetime, and through which the East European forces are able to put their point of view to the C-in-C.) The Pact also has a Military Staff, which has been enlarged by additional non-Soviet senior officers. The posts of C-in-C and C of S of the Joint High Command have, however, always been held by Soviet officers, and most of the key positions are still in Soviet hands. In the event of war, the forces of the other Pact members would be operationally subordinate to the Soviet High Command. The command of the air defence system covering the whole Warsaw Pact area is centralized in Moscow and directed by the C-in-C of the Soviet Air Defence Forces. The Soviet forces in the Warsaw Pact area are organized as the Northern Group of Forces, with headquarters at Legnica in Poland; the Southern Group of Forces, with headquarters at Budapest; Some of these meetings have been entitled Meetings of Ministers. 9 the Group of Soviet Forces in Germany, with headquarters at Zossen-Wünsdorf, near Berlin; and the Central Group of Forces, consisting of five divisions in Czechoslovakia, with headquarters at Milovice, north of Prague. Soviet tactical air forces are stationed in Poland, East Germany, Hungary and Czechoslovakia. The Soviet Union has deployed tactical nuclear missiles in Eastern Europe. Most East European countries have displayed short-range SSM launchers, but there is no evidence that nuclear warheads for these missiles have been supplied to these countries. Soviet MRBM (and other strategic weapons) are based in the Soviet Union and remain under Soviet control.

3.2 BULGARIA

Population: 8,555,000.

Military service: Army and Air Force, 2 years; Navy, 3 years.

Total regular forces: 148,000.

Estimated GNP 1970: \$8.9 billion.

Defence expenditure 1970: 324 million leva (\$279,000,000). 1.16 leva = \$1.

3.2.1 Army: 117,000.

8 motorized rifle divisions (3 cadre). 5 tank brigades. 30 JS-3 and T-10 hy tanks; about 1,900 med tanks, mainly T-54, with some T-34, T-55 and T-62; PT-76 It tanks, and BTR-40P scout cars; BTR-50, BTR-60 and BTR-152 APC; over 500 85mm, 122mm, 130mm, and 152mm guns; SU-100 and JSU-122mm SP guns; FROG and Scud SSM; 57mm, 85mm and 100mm ATK guns; Snapper, Swatter and Sagger ATGW; ZSU-57 SP AA guns; SA-2 SAM.

3.2.2 Navy: 9,000.

2 submarines. 2 escorts. 8 coastal escorts. 2 minesweepers. 2 minehunters. 4 inshore minesweepers. 12 motor torpedo boats (8 less than 100 tons). 14 landing craft. A small Danube flotilla.

3.2.3 Air Force: 22,000; 252 combat aircraft.

6 fighter-bomber squadrons with MiG-17. 4 interceptor squadrons with MiG-21. 3 interceptor squadrons with MiG-19. 5 interceptor squadrons with MiG-17. 1 reconnaissance squadron with Il-28. (12 aircraft in a combat squadron.) 2 reconnaissance squadrons with MiG-17C. 4 Li-2, 6 An-2 and 10 Il-14 transports. About 40 Mi-4 helicopters. 1 parachute regiment. Para-Military Forces: 15,000 including border security troops. A volunteer People's Militia of 150,000.

3.3 CZECHOSLOVAKIA

Population: 14,700,000.

Military service: Army 24 months; Air Force 27 months.

Total regular forces: 185,000.

Estimated GNP 1970: \$30.3 billion.

Defence expenditure 1970: 15,000 million crowns (\$1,765,000,000). 8.5 crowns = \$1.

3.3.1 Army: 145,000.

4 tank divisions. 8 motorized rifle divisions. 1 airborne brigade. (All about 70 per cent of strength except 2 cadre motorized rifle divisions at 30 per cent strength.) About 100 JS-3 and T-10 hy tanks: about 3,400 med tanks, mostly T-55 and T-62, with some T-54 and T-34; OT-65 and FUG-1966 scout cars; BTR-50P, BTR-152, OT-62 and OT-64 APC; SU-100, SU-122, JSU-152 SP guns; 82mm and 120mm mortars; FROG and Scud SSM; 57mm, 85mm and 100mm ATk guns; Snapper, Swatter and Sagger ATGW; 47mm twin SP and 30mm AA guns; SA-2 SAM,

3.3.2 Air Force: 40,000; 504 combat aircraft.

12 ground-support squadrons with Il-28, Su-7, MiG-15 and MiG-17. 18 interceptor squadrons with MiG-17, MiG-19 and MiG-21. 6 reconnaissance squadrons with MiG-15 and L-29 (14 aircraft in a combat squadron.) About 50 Li-2, Il-14 and Il-18 transports. About 90 Mi-1, Mi-4 and Mi-8 helicopters. Para-Military Forces: Border troops (Pohranicki straz) - 35,000. A part-time People's Militia of about 120,000 is being increased to 250,000. 10 #

3.4 GERMAN DEMOCRATIC REPUBLIC

Population: 17,150,000.

Military service: 18 months.

Total regular forces: 126,000.

Estimated GNP 1970: \$34 billion.

Defence budget 1971: 7,200 million Ostmarks (\$2,124,000,000). 3.39 Ostmarks = \$1.

3.4.1 Army: 90,000.

2 tank divisions. 4 motorized rifle divisions. About 100 T-10 and JS-3 hy tanks; about 2,200 med tanks, mostly T-54 and T-55, with some T-34 and T-62; about 125 PT-76 It tanks; SK-1 armd cars; BTR-40P scout cars; about 650 BTR-50P, BTR-60P and BTR-152 APC; SU-100 SP guns; 85mm, 122mm, 130mm and 152mm guns; FROG and Scud SSM: 57mm and 100mm ATk guns; Snapper, Swatter and Sagger ATGW; ZSU-57-2 SP, 57mm and 100mm AA guns.

3.4.2 Navy: 16,000.

4 destroyer escorts. 25 coastal escorts. 47 minesweepers. 12 Osa-class patrol boats with Styx SSM. 70 motor torpedo boats (less than 100 tons). 18 landing craft. 16 Mi-4 helicopters.

3.4.3 Air Force: 20,000;

290 combat aircraft. 2 interceptor squadrons with MiG-17. 16 interceptor squadrons with MiG-21. (16 aircraft in a combat squadron.) 30 transports, including An-2, Il-14 and Li-2. 20 Mi-1, Mi-4 and Mi-8 helicopters. An anti-aircraft division of 9,000 (5 regiments), with about 120 57mm and 100mm AA guns and with SA-2 SAM. Para-Military Forces: 46,000 border troops (Grenz- schutztruppe) including a Border Command separate from the regular army. 20,000 security troops. 350,000 in armed workers' organizations (Betriebskampfgruppen).

3.5 HUNGARY

Population: 10,320,000.

Military service: 2-3 years.

Total regular forces: 103,000.

Estimated GNP 1970: \$14.4 billion.

Defence expenditure 1970: 8,900 million forints (\$511,000,000). 17.4 forints = \$1.

3.5.1 Army: 90,000.

2 tank divisions. 5 motorized rifle divisions. 2 SAM battalions with SA-2. T-10 hy tanks; about 1600 med tanks, mainly T-55, with some T-34, T-54 and T-62; 50 PT-76 It tanks; FUG-A armd cars; OT-65 scout cars; OT-64, OT-66 and BTR-152 APC; SU-100 and JSU-122 SP guns; about 400 76mm, 85mm and 122mm guns, and 122mm howitzers; FROG SSM; 57mm ATk guns; Snapper, Swatter and Sagger ATGW; ZSU-57 SP AA guns; SA-2 SAM.

3.5.1.1 Navy: 500.

There is a Danube flotilla of: 40 minesweepers. 20 patrol craft.

3.5.2 Air Force: 12,500; 130 combat aircraft.

1 fighter-bomber/recce squadron with MiG-17. 10 interceptor squadrons with MiG-19 and MiG-21. (12 aircraft in a combat squadron.) About 25 An-2, Il-14 and Li-2 transport aircraft. About 6 Mi-1 and Mi-4 helicopters.

3.5.3 Para-Military Forces: 27,000 security and border guard troops.

250,000 workers' militia.

3.6 POLAND Population: 33,200,000.

Military service: Army and Air Force, 2 years; Navy and special services, 3 years; Internal security forces, 27 months.

Total regular forces: 265,000.

Estimated GNP 1970: \$42.5 billion.

Defence expenditure 1970: 35,300 million zloty (\$2,220,000,000). 15.9 zloty=\$1.

3.6.1 Army: 190,000.

5 tank divisions. 8 motorized rifle divisions. 1 airborne division. 1 amphibious assault division. (Divisions are at 70 per cent of strength, except those in the Warsaw Military District which are at 30-50 per cent of strength.) 30 JS-3 and T-10 hy tanks; 3,400 med tanks, mostly T-54 and T-55, with some T-34 and T-62; about 150 PT-76 It tanks; FUG-A armd cars; BTR-40P scout cars; OT-62, OT-64 (Skot-2) and BTR M-1967 APC; ASU-57, SU-100, JSU-122 and JSU-152 SP g7ns; FROG and Scud SSM; 57mm, 85mm and 100mm anti- tank guns; Snapper, Swatter and Sagger ATGW; SA-2 SAM.

3.6.2 Navy: 20,000 (including 1,000 marines).

5 submarines. 2 destroyers. 30 coastal escorts/submarine chasers. 24 fleet minesweepers. 27 inshore minesweepers. 12 Osa-class patrol boats with Styx SSM. 20 torpedo boats (less than 100 tons). 22 landing ships. 45 naval aircraft, mostly MiG-17, with a few Il-28 It bombers, and some helicopters. Samlet cruise missiles for coastal defence.

3.6.3 Air Force: 55,000; 730 combat aircraft.

6 light bomber/recce squadrons with Il-28.

12 fighter-bomber squadrons with MiG-17 and Su-7. 40 interceptor squadrons with MiG-17, MiG-19 and MiG-21. 3 reconnaissance squadrons with MiG-15 and MiG-17. (12 aircraft in a combat squadron.) About 45 An-2, An-12, Il-12, Il-14, Il-18 and Li-2 transports. 40 helicopters, including Mi-1 and Mi-4. Para-Military Forces: 65,000 security and border troops, including armoured brigades of the Frontier Defence Force, and operating 20 small patrol boats.
ROMANIA Population: 20,400,000.

Military service: Army and Air Force, 16 months; Navy, 2 years. Total regular forces: 160,000. Estimated GNP 1970: \$21.4 billion. Defence Budget 1971: 7,500 million lei (\$798,000,000). 9.4 lei=\$1. Army: 130,000. 2 tank divisions. 7 motorized rifle divisions. 1 mountain brigade. 1 airborne regiment. (All at about 90 per cent of strength.) A few JS-3 and T-10 hy tanks;

1,700 T-34, T-54, T-55 and T-62 med tanks; about 900 BTR-40, BTR-50P and BTR-152 APC; SU-100 and JSU-122 SP guns; 76mm, 122mm and 152mm guns; about 75 FROG SSM; 57mm, 85mm and 100mm ATK guns; Snapper, Swatter and Sagger ATGW; 37mm, 57mm and 100mm AA guns; SA-2 SAM.

Navy: 9,000. 6 coastal escorts. 4 minesweepers. 22 inshore minesweepers. 5 Osa-class patrol boats with Styx SSM. 12 motor torpedo boats (less than 100 tons). 8 landing craft. Air Force: 21,000; 230 combat aircraft. 18 interceptor squadrons with MiG-17, MiG-19 and MiG-21. 1 reconnaissance squadron with II-28. (12 aircraft in a combat squadron.) 1 transport squadron with II-14 and Li-2. 10 Mi-4 helicopters. Para-Military Forces: 40,000, including border troops. A militia of about 500,000.

3.7 THE NORTH ATLANTIC TREATY

3.7.1 Treaties

The North Atlantic Treaty was signed in 1949 by Belgium, Britain, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal and the United States; Greece and Turkey joined in 1952 and West Germany in 1955. The Treaty unites Western Europe and North America in a commitment to consult together if the security of any one member is threatened, and to consider an armed attack against one as an attack against all, to be met by such action as each of them deems necessary, 'including the use of armed force, to restore and maintain the security of the North Atlantic area'.¹² The Paris Agreements of 1954, added a Protocol to the Treaty, strengthening the structure of NATO, and revised the Brussels Treaty of 1948, which now includes Italy and West Germany in addition to its original members (Benelux countries, Britain and France). The Brussels Treaty signatories are committed to give one another 'all the military and other aid and assistance in their power' if they are the subject of 'armed aggression in Europe'. Since 1969 members of the Atlantic Alliance can withdraw on one year's notice; the Brussels Treaty was signed for 50 years.

3.7.2 Organization

The Organization of the North Atlantic Treaty is known as NATO. The governing body of the alliance, the North Atlantic Council, which has its headquarters in Brussels, consists of the Ministers of the fifteen member-countries, who normally meet twice a year, and, in permanent session, of ambassadors representing each government. In 1966, France left the integrated military organization and the 14-nation Defence Planning Committee (DPC), on which France does not sit, was formed. It meets at the same levels as the Council and deals with questions related to NATO's integrated military planning and other matters in which France does not participate. The Secretary-General and an international staff advise on the politico-military,

financial, economic and scientific aspects of defence planning. Two permanent bodies for nuclear planning were established in 1966. The first, the Nuclear Defence Affairs Committee (NDAC) is open to all NATO members (France, Iceland and Luxembourg do not take part): it normally meets at Defence Minister level once or twice a year, to associate non-nuclear members in the nuclear affairs of the alliance. The Secretary-General is Chairman of the NDAC. The second, the Nuclear Planning Group (NPG), derived from and subordinate to the NDAC, has eight members, and is intended to go further into the details of topics raised there. The members in June 1971 were Britain, Canada, Germany, Italy, the Netherlands, Norway, Turkey and the United States (Belgium, Denmark and Greece had participated earlier). The Secretary-General also chairs the NPG. The Council's military advisors are the Military Committee, which gives policy direction to the NATO military commands. The Military Committee consists of the Chiefs of Staff of all member countries, except France, which maintains a liaison staff, and Iceland, which is not represented; in permanent session, the Chiefs of Staff are represented by Military Representatives who are located in Brussels together with the Council. The Military Committee has an independent Chairman and is served by an integrated, international military staff. The major NATO Commanders are responsible to the Military Committee, although they also have direct access to the Council and heads of Governments. The principal military commands of NATO are Allied Command Europe (ACE), Allied Command Atlantic (ACLANT) and Allied Command Channel (ACCHAN). The NATO European and Atlantic Commands participate in the Joint Strategic Planning System at Omaha, Nebraska, but there is no Alliance Command specifically covering strategic nuclear forces. As for ballistic-missile submarines, the United States has committed a small number and Britain all hers to the planning control of SACEUR, and the United States a larger number to SACLAN. The Supreme Allied Commander Europe (SACEUR) and the Supreme Allied Commander Atlantic (SACLANT) have always been American officers; and the Commander-in-Chief Channel (CINCHAN) and Deputy SACEUR and Deputy SACLANT British. SACEUR is also Commander-in-Chief of the United States forces in Europe. (i) ALLIED COMMAND EUROPE (ACE) has its headquarters known as SHAPE (Supreme Headquarters, Allied Powers in Europe), at Casteau, near Mons, in Belgium. It is responsible for the defence of all NATO territory in Europe excluding Britain, France, Iceland and Portugal and of all Turkey. It also has general responsibility for the air defence of Britain. The European Command has some 7,000 tactical nuclear warheads in its area. There is a very wide range in the kiloton spectrum. The number of delivery vehicles (aircraft, missiles and howitzers) is about 2,250, spread among all countries, excluding Luxembourg. The nuclear explosives themselves, however, are maintained in American custody. Tactical nuclear bombs and missile warheads are all fission. The average yield of the bombs stockpiled in Europe for the use of NATO tactical aircraft is about 100 kilotons, and of the missile warheads, 20 kilotons. About 60 division equivalents are available to SACEUR in peacetime. The Command has some 2,900 tactical aircraft, based on about 150 standard NATO airfields and backed up by a system of jointly financed storage depots, fuel pipelines and signal communications. The majority of the land and air forces stationed in the Command are assigned to SACEUR while the naval forces are earmarked. The 2nd French Corps of two divisions (which is not integrated in NATO forces) is stationed in Germany under a status agreement reached between the French and German

Governments. Co-operation with NATO forces and commands has been agreed between the commanders concerned. The ACE Mobile Force (AMF), has been formed as a NATO force with particular reference to the northern or south-eastern flanks. Formed by eight countries, it consists of eight infantry battalion groups, an armoured reconnaissance squadron and ground-support fighter squadrons, but has no air transport of its own. The following Commands are subordinate to Allied Command Europe:

- (a) Allied Forces Central Europe (AFCENT) has command of both the land forces and the air forces in the Central European Sector. Its headquarters are at Brunssum, Netherlands, and its Commander (CINCENT) is a German general. The forces of the Central European Command include 21 divisions assigned by Belgium, Britain, Canada, West Germany, the Netherlands and the United States and about 1,700 tactical aircraft. The Command is sub-divided into Northern Army Group (NORTHAG) and Central Army Group (CENTAG). NORTHAG, responsible for the defence of the sector north of the Göttingen- Liège axis, includes the Belgian, British and Dutch divisions, four German divisions and is supported by 2nd Allied Tactical Air Force (ATAF), composed of Belgian, British, Dutch and German units. The American forces, seven German divisions and the Canadian battle group are under the Central Army Group, supported by the 4th ATAF which includes American, German and Canadian units, and an American Army Air Defense Command.
- (b) Allied Forces Northern Europe (AFNORTH) has its headquarters at Kolsås, Norway, and is responsible for the defence of Denmark, Norway, Schleswig-Holstein and the Baltic Approaches. The Commander has always been a British General. Most of the Danish and Norwegian land, sea and tactical air forces are earmarked for it, and most of their active reserves assigned to it. Germany has assigned one division, two combat air wings and her Baltic fleet.
- (c) Allied Forces Southern Europe (AFSOUTH) has its headquarters at Naples, and its Commander (CINCSOUTH) has always been an American admiral. It is responsible for the defence of Italy, Greece and Turkey, and for safeguarding communications in the Mediterranean and the Turkish territorial waters of the Black Sea. The formations available include 14 divisions from Turkey, 12 from Greece and 7 from Italy, as well as the tactical air forces of these countries. Other formations from these three countries have been earmarked for AFSOUTH, as have the United States 6th Fleet, and naval forces of Greece, Italy, Turkey and Britain. The ground-defence system is based on two separate commands: Southern, comprising Italy and the approaches to it, under an Italian Commander, and South-Eastern, comprising Greece and Turkey, under an American Commander. There is, however, an overall air command and there is a single naval command (NAVSOUTH), responsible to AFSOUTH with its headquarters in Malta. 14 A special air surveillance unit, Maritime Air Forces Mediterranean (MARAIMED), is now operating Italian, British and American patrol aircraft from bases in Greece, Turkey, Sicily, Malta and Italy. French aircraft are participating in these operations. Its Commander, an American rear admiral, is immediately responsible to CINCSOUTH. The

Allied On-Call Naval Force for the Mediterranean (NAVOCFORMED) has consisted of at least three destroyers, contributed by Italy, Britain and the United States, and three smaller ships provided by other Mediterranean countries, depending upon the area of operation.

- (ii) ALLIED COMMAND ATLANTIC (ACLANT) has its headquarters at Norfolk, Virginia, and is responsible for the North Atlantic area from the North Pole to the Tropic of Cancer, including Portuguese coastal waters. In the event of war, its duties are to participate in the strategic strike and to protect sea communications. There are no forces assigned to the command in peacetime except Standing Naval Force Atlantic (STANAVFORLANT), which normally consists, at any one time, of four destroyer-type ships. However, for training purposes and in the event of war, forces which are predominantly naval are earmarked for assignment by Britain, Canada, Denmark, Netherlands, Portugal and the United States. There are arrangements for co-operation between French naval forces and those of SACLANT. There are five subordinate commands: Western Atlantic Command, Eastern Atlantic Command, Iberian Atlantic Command, Striking Fleet Atlantic and Submarine Command. The nucleus of the Striking Fleet Atlantic has been provided by the American 2nd Fleet with up to six attack carriers; their nuclear role is shared with the missile-firing submarines.
- (iii) ALLIED COMMAND CHANNEL (ACCHAN) has its headquarters at Northwood near London. The wartime role of Channel Command is to exercise control of the English Channel and the southern North Sea. Many of the smaller warships of Belgium, Britain and the Netherlands are earmarked for this Command, as are some maritime aircraft. There are arrangements for co-operation with French naval forces.

3.7.3 Policy

The political and strategic guidance laid down in 1967 includes the concept of political warning time in a crisis and the possibility of distinguishing between an enemy's military capabilities and his political intentions. The strategic doctrine defined by the DPC in December 1967 envisaged that NATO would meet attacks on its territory with whatever force levels were appropriate. In June 1968 at the Ministerial Meeting at Reykjavik, the Council called on the countries of the Warsaw Pact to join in discussions of mutual force reductions, reciprocal and balanced in scope and timing, and repeated this invitation at their meeting in Rome in 1970.

3.8 BELGIUM

Population: 9,800,000. Military service: 12 months. Total armed forces: 96,500. Estimated GNP 1970: \$24.9 billion. Defence budget 1971: 29,700 million francs (\$594,000,000). 50 francs = \$1.

3.8.1 Army: 71,500.

2 mechanized divisions of two brigades each. 1 paracommando regiment. 2 SSM battalions with Honest John. 2 SAM battalions with HAWK. 4 squadrons with Alouette II and Do-27. 330 Leopard and 175 M-47 med tanks; 135 M-41 It tanks; M-75 and AMX-VTT APC; M-108 105mm, M-44 and M-109 155mm and M-55 203mm SP howitzers; 203mm howitzers.

3.8.1.1 RESERVES: 1 mech bde and 1 motorized bde.

3.8.2 Navy: 5,000.

5 fleet minesweepers/minehunters. 2 fleet minesweepers. 10 coastal minesweepers/minehunters. 10 inshore minesweepers. 2 support ships. 2 S-58 and 3 Alouette III helicopters.

3.8.2.1 RESERVES: 3,000 trained.

3.8.3 Air Force: 20,000; 175 combat aircraft.

2 fighter-bomber squadrons with F-104G. 2 fighter-bomber squadrons with F-84F. 2 AWW squadrons with F-104G. 1 reconnaissance squadron with RF-84F. (The F-84F and RF-84F are being replaced by Mirage-VB.) (A combat squadron has 18-25 aircraft.) 33 C-119 and 18 C-47, Pembroke and DC-6 tpts. 11 HSS-1 helicopters. 8 SAM squadrons with Nike-Hercules. Para-Military Forces: 13,500 Gendarmerie.

3.9 BRITAIN

Population: 56,000,000. Voluntary military service. Total armed forces: 380,900 (including 16,300 en- listed outside Britain). Estimated GNP 1970: \$121 billion. Defence budget 1971/72: £2,545 million (\$6,108 million). £1 = \$2.40.

3.9.1 Strategic Forces 4 SSBN each with 16 Polaris A-3 missiles.

The Ballistic Missile Early Warning System (BMEWS) station at Fylingdales provides early warning of missile threats.

3.9.2 Army: 185,300 (including 14,200 enlisted outside Britain).

12 armoured regiments. 5 armoured car regiments. 43 infantry battalions. 3 parachute battalions. 6 Gurkha battalions. 1 special air service (SAS) regiment. 3 regts with Honest John SSM and 203mm howitzers. 24 other artillery regiments. 1 SAM regiment with Thunderbird. 14 engineer regiments. 59 of the above units are organized in two armoured, twelve infantry, one parachute and one Gurkha brigades. EQUIPMENT: 900 Chieftain and Centurion med tanks; 105mm Abbot and M-107 175mm SP guns; M-109 155mm SP howitzers; 203mm howitzers; Honest John SSM; Vigilant and Swingfire ATGW; light aircraft and 30 Scout helicopters.

3.9.3 DEPLOYMENT:

The Strategic Reserve - includes one div of three air-portable bdes and two parachute bns of the United Kingdom Mobile Force (UKMF), and the SAS regiment. Germany - British Army of the Rhine (BAOR), of 54,900, includes three div HQ, one mech and five arm'd bdes, two arm'd car regts, two arty bdes and the Thunderbird SAM regt. In Berlin there is one 3,000-strong brigade. Far East (excl Hong Kong) - By the end of 1971 the force will be reduced to one bn gp in Singapore, and one Gurkha bn in Brunei. Hong Kong - five inf bns, one arty regt. Persian Gulf - two inf bns and support units (until end of 1971). Cyprus - UNFICYP: one inf bn and one air portable recce sqn. Garrison: one inf bn and one arm'd car sqn. Malta - one inf bn and one coy gp. Gibraltar - one inf bn. The Caribbean - one coy gp and engr det.

3.9.3.1 RESERVES: 118,200 Regular Reserves. 49,000 Volunteer reserves.

3.9.4 Navy: 84,600 (including Fleet Air Arm and Marines).

Submarines, attack: 2 nuclear-powered (SSN) (2 more are due to enter service in 1971-72); 17 diesel-powered. Surface Ships 2 aircraft carriers. 2 commando carriers. 2 assault ships. 1 GM cruiser with Seacat SAMs. 1 GM destroyer with Seadart SAM. 6 GM destroyers with Seaslug and Seacat SAM. 2 other destroyers. 29 general purpose (GP) frigates. 19 ASW frigates. 4 AA and 3 aircraft direction frigates. 47 MCM ships. Ships in reserve or undergoing refit or conversion include (in addition to the above): 2 SSN, 9 diesel submarines, 1 commando carrier, 2 GM cruisers, 1 GM destroyer, 1 other destroyer, 6 GP frigates, 3 ASW frigates, 1 aircraft direction frigate.

3.9.5 THE FLEET AIR ARM: 96 combat aircraft.

2 strike squadrons with Buccaneer. 2 air defence sqns with F-4K. 4 air defence sqns with Sea Vixen. (a combat squadron has 12 aircraft.) 8 helicopter sqns with Wessex. 3 helicopter sqns with Sea King. 3 helicopter sqns with Wasp and Whirlwind. THE ROYAL MARINES total about 8,000 men, and include 4 800-men Commandos.

3.9.5.1 RESERVES (naval and marines): 24,200 regular and 7,800 volunteers.

3.9.6 Air Force: 111,000; about 500 combat aircraft.

8 medium bomber squadrons with Vulcan. 2 light bomber squadrons with Canberra. 3 strike squadrons with Buccaneer. 6 strike/attack/reconnaissance squadrons with F-4M. 1 ground-attack squadron with Hunter. 4 close support squadrons with Harrier. 9 air defence squadrons with Lightning. 1 air defence squadron with F-4K. 1 reconnaissance squadron with Victor 2. 4 reconnaissance squadrons with Canberra. 2 maritime patrol squadrons with Nimrod. 6 maritime patrol squadrons with Shackleton. (A combat squadron has 6-12 aircraft.) 3 tanker squadrons with Victor. 4 strategic tpt squadrons with VC-10, Belfast and Britannia. 8 tactical tpt sqns with Hercules and Argosy. 2 light communication squadrons with Andover. 7 helicopter squadrons with Wessex and Whirlwind. (SA-330 Puma are entering service.) There are 11 ground defence and AD squadrons of the Royal Air Force Regiment, some with Bloodhound and Tigercat SAM, and L-40/70 AA guns. (Rapier SAM are being introduced.)

3.9.7 DEPLOYMENT

The Royal Air Force includes two operational home commands - Strike Command and Air Support Command, and four smaller overseas commands - RAF Germany, Near East Air Force, Air Force Gulf and Far East Air Force. Squadrons are deployed overseas as follows: Germany: 8,600. 4 F-4; 1 Buccaneer (a second is due to form during 1971); 2 Canberra, 2 Lightning; 2 Harrier (a third is due to form by the end of 1971); 1 Wessex. Near East: (a) Cyprus - 2 Vulcan; 1 Lightning; 1 Hercules. (b) Malta - 1 Shackleton (converting to Nimrod); 1 Canberra. Gulf: 1 Hunter; 1 Shackleton; 1 Argosy; 1 Andover; 1 Wessex, (Until the end of 1971.) Far East: (a) mid-1971 - 1 Lightning 1 Shackleton; 1 Hercules; 1 Whirlwind. (b) after 1971 - some Nimrod aircraft and Whirlwind helicopters, based on Singapore.

3.9.7.1 RESERVES: 32,800 regular; about 400 volunteer.

3.10 CANADA

Defence budget 1971-72: *Can*1,822,500,000(US1,687,500,000). \$Can1.08 = SUS1.* Population: 21,700,000. Voluntary military service. Total armed forces: 85,000. Estimated GNP 1970: \$US78.2 billion.

3.10.1 Army (Land)t 33,000.

IN CANADA: Mobile Command. 1 airborne regiment. 3 combat groups each comprising: 3 infantry battalions. 1 reconnaissance regiment. 1 reduced light artillery regiment (of 2 batteries). Support units. One group is intended for operations in Europe, while part of it, an air transportable battalion group, is assigned to Allied Command Europe (ACE) Mobile Force. The other groups contribute to North American ground defence, and UN commitments. IN EUROPE: One mechanized battle group of about 2,800 men, with 32 Centurion tanks, 375 M-113 APC and 18 M-109 155mm SP howitzers. IN CYPRUS (UNFICYP): 460 men. RESERVES: about 18,000.

3.10.2 Navy (Maritime)t: 15,000.

4 submarines. 9 helicopter destroyer escorts. 11 ASW destroyer escorts. 6 coastal minesweepers. 1 ASW hydrofoil. 3 support ships. The Maritime Air Element consists of: 4 maritime patrol squadrons with Argus. 1 maritime patrol squadron with Tracker aircraft. 1 ASW squadron with Sea King helicopters. RESERVES: about 2,900.

3.10.3 Air Force (Air)t: 37,000; 162 combat aircraft.

IN CANADA: Mobile Command:

2 CF-5 tactical fighter squadrons. 6 helicopter squadrons. Air Defence Command: 3 interceptor squadrons with CF-101 (due to be replaced in 1971 by F-101C). 2 SAM squadrons with Bomarc B. 28 surveillance and control radar squadrons. (The above are assigned to NORAD.)

- The exchange rate has been allowed to fluctuate since 1 June 1970. t The Canadian Armed Services have been unified since February 1968, but for purpose of comparison with other countries, are presented here in traditional form. 17 1 CF-100 electronic warfare training squadron. Air Transport Command:

1 sqn with Boeing 707-320C transport/tankers. 2 sqns with C-130E Hercules. 2 sqns with CC-115 Buffalo and CC-138 Twin Otter. 2 sqns with Buffalo, and CH-113 Labrador helicopters. 1 sqn with CC-106 Yukon. 1 sqn with CC-109 Cosmopolitan and Falcon. IN EUROPE: 2 strike-attack and 1 reconnaissance squadrons, with CF-104. (A squadron has 6-18 aircraft.) RESERVES: 800,

3.11 DENMARK

Population: 4,990,000. Military service: 12 months. Total armed forces: 40,500. Estimated GNP 1970: \$16.0 billion. Defence budget 1971-72: 3,077,100,000 kroner (\$410,300,000). 7.5 kroner = \$1.

3.11.1 Army: 24,000.

4 armoured infantry brigades. 1 battalion group. 3 artillery battalions. Centurion med tanks; M-41 It tanks; M-113 APC; M-109 155mm SP howitzers; 203mm howitzers; Honest John SSM*; 12 Hughes 500M hel. RESERVES: 40,000 - 2 armd inf bdes and sup- port units to be formed from reservists within 72 hours. Local defence units form 15 inf bn gps and 15 arty btys. Volunteer Home Guard - 52,000.

3.11.2 Navy: 6,500.

6 submarines. 2 fast frigates. 4 helicopter frigates (fishery protection). 4 coastal escorts. 16 fast torpedo boats. 16 patrol boats (7 less than 100 tons). 4 fleet minelayers. 3 coastal minelayers. 8 coastal minesweepers. 4 inshore minesweepers. 9 seaward defence craft, 8 Alouette III helicopters.

3.11.3 Air Force: 10,000; 112 combat aircraft.

1 fighter-bomber squadron with F-35XD Draken. 2 fighter-bomber squadrons with F-100D/F. 2 interceptor squadrons with F-104G. 1 interceptor squadron with Hunter. 1 reconnaissance squadron with RF-84F (con- verting to RF-35 Draken during 1971). (A combat squadron has 16 aircraft.) 1 transport squadron with C-47 and C-54. 1 SAR squadron with S-61 helicopters. 4 SAM squadrons with Nike-Hercules. 4 SAM squadrons with HAWK. RESERVES: 3,000. Volunteer Home Guard - 4,000 with small patrol boats. RESERVES: Volunteer Home Guard - 8,000.

3.12 FRANCE

Population: 51,225,000. Military service: 12 months. Total armed forces: 501,500. Estimated GNP 1970: \$148 billion. Defence Budget 1971: 28,873 million francs (\$5,202,000,000). 5.55 francs = \$1.

3.12.1 Strategic Forces

IRBM: the first 9-missile squadron is due to become operational during 1971§. SLBM: the first 16-missile SSBN is due to become operational during 1971+ Aircraft: Bombers: 36 Mirage IVA in 9 squadrons. Tankers: 9 KC-135F in 3 squadrons. Army: 329,000. M-47 and about 575 AMX-30 med tanks; AMX-13 It tanks; EBR hy and AML It armd cars; VTT-AMX APC; SP AMX 105mm guns and 155mm howitzers; 30mm twin SP AA guns; SS-11/Harpon ATGW.

5 mechanized divisions. 1 parachute division (2 brigades). 1 airportable motorized brigade. 2 Alpine brigades. 4 armoured car regiments. 2 motorized infantry regiments. 1 parachute battalion. 25 infantry battalions. 5 SSM battalions with Honest John.t 3 SAM regiments with HAWK.

3.12.2 DEPLOYMENT:

Strategic Reserve: permanent element includes the para div and the air-portable bde.

§ It became operational on 2 August 1971. 5 SSBN are due to be built in all. + The nuclear warheads held under double-key arrangements with the USA were withdrawn in 1966. The tactical nuclear SSM Pluton is due to enter service in 1973. * There are no nuclear warheads on Danish soil. Germany: About 62,000 incl two mech divs; 4 SSM regts with Honest John*. About 1,700 in West Berlin. French Territory of the Afars and Issas: 2 battalions. Elsewhere in Africa: about 4,000 (see p. 64). Pacific Territories: 2 battalions. Caribbean: 1 battalion. The remaining troops are stationed in France for local defence (DOT). Their peacetime strength is about 61,500 men, including 35 battalions (infantry, light armour, artillery and engineer). RESERVES: Mobilization would bring the DOT up to a total of 80 infantry battalions, 5 armoured car regiments and support units.

3.12.3 Navy: 68,500 (including Naval Air Force).

19 attack submarines. 2 aircraft carriers. 1 helicopter/aircraft carrier. 1 helicopter carrier. 2 assault landing ships. 1 anti-aircraft/command cruiser. 16 destroyers (4 GM, with Tartar SAM). 3 GM frigates with Malafon ASW missiles (2 with Masurca SAM). 27 frigates. 14 coastal escorts. 14 fleet minesweepers. 60 coastal minesweepers. 15 inshore minesweepers. 5 landing ships. 12 landing craft.

3.12.4 NAVAL AIR FORCE: 12,000; 200 combat aircraft.

3 fighter-bomber sqns with Etendard IV-M. 2 interceptor sqns with F-8F. 3 reconnaissance sqns with Etendard IV-P. 3 ASW sqns with Alizé. (All the above can be flown from aircraft

carriers.) 5 maritime recce sqns with Atlantic and P-2. 1 ASW helicopter sqn with Super-Frelon. 2 helicopter sqns with Alouette II/III. DEPLOYMENT: For naval elements overseas see p. 64.

3.12.5 Air Force: 104,000; 500 combat aircraft.

Air Defence Command (CAFDA) has:

3 interceptor squadrons with Mirage IIIC. 2 AWX interceptor squadrons with Vautour IIN. 3 interceptor squadrons with Super-Mystère B2. (Co-ordination is by the automatic STRIDA II air defence system.)

2nd CATAC - and includes: 8 fighter-bomber squadrons with Mirage IIIE. 1 fighter-bomber squadron with Mirage IIIB. 2 fighter-bomber squadrons with F-100D. 2 fighter-bomber squadrons with Mystère IVA. 3 tactical recce squadrons with Mirage IIIR/RD. Air Transport Command (COTAM) has: 3 tactical transport squadrons with Transall. 4 tactical transport squadrons with Noratlas. 1 heavy transport squadron with DC-6 and Br-765 Sahara and 2 mixed transport squadrons. 4 squadrons with H-34 and Alouette II helicopters. Tactical Air Force (FATAC) has: 2 subordinate Tactical Air Commands - 1st CATAC and FEDERAL REPUBLIC OF GERMANY DEPLOYMENT: 1 squadron of A-1J and 1 mixed transport squadron are stationed in the French Territory of the Afars and Issas. Other air elements overseas are shown on p. 64.

3.12.6 Army: 327,000 (including the 35,000 Territorial Force).

Population: 60,000,000 (excluding West Berlin). Military service: 18 monthst. Total armed forces: 467,000. Estimated GNP 1970: \$185 billion. Defence budget 1971: DM 21,816 million (\$5,961 million). DM 3.66 = \$11. Para-Military Forces: 65,000 Gendarmerie and 85,000 reserves (subordinate to the Ministry of Defence). 15,000 CRS (Compagnies Républicaines de Sécurité) (subordinate to the Ministry of the Interior).

12 armoured brigades. 1 armoured regiment. 13 armoured infantry brigades. 3 rifle brigades. 2 mountain brigades. 3 airborne brigades. 11 SSM battalions with Honest John. 4 SSM battalions with Sergeant. 1,050 M-48A2 Patton and 2,250 Leopard med tanks; 1,770 HS-30 and 3,140 M-113 APC; 1,100 tank destroyers with 90mm guns or ATK msls; 250 105mm, 375.155mm, 150 175mm and 75 203mm SP guns; 500 SP 40mm AA guns; about 460 Bell-47, UH-1D Iroquois and Alouette A. A Government Commission has proposed a reduction to 16 months. + The exchange rate has been allowed to fluctuate since 9 May 1971. * See footnote + on p. 17 19 II helicopters, and 80 Do-27 light aircraft. RESERVES: 540,000 on immediate recall.

3.12.7 Navy: 36,000 (including Naval Air Arm).

11 coastal submarines. 3 GM destroyers with Tartar SAM. 9 destroyers. 6 fast frigates. 2 frigates. 5 fleet utility vessels. 13 escort and support ships. 24 coastal minesweepers/minehunters. 30 fast minesweepers. 18 inshore minesweepers. 2 minelayers. 40 fast patrol boats. 2 landing ships. 22 landing craft. NAVAL AIR ARM: 6,000; 100 combat aircraft. 4 fighter-bomber/recce squadrons with F-104G.

2 MR squadrons with BR-1150 Atlantic. 23 S-58 SAR helicopters, being replaced by SH-3D. RESERVES: 36,000 on immediate recall.

3.12.8 Air Force: 104,000; 504 combat aircraft.

10 fighter-bomber squadrons with F-104G. 4 It ground-attack/strike squadrons with G-91. 4 interceptor squadrons with F-104G. 4 heavy reconnaissance squadrons with RF-104G (replacement with RF4-E Phantom II has started). 4 reconnaissance squadrons with G-91. 6 transport squadrons with C-160 Transall. 4 helicopter squadrons with UH-1D. (Fighter, fighter-bomber, reconnaissance and light- strike squadrons have 15-21 aircraft, and tpt squadrons up to 18.) 3 SSM battalions with Pershing. 24 SAM batteries with Nike-Hercules. 36 SAM batteries with HAWK. RESERVES: 87,000 for immediate recall.

3.13 GREECE

3.13.1 Army: 118,000.

Para-Military Forces: 18,500 Border Police with Saladin armoured cars and coastal patrol boats.

11 infantry divisions (3 close to full strength). 1 armoured division. 1 commando brigade. 2 SSM battalions with Honest John. 1 SAM battalion with HAWK. 200 M-47, 220 M-48 and 50 AMX-30 med tanks; M-24, M-26 and M-41 It tanks; M-8 and M-20 armd cars; M-3 scout cars; M-2, M-59 and M-113 APC; 105mm, 155mm and M-107 175mm SP guns; 105mm, 155mm and 203mm howitzers; 40mm, 75mm and 90mm AA guns.

3.13.2 Navy: 18,000.

2 submarines (4 more to be delivered by West Germany). 8 destroyers. 4 destroyer escorts. 7 coastal patrol vessels. 2 minelayers. 20 coastal minesweepers. 12 fast torpedo boats (less than 100 tons) (4 FPB, with Exocet SSM, are on order from France, the first due for delivery in 1971). 8 tank landing ships. 6 medium landing ships. 1 dock landing ship. 8 landing craft. 8 HU-16 maritime patrol aircraft.

Population: 8,960,000. Military service: 24 months. Total armed forces: 159,000. Estimated GNP 1970: \$9.2 billion. Estimated defence expenditure 1971: 10,138 million drachmas (\$337,900,000). 30 drachmas = \$1.

3.13.3 Air Force: 23,000; 216 combat aircraft.

3 fighter-bomber squadrons with F-84F. 2 fighter-bomber squadrons with F-104G. 4 interceptor squadrons with F-5A. 1 interceptor squadron with F-102A. 1 photo-reconnaissance squadron with RF-5. 1 reconnaissance squadron with RF-84F. (A combat squadron has up to 18 aircraft.) 30 C-47 and C-119G, and 25 Noratlas tpts. 1 helicopter squadron with 12 H-19 and 6 AB-205. 1 helicopter squadron with 10 Bell 47G. 1 SAM battalion with Nike-Hercules. Para-Military Forces and Reserves: 25,000 Gendarmerie. 200,000 Reserves. Population: 54,000,000. Military service: Army and Air Force, 15 months; Navy, 24 months. Total armed forces: 414,000 (excluding Carabinieri). Estimated GNP 1970: \$93.2 billion.

ITALY 20 Defence budget 1971: 1,657 billion lire (\$2,651,000,000). 625 lire=\$1. Army: 295,000

2 armoured divisions. 5 infantry divisions. 1 independent cavalry brigade. 4 independent infantry brigades. 5 Alpine brigades (of 5,000 men each). 1 parachute brigade. 1 SSM brigade (incl 4 bns with Honest John). 4 SAM battalions with Hawk. 800 M-47 and 200 M-60 med tanks (deliveries of 800 Leopard have started); M-24 light tanks; M-113 APC; M-44, M-56, M-107 and M-109 SP guns; M-42 SP AA guns. Navy: 45,000 (incl air arm and marines).

9 submarines. 3 GM cruisers with Terrier SAM and ASW helicopters. (one with ASROC ASW missiles). 2 GM destroyers with Tartar SAM. 2 destroyer leaders. 7 ASW destroyers. 10 destroyer escorts. 16 coastal escorts. 4 ocean minesweepers. 37 coastal minesweepers. 20 inshore minesweepers. 7 fast patrol boats. 7 motor torpedo boats (less than 100 tons). 1 command ship. 3 landing ships. 2 marine infantry battalions. NAVAL AIR ARM: 3 maritime patrol squadrons with S-2 (due to be replaced by Atlantic by mid-1972), HU-16A SAR aircraft and 50 Bell-47, SH-34, AB-204 and SH-3D SAR helicopters. Air Force: 74,000; 300 combat aircraft. 3 fighter-bomber squadrons with F-104G. 1 fighter-bomber squadron with G-91Y. 1 fighter-bomber squadron with F-84F. 4 light attack squadrons with G-91R. 4 AWX squadrons with F-104G. 2 AWX squadrons with F-104S. 1 AWX squadrons with F-86K. 3 reconnaissance squadrons with RF-84F and RF-104G. 3 transport squadrons with C-119 (delivery of 14 C-130E Hercules is due to begin in 1971). 1 transport sqn with C-47, Convair 440 and DC-6. (A combat squadron ('gruppo') has 12-18 aircraft, and a transport squadron 16.) 6 SAM groups with Nike-Hercules. LUXEMBOURG Population: 342,000. Voluntary military service. Total armed forces: 550. Estimated GNP 1970: \$0.91 billion. Defence budget 1971: 429,600,000 francs (\$8,592,000). 50 francs = \$1. Army: 550. A light infantry battalion (4 companies). Some anti-tank guns and mortars. Para-Military Forces and Reserves: 80,000 Carabinieri Corps. About 650,000 trained reservists. Para-Military Forces: 350 Gendarmerie.

3.14 NETHERLANDS

Population: 13,175,000. Military service: Army, 16-18 months; Navy and Air Force, 18-21 months. Total armed forces: 116,500. Estimated GNP 1970: \$31.3 billion. Defence budget 1971: 4,203 million guilders (\$1,161,000,000). 3.62 guilders=\$1

3.14.1 Army: 76,000.

2 armoured brigades. 4 armoured infantry brigades. 2 SSM battalions with Honest John. 400 Centurion (with 105mm guns) and 200 Leopard med tanks (285 more Leopards are being delivered); 120 AMX-13 It tanks; M-106, M-113 and M-577 amphibious APC; AMX-VTT and YP-408 APC; AMX-105, M-109 155mm, M-107 175mm and M-110 203mm SP howitzers. RESERVES: 1 inf div, and the remaining corps troops, incl 1 indep inf bde, are to be completed by call-up of reservists.

3.14.2 Navy: 19,000 including 2,900 marines and 2,000 naval air force.

5 submarines (2 more due to become operational in 1971/72). 2 cruisers (one GM with Terrier SAM). 6 GM frigates with Seacat SAM. 12 destroyers. 6 corvettes. 6 support escorts. 5 patrol vessels. 36 coastal minesweepers and minehunters. 16 inshore minesweepers. 1 fast combat support ship.* The exchange rate has been allowed to fluctuate since 9 May 1971.

NAVAL AIR ARM: 5 Atlantic, and about 30 P-2 and S-2 MR aircraft. 15 Wasp, SH-34J and AB-204B ASW helicopters.

3.14.3 Air Force: 21,500; 126 combat aircraft.

2 fighter-bomber squadrons with F-104G. 2 fighter-bomber squadrons with NF-5A. 2 interceptor squadrons with F-104G. 1 photo-reconnaissance squadron with RF-104G. (A combat squadron has 18 aircraft.) 1 transport squadron with F-27. 3 observation and communication squadrons (under Army command) with Alouette III helicopters, and Super-Cub and Beaver light aircraft. 8 SAM squadrons with Nike-Hercules. 9 SAM squadrons with HAWK. Para-Military Forces: 3,200 Gendarmerie (Royal Maréchaussée).

3.15 NORWAY Population: 3,915,000.

Military service: Army, 12 months; Navy and Air Force, 15 months. Total armed forces: 35,900. Estimated GNP 1970: \$12.46 billion. Defence budget 1971: 2,932 million kroner (\$410,640,000). 7.14 kroner = \$1.

3.15.1 Army: 18,000.

The peacetime establishment includes 1 brigade group in North Norway, independent battalions and supporting elements and training units. Leopard and M-48 med tanks; M-24 It tanks and M-8 armd cars; M-113 and BV-202 APC; M-109 155mm SP howitzers; L-18 and L-19 It aircraft. RESERVES: mobilization would produce 11 Regi- mental Combat Teams (brigades), supporting units and territorial forces totalling 157,000.

3.15.2 Navy: 8,500 (incl 800 coastal artillery).

15 coastal submarines. 5 frigates. 2 coastal escorts. 10 coastal minesweepers. 5 minelayers. 21 gunboats (refitting with Penguin SSM). 6 torpedo boats. 20 torpedo boats (less than 100 tons). 2 armed depôt and training ships. A number of coastal artillery batteries.

5 light attack squadrons each with 16 F-5A. 1 AWW fighter squadron with 20 F-104G. 1 photo-reconnaissance squadron with 16 RF-5A. 1 maritime patrol squadron with 5 P-3B. 1 transport squadron with 6 C-130 and 4C-47. 2 helicopter squadrons with UH-1. 4 SAM batteries with Nike-Hercules. Air Force: 9,400; 121 combat aircraft. RESERVES: 10,600, providing 12 airfield defence It AA bns. Home Guard (all services): 75,000.

3.16 PORTUGAL

Population: 9,730,000. Military service: Army, 24 months; Air Force, 36 months; Navy, 48 months. Total armed forces: 218,000 (about 60,000, incl those locally enlisted, are in Angola, 45,000 in Mozambique, and 25,000 in Portuguese Guinea). Estimated GNP 1970: \$6.1 billion. Estimated defence expenditure 1970: 11,444 million escudos (\$398,100,000). 28.75 escudos= \$1.

3.16.1 Army: 179,000.

2 tank regiments. 8 cavalry regiments and battalions. 35 infantry regiments and battalions. 17 coastal artillery regiments and battalions. M-47 and M-4 med tanks; M-41 It tanks; Humber Mark IV and EBR-75 armd cars; AML-60 scout cars; FV-1609 and M-16 half-track APC; 105mm and 140mm howitzers. DEPLOYMENT: Some of the above units form 2 infantry divisions, at or below half-strength, in Portugal. About 25 infantry regiments and supporting units are in the provinces in Africa.

3.16.2 Navy: 18,000 (including 3,300 marines).

4 submarines. 11 frigates. 6 corvettes. 14 coastal patrol vessels. 4 ocean minesweepers. 12 coastal minesweepers. 41 patrol launches (less than 100 tons). 5 landing craft (LCT-type). 58 small landing craft (less than 100 tons). RESERVES: 12,000. Air Force: 21,000; 150 combat aircraft.

2 light bomber sqns with B-26 Invader and PV-2. 1 fighter-bomber squadron with F-84G. 2 light-strike squadron with G-91. 1 interceptor squadron with F-86F. 6 COIN flights with armed T-6. 22

1 maritime patrol squadron with P-2 V5. (A combat squadron has 10-25 aircraft.) 22 Noratlas, 16 C-47, 11 DC-6 and 15 C-45 transports. 13 T-33, 25 T-37 and 35 T-6 reconnaissance/trainers. Other aircraft include 11 Do-27 and about 85 Alouette II/III and SA-330 Puma helicopters. 1 parachute regiment of 4,000.

DEPLOYMENT: 1 parachute battalion in each of the African provinces. 1 G-91 squadron in Mozambique. Para-Military Forces and Reserves: 9,700 National Republican Guard. 500,000 Reserves.

3.17 TURKEY 2 parachute battalions.

Population: 36,100,000. Military service: 20 months. Total armed forces: 508,500. Estimated GNP 1970: \$13.7 billion. Defence budget 1971-72: 6,695 million liras (\$446,000,000). 15 liras = \$1 (before 9 August 1970 9 = \$1).

3.17.1 Army: 420,000.

1 armoured division. 12 infantry divisions. 4 armoured brigades. 4 armoured cavalry brigades. 1 mechanized infantry division. 3 mechanized infantry brigades. M-47 and M-48 med tanks; M-24, M-26 and M-41 It tanks; M-36 tank destroyers; M-8 armd cars; M-59 and M-113 APC; 105mm and 155mm SP guns; 105mm, 155mm and 203mm howitzers; 40mm, 75mm and 90mm AA guns; Honest John SSM.

3.17.2 Navy: 38,500.

12 submarines. 10 destroyers. 6 coastal escorts. 11 motor torpedo boats (2 less than 100 tons). 10 motor launches. 15 coastal minesweepers. 4 inshore minesweepers. 1 fleet minelayer. 5 coastal minelayers. A number of landing craft.

3.17.3 Air Force: 50,000; 360 combat aircraft.

2 fighter-bomber squadrons with F-104G. 4 fighter-bomber squadrons with F-100. 4 fighter-bomber squadrons with F-5. 4 interceptor squadrons with F-5. 2 interceptor squadrons with F-86 (in store) 2 AWX squadrons with F-102A. 2 reconnaissance squadrons with RF-84F. (A combat squadron has 10-25 aircraft.) 4 tpt sqns incl 50 C-47, 3 C-54 and 5 C-130. 2 SAM battalions (6 batteries) with Nike-Hercules. Para-Military Forces: 75,000 Gendarmerie (incl 3 mobile brigades).

3.18 OTHER EUROPEAN COUNTRIES

3.19 ALBANIA

Population: 2,190,000. Military service: Army, 2 years; Air Force, Navy and special units, 3 years. Total regular forces: 42,000. Estimated GNP 1970: \$0.9 billion. Estimated defence expenditure 1971: 580 million leks (\$116,000,000). 5 leks = \$1.

3.19.1 Army: 35,000.

1 tank brigade. 6 infantry brigades. Some light shore batteries. 70 T-34 and 15 T-54 med tanks; 20 BA-64, BTR-40 and BTR-152 APC; SU-76 SP guns; 122mm and 152mm guns and howitzers; 45mm, 57mm, 76mm and 85mm ATk guns; 37mm, 57mm and 85mm AA guns; a few SA-2 SAM.

3.19.2 Navy: 3,000.

4 submarines. 4 ASW patrol vessels. 30 MTB and patrol boats (less than 100 tons). 8 inshore minesweepers. Some SSM deployed around the ports of Durazzo and Valona.

3.19.3 Air Force: 4,000: 72 combat aircraft.

3 fighter squadrons with MiG-17. 2 fighter squadrons with MiG-15. 1 interceptor squadron with MiG-19. (A combat squadron has 12 aircraft.) 1 transport squadron with An-2 and Il-14. About 8 Mi-1 and Mi-4 helicopters. Para-Military Forces: 37,500. Internal security force-12,500. Frontier force - 25,000.

3.20 AUSTRIA

Population: 7,445,000. Military service: 9 months (to be reduced to 6 months during 1971). Total armed forces: 48,350. Estimated GNP 1970: \$14.3 billion. Defence budget 1971: S4,283 million (\$170,138,000) 24.75 schillings = \$1 (before 9 May 1971 26 = \$1).

3.20.1 Army: 44,000.

4 reduced strength infantry brigades. 3 reduced strength mechanized brigades. .3 tank battalions. 3 independent air defence battalions. 150 M-47 and 120 M-60 med tanks; 40 M-41 and 60 AMX-13 It tanks; 400 G1-2K APC; 105mm and 155mm howitzers, and 155mm guns; JPz-4K SP ATK guns; 84mm Carl Gustav ATGW; 130 mm rocket launchers; 38 M-42 SP AA guns; 20mm and 35mm Oerlikon and 40mm Bofors AA guns.

3.20.2 Air Force*: 4,350; 23 combat aircraft.

17 Saab 105 fighter-bombers. 6 J-29F Tunnan fighter-bombers. 35 Magister, Vampire and Sufir trainers. 19 Cessna L-19 light reconnaissance aircraft. 1 transport squadron with 3 Beaver and 2 Skyvan. 22 AB-204, 23 Alouette and 12 AB-206 helicopters.

3.21 FINLAND

Para-Military Forces: 12,000 Gendarmerie. Population: 4,600,000. Military service: 8-11 months. Total armed forces: 39,500. Estimated GNP 1970: \$10.3 billion. Defence budget 1971: 646 million markkaa (\$153,800,000). 4.2 markkaa = \$1.

3.21.1 Army: 34,000.

1 armoured brigade (at about half strength). 6 infantry brigades (at about 35 per cent strength). 8 independent infantry battalions. 2 coastal artillery regiments. 3 coastal artillery battalions. 1 anti-aircraft regiment. 4 anti-aircraft battalions. T-54, T-55, and Charioteer med tanks; PT-76 It tanks; BTR-50P APC; 105mm, 122mm and 130mm guns; 122mm and 152mm howitzers; 81mm and 120mm mortars; Vigilant and SS-11 ATGW; ZSU-57, 35mm Oerlikon and 40mm Bofors AA guns.

3.21.2 Navy: 2,500.

3 frigates (one used as training ship). 2 corvettes. 1 patrol boat with Mk 66 SSM. 15 fast patrol boats (less than 100 tons). 2 coastal minelayers. 5 patrol boats (ex-inshore minesweepers). * Austrian air units are an integral part of the Army but for purposes of comparison have been listed separately.

3.21.3 Air Force: 3,000; 48 combat aircraft.

3 fighter sqns with MiG-21F and Gnat Mark 1. 12 Magister armed trainers. About 100 other trainers, incl 70 Magister, 30 Safir, and a few MiG-15/MiG-21 UT1. About 10 C-47 and Beaver transports. Hound, Alouette II and 4 AB-204B helicopters. Para-Military Forces and Reserves: 3,000 Frontier defence tps. 650,000 reserves.

3.22 SPAIN

Population: 33,600,000. Military Service: 18 months. Total armed forces: 301,000. Estimated GNP 1970: \$32.3 billion. Defence budget 1971: 47,724 million pesetas (\$681,000,000). 70 pesetas = \$1.

3.22.1 Army: 220,000.

1 armoured division. 1 mechanized infantry division. 1 motorized infantry division. 2 mountain divisions. 12 independent infantry brigades. 1 armoured cavalry brigade. (All above are about 70 per cent strength.) 1 high mountain brigade. 1 airportable brigade. 1 parachute brigade. 2 artillery brigades. 1 SAM battalion with HAWK. M-47 and M-48 med tanks; M-24 and M-41 Lt tanks; Greyhound armd cars; AML-60/90 and M-3 scout cars; M-113 APC; 105mm and 155mm SP guns; 105mm, 155mm and 203mm howitzers; 90mm SP AT guns. Navy: 47,500 including 6,000 marines. 3 submarines. 1 helicopter carrier. 1 cruiser. 16 ASW destroyers. 3 destroyers. 8 frigates. 6 frigate-minelayers. 6 corvettes. 1 ASW patrol vessel. 3 torpedo boats. 13 fleet minesweepers. 12 coastal minesweepers. 8 landing ships. 3 ASW helicopter squadrons. 1 light helicopter squadron.

12 Mirage-IIIE fighter-bombers. 50 F-5 fighter-bombers. 55 HA-200 fighter-bombers. (36 F-4C fighter-bombers are being delivered.) 21 F-104G interceptors. 48 F-86F interceptors. 25 T-6 armed trainers. 1 ASW squadron with 11 Hu-16B. About 150 transport aircraft and helicopters, including C-47, C-54, 12 Caribou and 20 Azor.

3.22.2 Air Force: 33,500; 221 combat aircraft.

Para-Military Forces: 65,000 Guardia Civil DEPLOYMENT (outside mainland Spain): Total strength: 41,000. These include mechanized and commando formations of the Spanish Foreign Legion, elements of 3 divisions and support units. Balearic Islands: 6,000. Canary Islands: 8,000. Ceuta: 8,000 incl 1 regt of the Foreign Legion. Melilla: 9,000 incl 1 regt of the Foreign Legion. Spanish Sahara: 10,000 incl 2 regts of the Foreign Legion.

3.23 SWEDEN

Population: 8,125,000. Military service: Army and Navy, 9-15 months; Air Force, 9-14 months. Total armed forces: 23,000 regulars and 50,300 conscripts (total mobilizable strength 750,000). Estimated GNP 1970: \$31.2 billion. Defence budget 1971-72: 6,165 million Swedish kronor (\$1,192,000,000). 5.17 kronor= \$1.

3.23.1 Army: 12,500 regulars; 36,500 conscripts; 100,000 reservists called up each year for 18-40 days' training.

7 armoured regiments. 15 infantry regiments. 7 artillery regiments. 6 anti-aircraft artillery regiments. 1 parachute training unit. (All in cadre form.) 1 SAM battalion with HAWK. Centurion and STRV-103 med tanks; STRV-74 It tanks; IKV-91 amphibious tanks; Pbv-301/-302 APC; 105mm and 155mm SP howitzers; 155mm SP guns; 105mm and 155mm guns; 75mm, 105mm and 155mm howitzers; 90mm ATK guns; SS-11, Bantam, Carl Gustav and Miniman ATGW; 57mm SP, 20mm and 40mm AA guns; Redeye SAM.

3.23.2 Navy: 4,700 regulars; 7,400 conscripts.

23 submarines. 2 GM destroyers with Rb-08 SSM. 4 GM destroyers with Seacat SAM. 2 other destroyers. 7 fast anti-submarine frigates. 17 heavy torpedo boats. 25 motor torpedo boats (less than 100 tons). 1 minelayer/submarine depot ship. 18 coastal minesweepers. 17 inshore minesweepers (8 less than 100 tons). 5 coastal artillery regiments with 75mm, 105mm, 120mm, 152mm and 210mm guns; Rb-08 and Rb-52 (SS-11) SSM. 10 Vertol and 10 AB-206A helicopters.

3.23.3 Air Force: 5,800 regulars; 6,400 conscripts; 650 combat aircraft.

10 attack squadrons with A-32A Lansen (with Rb-04 ASM) (replacement by the AJ-37 Viggen is due to start in 1971). 13 AWX squadrons with J-35 Draken F. 8 AWX squadrons with J-35 Draken A/D. 2 recce/fighter squadrons with S-32C. 3 recce/day-fighter squadrons with S-35E.

(A combat squadron has up to 18 aircraft.) 1 transport squadron with 2 C-130E and 7 C-47. 1 heavy helicopter squadron with 10 Vertol-107. 6 SAM squadrons with Bloodhound 2. There is a fully computerized, fully automatic control and air surveillance system, Stril 60, co-ordinating all air defence components. Para-Military Forces: Voluntary defence organizations - 325,000, including 90,000 women.

3.24 SWITZERLAND

Population: 6,375,000. Military service: 4 months initial training, followed by reservist training of three weeks a year for 8 years, two weeks for 3 years, and one week for 2 years. Total armed forces: 5,500 regulars and 24,000 conscripts (total mobilizable strength 600,000; reservists can be fully mobilized within 48 hours). Estimated GNP 1970: \$20.5 billion. Defence budget 1971: 1,909,200,000 francs (\$459,000,000). 4.08 francs = \$1 (before 9 May 1971 4.3 = \$1).

division and 2 infantry divisions each. There are also 17 frontier, fortress and 'redoubt' brigades, and 48 artillery battalions. 300 Centurion and 150 Pz-61 med tanks; 200 AMX-13 It tanks; 1,000 M-113 APC; 155mm SP howitzers; 105mm guns and howitzers; 81mm and 120mm mortars. Air Force: (including Air Defence troops)*; 3,000 regular; 7,000 conscripts; 40,000 reservists (maintenance by civilians); 315 combat aircraft. 13 ground support squadrons with Venom FB 50. 2 interceptor squadrons with Mirage-IIIS. 5 interceptor squadrons with Hunter F-58 (with Sidewinder AAM). 1 reconnaissance squadron with Mirage-IIIR. (A combat squadron has 15 aircraft.) 20 transports including 3 Ju-52/3 and 6 Do-27. 80 helicopters including 60 Alouette II|III. 40 AA batteries with Oerlikon twin 35mm cannon. 2 SAM battalions with Bloodhound 2.

3.24.1 Army: 2,500 regular training cadre; 17,000 conscripts; 530,500 reservists.

The militia-style Army is organized into 4 corps. 1 corps, for the defence of the Alps, consists of 3 mountain divisions; the other 3 corps, for the defence of the plain, consist of an armoured
YUGOSLAVIA Population: 20,800,000. Military service: 18 months. Total armed forces: 233,000. Estimated GNP 1970: \$11.8 billion. Defence budget 1971: 8,838 million dinars (\$596,000,000). 15 dinars = \$1 (before 23 Jan. 1971 12.5 dinars = \$1).

3.24.2 Army: 195,000.

9 infantry divisions. 14 armoured brigades. 31 independent infantry brigades. 1 airborne brigade. 1 marine infantry brigade. T-54/55, T-34, M-47 and 650 M-4 med tanks; PT-76 and 35 AMX-13 It tanks; M-3, BTR-50, BTR-60P and BTR-152 APC; SU-100 SP guns; 105mm

and 155mm howitzers; 50mm, 57mm, 75mm and 76mm ATk guns; SU-57 SP AA guns; SA-2 SAM.

3.24.3 Navy: 18,000.

5 submarines. 1 destroyer. 3 patrol vessels. 16 submarine chasers. 4 coastal minesweepers. 20 inshore minesweepers (12 less than 100 tons). * Swiss Air Force and Air Defence Troops are an integral part of the Army, but are listed here separately for purposes of comparison.

10 Osa-class patrol boats with Styx SSM. 67 motor torpedo boats (55 less than 100 tons). 35 landing craft. 25 coastal artillery batteries.

3.24.4 Air Force: 20,000; 330 combat aircraft.

10 GA squadrons with F-84, Kraguj and Jastreb. 10 fighter/interceptor squadrons with F-86D/E and MiG-21F/PF. 2 reconnaissance squadrons with RT-33. (A combat squadron has 15 aircraft.) 60 Galeb trainers. 25 Li-2, Beaver, C-47 and II-14 transports. 50 Whirlwind and Mi-4, and some Alouette III helicopters. 8 SAM batteries with SA-2. Para-Military Forces: 19,000 Frontier Guards. 1,000,000 Territorial defence force (planned to increase to 3,000,000).

4 The Middle East and the Mediterranean

4.1 Multilateral Agreements

The members of the Central Treaty Organization (CENTO) are Britain, Iran, Pakistan and Turkey, with the United States as an associate. All sit on the Military, Economic and Counter-Subversion Committees and on the Permanent Military Deputies Group. The Treaty provides for mutual co-operation for security and defence but has no international command structure, nor forces allocated to it. For the local powers, the economic organization of Regional Co-operation for Development (RCD), which arose out of CENTO, may today be more important.

4.2 Bilateral Agreements

A number of external powers have military arrangements with countries in the region. The United States has varying types of security assistance agreements and provides significant military aid on either a grant or credit basis to Greece, Turkey, Portugal, Spain, Morocco, Tunisia, Lebanon, Jordan, Saudi Arabia and Israel. It provides, in addition, a significant amount of military equipment on a cash sales basis to many countries, notably Israel, Spain and Jordan. For grant military assistance purposes Greece and Turkey are considered forward defence areas and Spain is considered a base rights country. Communication bases are maintained in Morocco under informal arrangements. The Soviet Union has a military assistance agreement, concluded in December 1970, and a 15 year treaty of friendship and co-operation, signed in May 1971, with the UAR. Important military assistance is also provided to Algeria, Iraq, Sudan and Syria which may be covered by more informal arrangements. The People's Republic of China has supplied arms to Albania, and has a treaty of friendship with the Yemen. Britain has defence commitments to Cyprus, Gibraltar, and Malta,* and has proposed defence arrangements with the lower Gulf States after her withdrawal from the Persian Gulf at the end of 1971. Britain is also an important arms supplier for the Gulf Sheikdoms, Saudi Arabia and Jordan. France has a pilot training agreement with Morocco but no other formal commitments in the region. The facilities provisions of the Evian agreements with Algeria lapsed at the end of 1970 with the return of the Bou-Sfer airbase to Algeria. France sells arms to a number of countries, notably to Libya.

4.3 Arrangements within the region (between Arab states)

Algeria, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Saudi Arabia, South Yemen, Sudan, Syria, Tunisia, the UAR and Yemen are members of the League of Arab States. Among its subsidiary bodies are the Arab Defence Council set up in 1950 and the Unified Arab Command organized in 1964. Defence agreements were concluded by the UAR with Syria in November 1966 and Jordan in May 1967 to which Iraq later acceded. These agreements provided for the establishment of a Defence Council and a Joint Command. The loosely associated Eastern Front Command, comprising Iraq, Jordan, the Palestine Liberation Army and Syria, was reorganized in December 1970 into separate Jordanian and Syrian commands. Iraq and Syria concluded defence pacts in May 1968 and July 1969. The proposed Union of Arab Republics, announced by Libya, Syria, and the UAR in April 1971, would provide for a common defence policy and a Federal Defence Council. Sudan has announced its intention to join. * The Malta and British Governments are discussing the 1964 Defence Agreement with a view to revising its provisions. 28

4.4 ALGERIA

Population: 14,150,000. Military service: limited conscription. Total armed forces: 60,250. Estimated GNP 1970: \$4.4 billion. Defence budget 1971: 490 million dinars (\$99,200,000). 4.94 dinars = \$1.

4.4.1 Army: 53,000.

4 motorized infantry brigades. 1 parachute brigade. 3 independent tank battalions. 50 independent infantry battalions. 12 companies of desert troops. 5 independent artillery battalions. 200 T-34, 200 T-54 and 50 T-55 med tanks; AMX-13 light tanks; 350 BTR-152 APC; 25 SU-100 and 6 JSU-152 SP guns; 85mm guns, 122mm and 152mm howitzers; 140mm and 240mm RL.

4.4.2 Navy: 3,250.

6 coastal escorts. 2 fleet minesweepers. 1 coastal minesweeper. 8 Komar- and 1 Osa-class patrol boats (Styx SSM). 8 P-6 torpedo boats.

4.4.3 Air Force: 4,000; 142 combat aircraft.

24 Il-28 light bombers. 20 MiG-15, 40 MiG-17 FGA. 30 MiG-21 interceptors. 28 Magister armed trainers. 8 An-12 and 3 Il-18 transports. 3 Mi-1, 40 Mi-4, 7 Hughes-269A and 2 SA-330

helicopters. 1 SAM battalion with SA-2. Para-Military Forces: 8,000. Gendarmerie with 50 AML armoured cars.

4.5 IRAN

Population: 29,500,000. Military service: 2 years. Total armed forces: 181,000. Estimated GNP 1970: \$10.9 billion. Defence budget 1971-72: 77,500 million rials (\$1,023,000,000). 75.75 rials = \$1.

4.5.1 Army: 150,000.

3 armoured divisions. 3 infantry divisions. 4 independent infantry brigades. 1 SAM battalion with HAWK. 400 M-47 and 460 M-60A1 med tanks; 100 M-24 Lt tanks; 100 M-8 and 140 M-20 armd cars; 300 M-113, 270 BTR-50 and 300 BTR-60 APC; 75mm, 105mm and 155mm howitzers; 40mm, 57mm and 85mm AA guns. 8 Huskie helicopters. (Further helicopters are being delivered.)

4.5.2 Navy: 9,000.

1 destroyer. 1 frigate (4 with Seacat SAM are being delivered). 4 corvettes. 4 patrol boats. 4 coastal minesweepers. 2 inshore minesweepers. 8 SRN-6 and 2 Wellington hovercraft (less than 100 tons). 4 landing craft.

4.5.3 Air Force: 22,000; 140 combat aircraft.

2 fighter-bomber squadrons with F-4D, with Sidewinder and Sparrow AAM (32 F-4E are on order). 5 fighter-bomber squadrons with F-5. 20 F-86 AWX (being phased out). 9 RT-33 reconnaissance aircraft. Transports include 10 C-47, 26 C-130E and 6 Beaver (30 C-130H are being delivered). Helicopters include 10 Huskie, 45 AB-205 and 16 Super-Frelon. (Further helicopters are being delivered.) Tigercat SAM. (Rapier SAM are on order.) Para-Military Forces: 40,000. Gendarmerie with 30 AB-206 helicopters.

4.6 IRAQ

Population: 9,250,000. Military service: 2 years. Total armed forces: 95,250. Estimated GNP 1970: \$3.12 billion. Estimated defence expenditure 1970-71: 84,700,000 dinars (\$237,160,000). 1 dinar = \$2.8.

4.6.1 Army: 85,000.

2 armoured divisions. 4 infantry divisions (each of 4 brigades). 800 T-54 and T-55, and 60 T-34/85 med tanks; 45 PT-76 It tanks; 115 AML armd cars; 60 Ferret scout cars; BTR-152 APC; artillery includes 300 Soviet 120mm and 130mm guns.

4.6.2 Navy: 2,000.

3 submarine chasers. 12 motor torpedo boats (less than 100 tons). 10 patrol boats (less than 100 tons).

4.6.3 Air Force: 8,250; 220 combat aircraft.

9 Tu-16 medium bombers. 12 Il-28 light bombers. 48 Su-7 fighter-bombers. 35 Hunter FGA. 16 T-52 Jet Provost light-strike aircraft. 85 MiG-21 interceptors. 15 MiG-17 fighters. 35 Mi-4, 12 Mi-8 and 9 Wessex helicopters. 2 An-2, 8 An-12, 10 An-24, 2 Tu-124 and 2 Heron transports. Para-Military Forces: 20,000 including 10,000 national guard and 4,000 security troops, forming 1 mechanized brigade.

4.7 ISRAEL

Population: 3,040,000. Military service (Jewish population only): men, 36 months; women, 20 months. Total armed forces: 75,000 regular cadre and conscripts (can be raised to 300,000 by mobilizing reservists within 48-72 hours). Estimated GNP 1970: \$5.4 billion. Defence budget 1971-72: 5,193 million Israeli pounds (\$1,483,700). 3.5 Israeli pounds = \$1.

4.7.1 Army: 11,500 regular, 50,000 conscripts (275,000 when fully mobilized).

4 armoured brigades. 4 infantry brigades. 1 parachute brigade. 300 M-48 (with 105mm guns), 250 Ben Gurion (Centurion with French 105mm gun), 200 Centurion, 200 Isherman (with 105mm gun) and Super Sherman, 100 TI-67 (T-54/55 with 105mm gun) and 25 M-60 med tanks; AML-60, 15 AML-90 and some Staghound armd cars; about 1,000 M-2 and M-3 half-tracks; M-113 APCs; 24 M-109 155mm SP howitzers; 155mm howitzers on Sherman chassis; about 300 SP 105mm howitzers, 120mm and 160mm mortars on AMX-chassis; 90mm SP ATK guns and 106mm jeep-mounted recoilless rifles; Cobra, and weapons carrier-mounted SS-10/11 ATGW; 20mm, 30mm and 40mm AA guns. (The MD-660 280-miles-range SSM may become operational during 1971.) RESERVES: would increase above formations to 10 armoured, 9 infantry and 4 parachute brigades.

4.7.2 Navy

1 destroyer (used as a training ship). 12 FPB (with Gabriel SSM). 9 motor torpedo boats (less than 100 tons). 8 patrol boats (less than 100 tons). 10 landing craft (4 less than 100 tons). Naval commandos: 500. Navy: 3,500 regular, 1,000 conscripts (8,000 when fully mobilized). 3 submarines.

4.7.3 Air Force: 8,000 regular, 1,000 conscripts (17,000 when fully mobilized); 374 combat aircraft.

10 Vautour light bombers. 75 F-4E fighter-bomber/interceptors. 60 Mirage III-C fighter-bomber/interceptors (some with R-530 AAM). 72 A-4E/H fighter-bombers (18 more are due to be delivered during 1971). 27 Mystère IV-A fighter-bombers. 30 Ouragan fighter-bombers. 9 Super Mystère interceptors. 6 RF-4E reconnaissance aircraft. 85 Magister armed trainers. 10 Stratocruiser transports/tankers. 15 Noratlas, 10 C-47 and 4 C-46 transports. 12 Super Frelon, 8 CH-53, 25 AB-205 and 20 Alouette helicopters. 8 SAM batteries with 48 HAWK. Para-Military Forces: 10,000. Militia providing regional border defence units.

4.8 JORDAN

Population: 2,225,000. Military service: 2 years. Total armed forces: 60,250. Estimated GNP 1970: \$0.64 billion. Defence budget 1971: 32,300,000 dinars (\$90,440,000). 1 dinar = \$2.8.

4.8.1 Army: 58,000.

1 armoured division. 1 mechanized division. 1 infantry division. 1 Royal Guards battalion (armoured). 3 artillery regiments. 1 SAM regiment with Tigercat. 150 M-47 and M-48, and 140 Centurion med tanks; 125 Saladin armd cars; 140 Ferret scout cars; 250 M-113 and 100 Saracen APC; 25 pounder guns, 30 105mm and 155mm howitzers, a few 155mm and 203mm guns; M-42 SP AA guns.

4.8.2 Navy: 250.

8 small patrol craft.

4.8.3 Air Force: 2,000; 33 combat aircraft.

2 ground-attack squadrons with 18 Hunter. 30 1 interceptor squadron with 15 F-104A. 4 C-47 and 2 Dove transports. Helicopters include 7 Alouette III. Para-Military Forces: 37,500, consisting of 7,500 Gendarmerie, and 30,000 National Guard.

4.9 LIBYA Army: 20,000.

4.9.1 Army: 52,000.

4 armoured battalions. 5 infantry battalions. 3 artillery battalions. 2 AA artillery battalions. 6 Centurion-5, 100 T-54/55 and 15 T-34/85 med tanks; Saladin armd cars; Shorland and Ferret scout cars; Saracen APC; 122mm guns, 105mm and 155mm howitzers; L40/70 Bofors AA guns. (An order for 188 Chieftain tanks from Britain is in abeyance.)

4.10 LEBANON

Population: 2,775,000. Voluntary military service (proposals have been made to introduce compulsory military training). Total armed forces: 15,250. Estimated GNP 1970: \$1.56 billion. Defence budget 1971: £L166,200,000 (\$51,100,000). Lebanese £3.25 = \$1.

1 motorized battalion. 9 infantry battalions. 40 Charioteer med tanks; 40 AMX-13 and 20 M-41 It tanks; M-706, M-6 and AEC Mark-3 armd cars; M-113 and M-59 APC; 155mm howitzers; 15 M-42 SP AA guns. 2 tank battalions. Navy: 250.

1 patrol vessel. 4 small patrol boats (less than 100 tons). 1 landing craft. Air Force: 1,000; 21 combat aircraft. 12 Hunter FGA.

1 interceptor squadron with Mirage III-C* with R-530 AAM. 5 transports. 1 helicopter sqn with 4 Alouette II and 6 Alouette III. Some radars of a Crotale SAM system have been delivered. Para-Military Forces: 2,500 Gendarmerie. A National Guard of 5,000 is being formed. Population: 2,000,000. Military service: 18 months. Total armed forces: 22,000. Estimated GNP 1970: \$4.0 billion. Defence budget 1971-72: £L30 million (\$84 million). £L1 = \$2.8.

4.10.1 Navy: 1,000.

1 corvette. 3 FPB with SS-12(M) SSM. 1 fleet minesweeper. 2 inshore minesweepers. 1 logistic support ship. 12 small patrol craft. (1 fast frigate is due for delivery during 1971.) Army: 14,000. Population: 16,000,000. Military service: 18 months. Total armed forces: 57,500. Estimated GNP 1970: \$3.34 billion. Defence budget 1971: 491 million dirham (\$97,000,000). 5.06 dirham = \$1. Air Force: 1,000; 7 combat aircraft.

1 interceptor squadron with 7 F-5. 18 Mirage III and 3 T-33 trainers. 8 C-130E and 9 C-47 medium transports. 2 AB-206, 3 OH-13, 4 Alouette III and 6 Super Frelon helicopters. (30 more of the total order of 110 Mirage, and 8 F-5 are due to be delivered during 1972.)

1 armoured brigade. 3 motorized infantry brigades. 1 light security brigade. 1 parachute brigade. 12 independent infantry battalions. 2 camel corps battalions. 3 desert cavalry battalions. 4 artillery groups. 120 T-54 med tanks; 120 AMX-13 It tanks; some EBR-75, and 50 AML-245 and M-8 armd cars; 40 M-3 half-track and 95 Czech APC; 25 Su-100 and AMX-105, and 50 M-56 90mm SP guns; 75mm and 105mm howitzers; 6 Alouette II|III helicopters.

4.11 MOROCCO

Negotiations have taken place for their resale to France, and they are not thought to be operational.

4.11.1 Navy: 1,500.

1 frigate. 31 2 coastal escorts. 1 patrol boat (less than 100 tons). 2 landing ships.

4.11.2 Air Force: 4,000; 38 combat aircraft.

10 F-5A and 4 F-5B interceptors. 24 Magister armed trainers. 45 T-6 and 25 T-28 trainers. 10 C-47 and 11 C-119 transports. OH-13, 24 AB-204, 12 AB-205 and 6 HH-43 helicopters. (12 MiG-17 fighter-bombers are in storage.)

Para-Military Forces: 23,000. 2,250 Gendarmerie including 2 mobile security battalions; 750 Royal Guards; 20,000 Auxiliaries.

4.12 SAUDI ARABIA

Population: 7,400,000. Voluntary military service. Total armed forces: 41,000. Estimated GNP 1970: \$4.1 billion. Defence budget 1970-71: 1,723 million riyals (\$383,000,000). 4.5 riyals = \$1.

4.12.1 Army: 35,000.

4 infantry brigades. 10 SAM batteries with HAWK. 25 M-47 med tanks; 60 M-41 It tanks; 200 AML-60 and AML-90; some Staghound and Greyhound armd cars: Ferret scout cars. DEPLOYMENT: 1,000 in Jordan; 2,000 in UAR.

4.12.2 Navy: 1,000.

3 torpedo boats. 1 patrol vessel. 2 FPB. 8 SRN-6 hovercraft. (20 smaller patrol boats are being delivered.) Air Force: 5,000; 75 combat aircraft.

1 fighter-bomber squadron with 15 F-86. 2 ground-attack squadrons with 20 BAC-167. 2 interceptor squadrons with 20 Lightning. 10 C-130E transport aircraft. 4 Alouette III, 1 AB-204, 3 AB-205 and 14 AB-206 helicopters. About 35 Hunter, Lightning and T-33A trainers. 2 SAM regiments with 36 Thunderbird. Para-Military Forces: 30,000. National Guard (formerly known as the 'White Army') - lightly armed tribal levies with Vigilant ATGW.

4.13 SUDAN

Population: 16,050,000. Voluntary military service.* Total armed forces: 37,100. Estimated GNP 1970: \$1.83 billion. Defence budget 1970-71: £\$46,400,000 (\$133,200,000). £Sudan 1 = \$2.87.

4.13.1 Army: 35,000.

1 armoured brigade. 6 infantry brigades. 1 independent infantry battalion. 1 parachute regiment. 3 artillery regiments. 1 engineer regiment. 20 T-34/85, 50 T-54 and 50 T-55 med tanks; 50 Saladin and 45 Commando armd cars; 60 Ferret scout cars; BTR-40, BTR-152 and Saracen APC; 55 25-pounder, 40 105mm and some 122mm guns and howitzers; 20 120mm mortars; 80 Bofors 40mm and some Soviet 85mm AA guns. DEPLOYMENT: 2,000 in Egypt. Navy: 600, 6 coastal patrol boats. 2 landing craft.

4.13.2 Air Force: 1,500; 32 combat aircraft.

16 MiG-21 interceptors. 5 BAC-145 Mk 5, 8 Jet Provost Mk 52, and 3 Provost Mk 51 light attack aircraft. 3 Pembroke, 3 F-27 Troopship, 6 An-12 and 5 An-24 transports. 10 Mi-8 helicopters. Para-Military Forces: 3,000. 1,000 Gendarmerie; 2,000 Frontier Police.

4.14 SYRIA

Population: 6,200,000. Military service: 30 months (Jewish population exempted). Total armed forces: 111,750. Estimated GNP 1970: \$1.46 billion. Estimated defence expenditure 1970: £S670 million (\$176,000,000). £Syrian 3.8 \$1.

4.14.1 Army: 100,000.

1 armoured division. 2 mechanized divisions. 2 infantry divisions. * Proposals for compulsory service have been made, 32

1 parachute battalion. 5 commando battalions. 7 artillery regiments. 8 SAM batteries with SA-2. About 30 JS-3 hy tanks; 150 T-34 and 600 T-54/55 med tanks; some PT-76 It tanks; 100 SU-100 SP guns; 500 BTR-152 APC; 800 Soviet-made guns including 122mm, 130mm and 152mm.

4.14.2 Navy: 1,750.

2 minesweepers. 2 coastal patrol vessels. 6 Komar-class patrol boats, with Styx SSM. 12 motor torpedo boats (less than 100 tons).

4.14.3 Air Force: 10,000 men; 210 combat aircraft.

80 MiG-15 and MiG-17 fighter-bombers. 30 Su-7 fighter-bombers. 100 MiG-21 interceptors. 8 Il-14, 6 C-47 transports. 4 Mi-1, 8 Mi-4 and some Mi-8 helicopters. Para-Military Forces: 6,500. 5,000 Gendarmerie; 1,500 Internal Security Camel Corps.

4.15 TUNISIA

Population: 5,050,000 Military service: 1 year (selective). Total armed forces: 21,550. Estimated GNP 1970: \$1.24 billion. Estimated defence expenditure 1971: 10,509,000 dinars (\$20,020,000). 1 dinar= \$1.905.

4.15.1 Army: 20,000.

1 armoured battalion. 6 infantry battalions. 1 commando battalion. 1 artillery group. 1 Sahara patrol group. About 15 AMX-13 and M-41 It tanks; 20 Saladin and some M-8 armd cars; 105mm SP and 155mm guns; 40mm Bofors AA guns.

4.15.2 Navy: 800.

1 corvette. 1 coastal escort. 2 patrol boats with SS-12 (M) SSM. 10 patrol boats (less than 100 tons). (4 FPBs and 6 coastal patrol boats due to be delivered in 1971.)

4.15.3 Air Force: 750; 12 combat aircraft.

12 F-86 fighters. 8 MB-326, 12 T-6 and 14 Saab 91-D trainers. 3 Flamant light transports. 8 Alouette II helicopters. Para-Military Forces: 10,000. 5,000 Gendarmerie organized in 6 battalions. 5,000 National Guard.

4.16 UNITED ARAB REPUBLIC (UAR)

Population: 34,150,000. Military service: 3 years. Total armed forces: 318,000. Estimated GNP 1970: \$6.43 billion. Defence budget 1971-72: £E 650 million (\$1,495,000,000). £E1 = \$2.3.

4.16.1 Army: 275,000.

3 armoured divisions. 4 mechanized infantry divisions. 5 infantry divisions. 2 parachute brigades. 16 artillery brigades. 20 commando battalions. 50 JS-3 and T-10 hy tanks; 1,200 T-54/55 and 250 T-34/85 med tanks; 150 PT-76 It tanks; 850 BTR-40, BTR-50P, BTR-60P, OT-64 and 350 BTR-152 APC; about 150 SU-100 and JSU-152 SP guns; about 1,500 122mm, 130mm and 152mm guns and howitzers, and 40 203mm howitzers: 57mm, 85mm and 100mm ATk guns: Snapper ATGW; 24 FROG-3 and 25 Samlet short-range SSM; ZSU-23-4 and ZSU-57 SP AA guns.

4.16.2 Navy: 14,000 including coastguards.

12 submarines (including 6 ex-Soviet W-class and 6 ex-Soviet R-class). 5 destroyers (including 4 ex-Soviet Skory-class). 2 corvettes. 10 submarine chasers. 4 fleet minesweepers. 2 inshore minesweepers. 12 Osa-class and 8 Komar-class patrol boats with Styx SSM. 30 motor torpedo boats (less than 100 tons). 20 landing craft.

4.16.3 Air Force: 25,000; 523 combat aircraft.

18 Tu-16 medium bombers. 25 Il-28 light bombers. 200 MiG-21 interceptors. 110 Su-7 fighter-bombers. 200 MiG-17 fighter-bombers. 150 MiG, Yak and L-29 trainers, some can be armed. About 40 Il-14 and 20 An-12 medium transports. 140 Mi-1, Mi-4, Mi-6 and Mi-8 helicopters. Air defence is provided by 37mm, 57mm, 85mm and 100mm guns; up to 70 sites with 6 launchers 33 each of SA-2 SAM; a radar network and six squadrons of MiG-21 interceptors. Co-ordinated with this defence are up to 150 MiG-21J and possibly MiG-23 aircraft - all Soviet-operated. There are also up to 65 Soviet-controlled sites with 4 launchers each of SA-3 (and possibly SA-4). DEPLOYMENT: elements in Sudan. Missile Command: 4,000. This is separate from the Army and the Air Force and its numbers include civilian technicians. Fresh development work may have started on the 1,000 lb warhead 235 mile-range Al Zafir, the 375 mile-range Al Kahir and the 440 mile-range Al Raid, stated to be able to carry a one-ton scientific probe, but these ranges are probably over-optimistic. The first two missiles were designed to be mobile; none is thought to have achieved any operational capability. Para-Military Forces: National Guard - about 120,000.

5 Sub-Saharan Africa

5.1 Multilateral Agreements

The Organization of African Unity (OAU), constituted in May 1963, includes all internationally recognized independent African states except South Africa. Its Defence Commission is responsible for defence and security co-operation, and the defence of the sovereignty, territorial integrity and independence of its members. There is a regional defence pact between France, Congo (Brazzaville), the Central African Republic and Chad, and there is a five-party defence agreement between France, Dahomey, Ivory Coast, Niger and Upper Volta which has set up the 'Conseil de défense de l'Afrique équatoriale'.

5.2 Bilateral Agreements

A number of external powers have military arrangements with countries in the region. The United States has varying types of security assistance agreements and provides significant military aid on either a grant or credit basis to Ethiopia, Liberia and Congo (Kinshasa). For grant military assistance purposes, Ethiopia, where the United States has a large communications centre, is considered a base rights country. The Soviet Union and China are not known to have defence agreements with countries in the region but Soviet military assistance has been given to Guinea, Mali and Mauritania. Britain maintains defence agreements with Kenya and Mauritius, and an agreement with South Africa, made in June 1955 and revised in January 1967, covering the use of the Simonstown naval base. France has defence agreements with Cameroun, Gabon, Malagasy Republic, Mauritania, Senegal and Togo; technical military assistance agreements with Cameroun, the Central African Republic, Chad, Congo (Brazzaville), Dahomey, Gabon, Ivory Coast, Malagasy Republic, Mauritania, Niger, Senegal, Togo and Upper Volta; and mutual facilities agreements with Dahomey, Gabon, Ivory Coast, Mauritania and Niger.

5.3 CONGO (Kinshasa) (Democratic Republic of the Congo)

Population: 21,300,000 Voluntary military service. Total armed forces: 46,000. * With a few important exceptions, only countries with armed forces over 5,000 strong are included.

Though in some African States they have a considerable internal security role, civil police forces have not been included. Details of civil police forces of African States and of the armed forces of countries not included here may be found in Adelphi Paper No. 67 The Armed Forces of African States, 1970. The amount of military equipment shown may not necessarily be that which can be used. In some of the developing nations maintenance facilities and skills may pose problems, and spare parts may not be readily available. t Portugal directly assures the defence of Angola, Mozambique and Portuguese Guinea, and Spain of Spanish Sahara, Ceuta and Melilla. All of these are administratively regarded as overseas provinces except Ceuta and Melilla, which are treated as integral parts of Spain. ## Estimated GNP 1970: \$1.9 billion. Estimated defence expenditure 1970: 42 million zaires (\$84,000,000). 1 zaire = \$2.

5.3.1 Army: 45,000.

14 infantry battalions. 7 parachute battalions. 1 heavy weapons battalion. 4 other battalions. The above, together with support units, form 7 brigade groups and 1 parachute division. About 80 AML armd cars: M-3 and Ferret scout cars (less than half operational).

5.3.2 Navy: 150.

7 river gunboats. 1 patrol boat.

5.3.3 Air Force: 850; 32 combat aircraft.

17 MB-326GB, 8 T-6G and 5 T-28D armed trainers. 10 C-47, 4 C-54 and 3 C-130 transports. 8 SF-260M trainers. 1 Alouette II, 4 Alouette III and 7 SA-330 Puma helicopters. Para-Military Forces: 6 National Guard and 7 Gendarmerie battalions.

5.4 ETHIOPIA

Population: 25,800,000. Voluntary military service. Total armed forces: 42,750. Estimated GNP 1970: US\$1.75 billion. Defence budget 1970-71: E\$89,100,000 (US \$35,640,000). E\$2.5 = US\$1.

5.4.1 Army: 39,000.

4 infantry divisions* (incl Imperial Guard). 1 tank battalion. 1 airborne infantry battalion. 1 armoured car squadron. 4 artillery battalions. 5 air defence batteries. 2 engineer battalions. 55 M-41 med tanks; 15 M-24 Lt tanks; about 50 APC.

5.4.2 Navy: 1,500.

1 training ship (ex-seaplane tender). 5 patrol boats. 2 motor torpedo boats. 4 gun boats (less than 100 tons). 4 landing craft (less than 100 tons).

5.4.3 Air Force: 2,250; 48 combat aircraft.

1 bomber squadron with 4 Canberra B-2. 1 fighter-bomber squadron with 11 F-86F. 1 ground-attack squadron with 13 T-28. 1 ground-attack squadron with 8 Saab-17. 1 fighter squadron with 10 F-5A. 1 reconnaissance squadron with 2 T-33. 1 tpt sqn with 4 C-47, 2 C-54, 4 C-119G, 3 Dove and 1 II-14. 3 trg sqns with 20 Safir, 15 T-28A and 11 T-33. 4 Alouette II and 2 Mi-8 helicopters. Para-military Forces: 13,750. 6,000 Territorial Army - active strength. 6,800 mobile emergency police force; 1,500 frontier guards.

5.5 GHANA

Population: 9,050,000. Voluntary military service. Total armed forces: 18,600. Estimated GNP 1970: \$2.57 billion. Defence budget 1970-71: 45,300,000 cedi (\$44,400,000). 1.02 cedi = \$1.

5.5.1 Army: 16,500.

2 brigades comprising 7 inf bns and support units. 2 reconnaissance squadrons. Saladin armd cars; Ferret scout cars; heavy mortars.

5.5.2 Navy: 1,000.

2 corvettes. 1 coastal minesweeper. 2 inshore minesweepers. 2 seaward defence vessels. 3 P-class patrol boats (less than 100 tons).

5.5.3 Air Force: 1,100; no combat aircraft.

1 transport squadron with 7 Otter. 1 transport squadron with 8 Caribou and 3 Heron. 1 comms and liaison squadron with 11 Beaver. 3 Whirlwind, 2 Wessex and 3 Hughes 269 hel. 6 MB-326 and 9 Chipmunk trainers. Para-Military Forces: A workers brigade.

5.6 GUINEA

Population: 4,075,000. Military service: 2 years. Estimated GNP 1970: \$0.7 billion. Total armed forces: 5,350. Defence budget 1966-67: 2,338 million Guinea francs (\$9,470,000). 278 Guinea francs = \$1.

5.6.1 Army: 5,000.

5 infantry battalions. 1 armoured battalion. 3 engineer companies. T-34 tks: BTR-152 APC: 105mm and 85mm guns. DEPLOYMENT: about 200 in Sierra Leone.

5.6.2 Navy: (Coast Guard) 150.

6 ex-Soviet patrol boats (less than 100 tons).

5.6.3 Air Force: 200; 5 combat aircraft.

5 MiG-17 fighters. 2 Il-18 and 4 Il-14 transports. Yak-18 and MiG-15 trainers. * 8,000 men in each. Para-Military Forces: 7,500. 900 Gendarmerie. 1,600 Republican Guard; 5,000 Militia. t There is a substantial shortage of spares for all naval craft.

5.7 IVORY COAST

Population: 4,375,000. Military Service: 2 years. Total armed forces: 4,400. Estimated GNP 1970: \$1.44 billion. Estimated defence expenditure 1970: 6,350 million CFA francs (\$22,800,000). 278 CFA francs = \$1.

5.7.1 Army: 4,000.

3 infantry battalions. 1 armoured squadron. 1 parachute company. 2 artillery batteries. 1 engineer company. About 5 AMX-13 It tanks: some armd cars, scout cars, 105mm guns, mortars, 40mm AA guns.

5.7.2 Navy: 100. 3 patrol vessels (1 less than 100 tons).

2 landing craft (less than 100 tons).

5.7.3 Air Force: 300; no combat aircraft.

3 C-47 medium, and 1 Mystère 20, 1 Commander 500 and 5 MH-1521 Broussard light transports. 5 Alouette helicopters and 6 light aircraft. Para-Military Forces: 2,000 Gendarmerie.

5.8 KENYA

Population: 11,525,000. Voluntary military service. Total armed forces: 7,170. Estimated GNP 1970: \$1.58 billion. Estimated defence expenditure 1970: Sh. 175 million (\$24,500,000). 7.143 shillings = \$1.

5.8.1 Army: 6,300.

4 infantry battalions. 1 support battalion with a parachute company. Saladin armoured cars; Ferret scout cars; 81mm and 120mm mortars; 120mm recoilless rifles.

5.8.2 Navy: 250. 1 seaward defence boat. 3 patrol boats.

5.8.3 Air Force: 620; 6 combat aircraft.

6 BAC-167 ground support aircraft. 1 transport squadron with 4 Caribou. 1 light transport squadron with 7 Beaver. 1 training squadron with 5 Chipmunk and 3 Beaver. 3 Alouette II and 2 H-269 helicopters. (5 Bulldog armed trainers are due to be delivered by mid-1972.)

Para-Military Forces: 1,800 in General Service Units (including Presidential escort).

5.9 MALAGASY REPUBLIC

Population: 7,200,000. Military service: 18 months. Total armed forces: 4,100. Estimated GNP 1970: \$0.82 billion. Defence budget 1969: 3,450 million francs (\$13,450,000). 278 MG francs = \$1.

5.9.1 Army: 3,700.

2 infantry regiments. 1 parachute company. 1 armoured squadron. 1 artillery battery. 1 engineer regiment.

5.9.2 Navy: 200.

1 patrol vessel. 1 training ship. 1 tender. 1 marine company.

5.9.3 Air Force: 200; no combat aircraft.

5 C-47 medium and 3 MH-1521 light transports. 2 MD-315 Flamant light aircraft Para-Military Forces: 4,100 Gendarmerie.

5.10 NIGERIA

Population: 62,000,000. Voluntary military service. Total armed forces: 252,000. Estimated GNP 1970: \$9.1 billion. Defence budget 1971-72: £N87 million (\$243,600,000). £N1 = \$2.80.

###Army: 240,000. 3 infantry divisions.

3 reconnaissance regiments. 3 artillery regiments. Saladin and 20 AML-60/90 armcd cars; Ferret scout cars; Saracen APC; 25-pounder, 76mm, 105mm and 122mm guns.

5.10.1 Navy: 5,000. 1 frigate (refitting). 3 ex-Soviet FPB (less than 100 tons). 37 6 seaward defence boats. 1 landing craft. (2 corvettes are due to be delivered by mid-1972.)

5.10.2 Air Force: 7,000; 32 combat aircraft.

6 Il-28 medium bombers. 8 MiG-17 fighter-bombers. 8 L-29 Delfin and 10 P-149D armed trainers. Other aircraft include 6 C-47 transports; 20 Do-27/28 communication/liaison aircraft; 8 Whirlwind and Alouette II helicopters.

6 RHODESIA

Population: 5,425,000 (250,000 white population). Military service: 12 months (white population). Total armed forces: 4,600. Estimated GNP 1970: \$1.44 billion. Estimated defence expenditure 1970-71: R\$17,879,000 (US\$25,031,000). R\$1 = US\$1.4.

The white population completing military service is assigned for three years part-time training to Territorial units, which include active Territorial battalions based on the cities and reserve Territorial battalions based on country districts. The establishment of the Army Reserves is 8 infantry battalions and one field artillery battery. The majority of ground personnel servicing regular Air Force units are Air Force reservists or non-white civilians employed by the Air Force. Para-Military Forces: 6,400 active; 28,500 reservist. The British South African Police (BSAP) have some military equipment such as small arms and would be responsible for much of the internal security of Rhodesia in the event of civil disturbances or a military threat from outside. The RESERVES: 8,000. white population forms only about a third of the active strength, but nearly three-quarters of the Police reserves.

6.1 SENEGAL

Population: 3,950,000. Military service: 2 years. Total armed forces: 5,900. Estimated GNP 1970: \$0.72 billion. Defence budget 1969-70; 4,461 million CFA francs (\$18,060,000). 278 CFA francs = \$1.

6.1.1 Army: 5,500.

3 infantry battalions. 2 parachute companies. 2 commando companies. 1 reconnaissance squadron. 1 engineer battalion. Support units include a tpt and a sig coy. Greyhound and AML-245 armcd cars.

6.1.2 Navy: 200.

1 coastal escort. 2 submarine chasers. 1 patrol boat (less than 100 tons).

6.1.3 Air Force: 200; no combat aircraft.

4 C-47 medium and 4 MH-1521 light transports. 2 Bell-47G helicopters. Para-Military Forces: 1,600 Gendarmerie.

Population: 2,900,000. Voluntary military service. Total armed forces: 15,000. Estimated GNP 1970: \$0.18 billion. Defence budget 1969: 64,320,000 shillings (\$9,005,000). 7.143 Somali shillings = \$1.

4 tank battalions. 9 mechanized infantry battalions. 1 commando battalion. About 150 T-34 med tanks; 5 *Ferret scout cars*; over 200 *BTR-40*, 50 and 152 *APC*; 100mm guns. ## *SOMALI DEMOCRATIC REPUBLIC Navy: 250. 6 patrol boats (less than 100 tons). ## Army: 13,000. Air Force: 1,750; 20 combat aircraft. 20 MiG-15/MiG-17 fighters. Only about one quarter are serviceable. 38 2 MiG-15/MiG-17 UTI and 3 P-18 trainers. Tpts include 1 C-45, 3 C-47, 3 An-2 and 1 An-24. Para-Military Forces: 500 border guards.*

6.2 SOUTH AFRICA

Population: 20,550,000 (3,900,000 white population). Military service: 9-12 months in Citizen Force. Total armed forces: 44,250. Estimated GNP 1970: \$17.6 billion. Defence budget 1971-72: 316 million rand (\$442,400,000). 1 rand = \$1.4.

6.2.1 Army: 32,000 (10,000 regular; 22,000 Citizen Force)

100 Centurion Mark 5, 100 Sherman and 40 Comet med tanks; 500 AML-60 and AML-90, and 50 M-3 armd. cars; 200 Ferret scout cars; Saracen APC. RESERVES: 23,000 trained reserves in Citizen Force.

6.2.2 Navy: 4,250 (3,000 regular; 1,250 Citizen Force).

1 submarine (2 more due for delivery by mid-1972).

2 destroyers with Wasp ASW helicopters.* 6 ASW frigates. 1 escort minesweeper. 10 coastal minesweepers. 5 seaward defence boats. 1 fleet replenishment tanker. RESERVES: 4,750 trained reserves in Citizen Force.

6.2.3 Air Force: 8,000 (5,000 regular: 3,000 Citizen Force); 163 combat aircraft.

1 bomber squadron with 16 Canberra B-12. 1 It bomber squadron with 15 Buccaneer Mark 50. 1 fighter-bomber squadron with 20 Mirage III-EZ (with AS-20 and AS-30 ASM).t 1 interceptor sqn with 16 Mirage III-CZ (with R-530 AAM). Other aircraft include 4 Mirage III-RZ, 30 F-86, 5 Vampire FB-5 and at least 50 MB-326 Impala. 1 maritime recce squadron with 7 Shackleton. 9 Transall, 30 C-47, 4 C-54, 7 C-130B/E and 1 Viscount med and 9 P-166 light transports. 106 Alouette II|III, 8 Wasp and 16 Super Frelon helicopters. (Deliveries of 20 SA-330 Puma have begun.) A Cactus air defence missile system is being in- * Reports suggest that both destroyers and 1 frigate are temporarily in reserve. t Mirage aircraft are to be built in South Africa under licence. stalled, but the Crotale SAM have not yet been delivered. RESERVES: The Citizen Air Force operates eight squadrons with 50 Impala, about 120 Harvard armed trainers and C-47 transports.

Para-Military Forces: 78,000. 75,000 Kommandos organized and trained on the same lines as the Citizen Force. 3,000 police with anti-terrorist training whose equipment includes 80 Saracen APC on loan from the army.

6.3 TANZANIA

Population: 13,600,000. Voluntary military service. Total armed forces: 11,100. Estimated GNP 1970: \$1.1 billion. Defence budget 1968-69: 190,300,000 shillings (\$26,640,000). 7.143 shillings = \$1.

6.3.1 Army: 10,000 4 infantry battalions.

14 Chinese T-62 It tanks; some BTR-40 and 152 APC; Soviet field artillery and Chinese mortars.

6.3.2 Navy: 600.

5 fast patrol boats. 8 patrol boats (less than 100 tons).

6.3.3 Air Force: 500; no combat aircraft.

1 An-2, 6 Beaver, and 4 Caribou transports. 7 P-149 trainers. Para-Military Forces: A police marine unit.

6.4 UGANDA

Population: 10,025,000. Voluntary military service Total armed forces: 9,000. Estimated GNP 1970: \$1.06 billion. Defence budget 1968-69: 120,540,000 shillings (\$16,875,000). 7.143 shillings= \$1.

6.4.1 Army: 8,550

2 brigades each of 2 infantry battalions with supporting services. 2 border guard battalions. 1 mechanized battalion. 1 parachute/commando battalion. 1 artillery regiment. 5 M-4 med tanks; 16 Ferret scout cars; 20 BTR-40 and BTR-152, and 12 OT-64B APC (perhaps half are operational).

6.4.2 Air Force: 450; 19 combat aircraft.

1 fighter squadron with 7 MiG-15 and MiG-17. 12 Magister armed trainers. 1 transport squadron with 6 C-47 and 1 Caribou. 2 AB-206 and 2 Scout helicopters. 4 Piaggio P-149 and 12 L-29 Delfin trainers, and 7 Piper light aircraft.

6.5 ZAMBIA

Population: 4,250,000. Voluntary military service. Total armed forces: 5,500. Estimated GNP 1970: \$1.58 billion. Defence budget 1966: 12,600,000 kwachas (\$17,640,000). 1 kwacha = \$1.4.

6.5.1 Army: 4,500.

1 brigade of 3 inf bns and 1 recce sqn. 1 artillery battery. 1 engineer squadron. A signals squadron and supporting services. Ferret scout cars; 105mm guns.

6.5.2 Air Force: 1,000; 12 combat aircraft.

4 Jastreb light attack aircraft. 8 SF-260MZ armed trainers. 1 transport squadron with 2 C-47 and 4 Caribou. 1 comms/liaison sqn with 6 Beaver and 2 Pembroke. 4 AB-205 helicopters. 2 Galeb and 6 Chipmunk trainers. (12 MB-326 ground-attack aircraft are on order.) Para-Military Forces: 2 police mobile battalions.

7 Asia and Australasia

7.1 CHINA

China's dominant strategic concept is People's War, in which most of the population is allotted a military role. This entails a peacetime programme of rudimentary military training for civilians. The People's Liberation Army (PLA) is heavily involved in the political and military administration of the country. China's large manpower pool allows great selectivity in manning the 2.9 million strong regular forces. The vast bulk of the manpower lies in the land forces, specifically in the infantry and artillery. Out of a total of 140 divisions, only 5 are armoured. The Navy and Air Force account for little more than 10 per cent of the personnel, compared with about 30 per cent in the Soviet Union. The PLA is not equipped on the scale of major industrial countries, including the Soviet Union, and its mobility is limited. However, China's military production is improving steadily in quantity and quality. She now produces the Tu-16 medium bomber, the MiG-21, the T-59 medium tank, the (Chinese) T-62 light tank, and APC, which improve the mobility of the PLA; also a new Chinese twin-engined fighter is being developed. In the Navy, the build-up of fast guided-missile patrol boats is continuing, along with its own version of the R-class medium range diesel-powered submarine. At least one nuclear-powered submarine appears to be under construction; it is probably an attack vessel. The PLA is organized in 11 Military Regions, and to some extent its equipment and logistics support reflect this regional character. Its deployment is uneven, with major concentrations along the littoral, the Canton-Wuhan railway and in the north-east. During 1969-70, there were some shifts of forces from the south of China to the northern half of the country, but little movement has been reported since. In July 1971 there were thought to be 15,000-20,000 railway engineers, construction engineers and protecting troops in North Vietnam and Laos. China has a 30-year Treaty of Alliance and Friendship with the Soviet Union signed in 1950 with mutual defence obligations, the validity of which must be in doubt. China has a mutual defence agreement with North Korea dating from 1961, and it is probable that she has well-defined defence commitments towards North Vietnam. China has in the past year continued to provide military assistance to Pakistan and Tanzania and to Albania with whom she has been co-operating on defence matters.

7.1.1 Nuclear weapons programme

China conducted only one nuclear test in the past year, the eleventh since 1964. As with at least three of the previous tests, the 1970 explosion involved a fusion (thermonuclear) device

with a yield of some 3 megatons. China has significant resources of natural uranium and its own plant for uranium enrichment. It may now have sufficient fissionable material for a total of about 120 fission and fusion weapons, although the availability of deuterium and/or tritium may constrain production of fusion weapons. For air delivery of nuclear weapons China had until recently only a few old Tu-4 bombers. At least 30 Tu-16, a medium bomber with an operational range of about 1,500 miles, have now been produced, and estimated production capacity is some 5 a month. China, which has been testing MRBM since the mid-1960s, has apparently deployed, mainly in north-western and north-eastern China, about 20 operational missiles with a range of up to 1,000 miles.* During 1970-71, a new missile testing site was also brought into use in Manchuria. The 230-kilogramme second earth satellite was launched, in March 1971, by a booster of IRBM capability. 41 allowing ballistic flights of up to 2,000 miles into the Sinkiang desert. One test from this site in late 1970 may have been connected with the development of an IRBM, or components for an ICBM. Full-range testing of an ICBM would require the use of impact areas and tracking facilities in the Indian or Pacific Oceans. There is no clear evidence to show what 'mix' of missile forces China is seeking to develop. The design of any Chinese ICBM would have to take into account the fact that the urban areas on the north-western coast of the United States are some 6,000 miles from Chinese territory. The responsibility for operational Chinese missile forces is believed to have been assigned to the 'Second Artillery Command'. It is not clear whether this Command is autonomous (cf. the Soviet Strategic Rocket Forces) or is subordinate to the Army.

7.2 CHINA

Population: 760,000,000.

DEPLOYMENT: China is now divided into 11 Military Regions (MR), as Inner Mongolia has been incorporated in the Peking MR, and Tibet in the Chengtu MR. The military commander of each Region commands the regular air and naval forces assigned to it, and the civilian militia. The MR are in turn divided into Military Districts (MD), with usually two or three Districts to a Region. It is believed that basically one Army is assigned to each MD giving a total of about 30 Armies. An Army generally consists of three infantry divisions, three artillery regiments and, in some cases, three armoured regiments. Of the five armoured divisions in the PLA, two or three are probably kept in the Peking and Shenyang Regions. The geographical distribution of the divisions (excluding artillery) is believed to be: North and northeast China (Shenyang and Peking MR): 33 divisions. East and southeast China (Tsinan, Nanking and Foochow MR): 25 divisions. South-central China (Canton|| and Wuhan MR): 31 divisions. Midwest China (Lanchow MR): 11 divisions. West and southwest China (Sinkiang, Chengtu and Kunming MR): 20 divisions. North Vietnam and Laos: 1 railway engineer division and some construction engineer troops, in all 15-20,000 men. The army is, however, adequately equipped with infantry weapons, mortars, rocket-launchers, recoilless rifles and light and medium artillery, all produced in China. § There are, in addition, two or three divisions of border troops in each of these MR. II Includes Hainan island.

7.2.1 Navy: 150,000 (including Naval Air Force and 28,000 Marines).

1 submarine, G-class (with ballistic missile tubes). 32 fleet submarines. 3 coastal submarines. 4 destroyers. 4 destroyer escorts. 11 patrol escorts. 24 submarine chasers. 15 missile patrol boats. 30 minesweepers. 45 auxiliary minesweepers. 220 MTB and hydrofoils (less than 100 tons). 320 motor gunboats. Many less than 530 landing ships/landing craft 100 tons.

DEPLOYMENT: North Sea Fleet: 240 vessels. The main bases are at Tsingtao and Lushun. It is deployed along the coast from the mouth of the Yalu river in the north to Lienyunkang in the south. East Sea Fleet: 700 vessels. Bases are at Shanghai and Chou Shan. It is deployed along the coast from Lienyunkang in the north to Chaoan Wan in the south. South Sea Fleet: 300 vessels. Bases are at Huangpu and Chanchiang. It is deployed from Chaoan Wan in the north to the North Vietnamese frontier in the south. China is not known to have any missiles for this boat. Also about 10 older, training vessels. NAVAL AIR FORCE: 16,000; about 450 shore-based combat aircraft, including up to 100 Il-28 torpedo-carrying light bombers and substantial numbers of MiG-15 and MiG-17 fighters: Though under Navy command, the fighters are fully integrated into the air defence system.

7.2.2 Air Force: 180,000 (incl 85,000 air-defence personnel); about 2,800 combat aircraft.

About 30 Tu-16 and a few Tu-4 medium bombers. 150 Il-28 light bombers. About 1,700 MiG-15 and MiG-17; up to 800 MiG-19 and a growing number of MiG-21 fighters. Some An-2, Il-14 and Il-18 transports and Mi-4 helicopters (these could be supplemented by about 350 aircraft of the Civil Air Bureau). There is an air-defence system, initially developed to defend the eastern seaboard of China and now greatly expanded, based on early warning/control radar, interceptor aircraft and some SA-2 SAM.

7.2.3 Para-Military Forces:

About 300,000 security and border troops, including 19 infantry-type divisions and 30 independent regiments stationed in the frontier areas; the public security force and a civilian militia with an effective element of probably not more than 5 million; production and construction corps in a number of MR, including those adjoining the northern frontier.

7.3 OTHER ASIAN COUNTRIES AND AUSTRALASIA

7.3.1 Multilateral Agreements

In 1954 the United States, Australia, Britain, France, New Zealand, Pakistan, the Philippines and Thailand signed the South-East Asia Collective Defence Treaty, which came into force in 1955 and brought into being SEATO. They committed themselves to consult with a view to joint defence in the event of direct or indirect aggression against a member country or against the so-called 'protocol states' of Cambodia, Laos and South Vietnam. However, since 1955 and 1956 respectively, Cambodia and Laos have not accepted the protection of SEATO. The treaty area is the general area of South-East Asia and the South-West Pacific, below latitude 21° 30' North. SEATO has no central command structure and forces remain under national control. In 1969 Britain ceased to declare ground forces to the contingency plans for the Organization and France has no forces declared. Pakistan has announced her progressive disengagement from the Alliance. All remain members. The United States, Australia, New Zealand and Thailand have troops serving in South Vietnam. This intervention was not the result of a decision by the SEATO Council, but these countries have, for the most part, justified this action in terms of their SEATO obligations. Australia, New Zealand and the United States are the members of a tripartite treaty known as ANZUS, which was signed in 1951 and is of indefinite duration. Under this treaty each agrees to 'act to meet the common danger' in the event of armed attack on either metropolitan or island territory of any one of them, or on armed forces, public vessels or aircraft in the Pacific. Australia, Malaysia, New Zealand, Singapore and Britain have agreed Five-Power defence arrangements relating to the external defence of Malaysia and Singapore, which will come into effect on 1 November 1971. Britain, Australia and New Zealand maintain forces in Malaysia and Singapore, with the land and naval components based in Singapore and Australia's air contribution mainly at Butterworth in the Malayan Peninsula. Until 1 November 1971, the British commitment is governed by the Anglo-Malaysian Defence Agreement but this is to be replaced after that date by new Five-Power political arrangements. These arrangements envisage that in the event of any armed attack or threat of attack externally organized or supported against Malaysia or Singapore, the five governments would consult together for the purpose of deciding what measures should be taken, jointly or separately.

7.4 Bilateral Agreements

The United States has bilateral defence treaties with Japan,* the Republic of China, the Republic of Korea and the Philippines. It has a number of military arrangements with other countries of the region. It provides significant military aid on either a grant or credit basis to the Republic of China, Cambodia, India, Indonesia, the Republic of Korea, Laos, Malaysia, Pakistan, Singapore, Thailand and South Vietnam. It sells military equipment to many countries, notably Australia, the Republic of China and Japan. For grant military assistance

purposes, Cambodia, the Republic of Korea and the Republic of China are considered forward defence areas. Laos, Cambodia, Thailand and South Vietnam receive grant military assistance direct from the US Department of Defense budget, the only countries in the world to do so. There are military facilities agreements with Australia, Japan, the Republic of Korea and the Philippines. Major bases maintained in the region include Okinawa and Guam. The Soviet Union has treaties of friendship, co-operation and mutual assistance with Mongolia and the Democratic People's Republic of Korea. The validity of a similar treaty with the People's * Either party may terminate the treaty by giving 1 year's notice to the other. 44 Republic of China must be in doubt. Military assistance agreements with Ceylon and the People's Democratic Republic of Vietnam reportedly exist. Important Soviet military aid is also given to Afghanistan and India and, on a small scale, to Pakistan.* China has non-aggression treaties with Burma, Afghanistan, and Cambodia, a treaty of friendship, co-operation and mutual assistance with North Korea; and a treaty of friendship with North Vietnam, which is thought to contain defence arrangements.

7.5 AFGHANISTAN

Population: 17,600,000. Military service: 2 years. Total armed forces: 83,000. Estimated GNP 1970: \$1.4 billion. Estimated defence expenditure 1970: 1,400 million afghanis (\$31,100,000). 45 afghanis = \$1.

7.5.1 Army: 80,000.

1 armoured division. 2 infantry divisions. 1 infantry brigade (Royal Bodyguard). 10 independent motorized battalions. 10 independent infantry battalions. T-34 and T-54 medium tanks and Snapper ATGW.

7.5.2 Air Force: 3,000; 100 combat aircraft.

3 light bomber squadrons with Il-28. 2 interceptor squadrons with 30 MiG-21. 1 interceptor squadron with 12 MiG-19. 4 fighter-bomber squadrons with MiG-15/17. 1 Il-18, 25 Il-14, 10 An-2, 2 Twin Otter and 5 Anson transports. Mi-1 and Mi-4 helicopters. Para-Military Forces: 13,000 Gendarmerie.

7.6 AUSTRALIA

Population: 12,775,000. Two years' selective military service. Total armed forces: 88,280. Estimated GNP 1970: \$US 34.4 billion. Defence budget 1970-71: A1, 149million(US1,261,120,000). \$A1 = \$US1.12.

7.6.1 Army: 47,760.

1 tank regiment. 1 cavalry regiment. 9 infantry battalions. 2 battalions of the Pacific Islands Regiment (PIR) 1 Special Air Service (SAS) regiment. * On 9 August 1971 the Soviet Union and India signed a 20-year Treaty of Peace, Friendship and Co-operation in which each undertook to come to the assistance of the other in the event of a conflict with a third country. 4 field artillery regiments. 1 light anti-aircraft regiment. 1 aviation regiment. 5 signals regiments. 1 Logistic Support Force. 140 Centurion med tanks; 265 Ferret scout cars; 675 M-113 APC; 235 105mm howitzers; about 50 Sioux and Alouette III helicopters; 25 light aircraft. DEPLOYMENT: A task force of 7,000 in South Vietnam (including 2 inf bns and supporting services); 1 bn gp and 1 sig regt in Singapore; 2 PIR bns in Papua-New Guinea. RESERVES: The Citizen Military Force of 36,000 is intended to form 24 infantry battalions with supporting arms and services.

7.6.2 Navy: 17,820.

4 submarines. 1 aircraft carrier (ASW). 3 GM destroyers with Tartar SAM. 5 destroyers. 6 destroyer escorts. 2 minehunters. 4 coastal minesweepers. 20 patrol boats. 1 fast troop transport. 1 destroyer tender. Carrier-borne aircraft include:- 1 fighter-bomber squadron with A-4G Skyhawk, 1 ASW squadron with S-2E Tracker and 1 helicopter squadron with Wessex. RESERVES: Navy Citizen Military Force; 4,330.

7.6.3 Air Force: 22,700; 210 combat aircraft.

1 bomber squadron with Canberra B-20. 2 fighter squadrons with F-4E. 4 interceptor/strike squadrons with Mirage III-O, 1 MR squadron with 10 P-3B Orion and 1 MR squadron of 12 P-2H Neptune. 64 MB-326 trainers. t Announced withdrawals will reduce this figure to 6,000 by the end of 1971. 45 24 C-130, 10 HS-748, 24 Caribou, 22 C-47 tpts. 2 helicopter squadrons with Iroquois. DEPLOYMENT: 2 Mirage sqns in Malaysia/Singapore; 1 hel sqn in Vietnam. RESERVES: 950 Citizen Air Force.

7.7 BURMA

Population: 28,175,000. Military service: 2 years. Total armed forces: 143,500. Estimated GNP 1970: \$3.2 billion. Defence budget 1970-71: 480 million Kyat (\$100,600,000). 4.77 kyat=\$1.

7.7.1 Army: 130,000.

5 regional commands. 3 infantry divisions. The army is largely an infantry force, with some artillery, engineer and signals regiments. It is organized chiefly for counter-insurgency and internal security duties. Comet med tanks; Humber armd cars; Ferret scout cars; mainly American, British and Yugo- slav light arms.

7.7.2 Navy: 7,000.

1 frigate. 1 escort minesweeper. 2 coastal escorts. 5 motor torpedo boats (less than 100 tons). 34 river and patrol gunboats. 7 motor gunboats (less than 100 tons). 40 landing craft (less than 100 tons).

7.7.3 Air Force: 6,500; 18 combat aircraft.

12 AT-33 and 6 Vampire armed trainers. 4 C-45, 12 C-47, 8 Otter and 2 Bristol 170 tpts. 6 Sioux, 10 Huskie, 8 Alouette III and 10 Shawnee helicopters. Para-Military Forces: 25,000.

7.8 CAMBODIA

Population: 7,000,000. Voluntary military service.* Estimated GNP 1970: \$0.91 billion. Total armed forces: 179,000. Defence budget 1971: 18,650 million riels (\$336,000,000). 55.5 riels = \$1.

7.8.1 Army: 175,000.

200 infantry and commando battalions. 1 tank regiment. 1 armoured car battalion. 3 parachute battalions. M-24 and AMX-13 It tks: M-8 and M-20 armd cars; M-3 scout cars; BTR-152 APC; 105mm howitzers and Soviet 76mm and 122mm guns; 40mm, 57mm, 85mm and 100mm AA guns.

7.8.2 Navy 1,600 (including 150 marines).

2 patrol vessels. 2 support gunboats. 2 motor torpedo boats (less than 100 tons). 6 patrol boats (less than 100 tons). 4 landing craft. Air Force: 2,400; 7 combat aircraft. 7 T-28 Trojan ground-attack aircraft. 5 C-47, 5 An-2, and 1 Il-14 transports. 3 MiG-15 UTI, 11 Horizon and 4 Yak-18 trainers. 4 Alouette II, 1 Mi-4 and 2 H-34 helicopters. Para-Military Forces: 150,000.

7.9 REPUBLIC OF CHINA (TAIWAN)

Population: 14,575,000. Military service: Army 2 years; Navy and Air Force 3 years. Estimated GNP 1970: \$5.5 billion. Total armed forces: 540,000. Estimated defence expenditure 1971: 24,500 million new Taiwan dollars (\$601,250,000).

7.9.1 Army: 390,000.

2 armoured divisions. 14 infantry divisions. 6 light divisions. 3 armoured cavalry regiments. 1 SAM battalion with HAWK. 1 SAM bn and 1 SAM bty with Nike-Hercules. 2 airborne brigades. 4 Special Forces Groups. M-47 and M-48 med tks; M-24, and M-41 It tks; M-18 tk destroyers. DEPLOYMENT: 60,000 on Quemoy; 20,000 on Matsu. * Conscription is authorized but not yet in force. ### Navy: 35,000.

10 destroyers. 6 destroyer escorts. 12 frigates. 12 submarine chasers.

12 patrol vessels. 3 fleet minesweepers. 15 coastal minesweepers. 2 inshore minesweepers. 21 tank landing ships. 9 medium landing ships. 30 landing craft. Marine Corps: 35,000. 2 divisions.

7.9.2 Air Force: 80,000; 385 combat aircraft.

80 F-100A/D fighter-bombers. 70 F-5A tactical fighters. 45 F-104G interceptors. 150 F-86F interceptors. 8 RF-104G and 4 RF-101 recce aircraft. About 95 C-46, C-47 and C-119 transports. 10 UH-19 helicopters. Population: 557,000,000. Voluntary military service. Total armed forces: 980,000. Estimated GNP 1970: \$49 billion. Defence budget 1971-72: 12,420 million rupees (\$1,656 million). 7.5 rupees = \$1.

7.9.3 Army: 860,000.

1 armoured division. 2 independent armoured brigades. 13 infantry divisions. 10 mountain divisions. 6 independent infantry brigades. 2 parachute brigades. About 20 AA artillery units. 200 Centurian Mk 5/7, 250 Sherman, 450 T-54 and T-55 and 300 Vijayanta med tanks; 150 PT-76 and 100 AMX-13 It tanks; OT-62 and Mk. 2/4A APC; about 3,000 artillery pieces, mostly 25-pounders, but including about 350 100mm and 140 130mm guns; SS-11 and Entac ATGW.

7.9.4 Navy: 40,000.

1 16,000-ton aircraft carrier. 4 submarines (ex-Soviet F-class). 2 cruisers. 3 destroyers. 9 destroyer escorts (including 5 ex-Soviet Petya class). 1 general purpose frigate. 5 anti-submarine frigates. 3 anti-aircraft frigates. 10 patrol boats (4 less than 100 tons).

4 coastal minesweepers. 4 inshore minesweepers. 1 landing ship. 2 landing craft. 9 seaward defence boats (6 less than 100 tons). The naval air forces includes 35 Sea Hawk attack aircraft, 12 Alizé maritime patrollers, and 2 Sea King and 10 Alouette III helicopters. 10 Sea Hawks, 5 Alizés and 2 Alouettes can be carried on the aircraft carrier at any one time.

7.9.5 Air Force: 80,000; 625 combat aircraft.

3 light bomber squadrons with Canberra B (1). 5 fighter-bomber squadrons with Su-7. 2 fighter-bomber squadrons with HF-24 Marut 1A. 6 fighter-bomber squadrons with Hunter F-56. 2 fighter-bomber squadrons with Mystère-IV. 7 interceptor squadrons with MiG-21. 8 interceptor squadrons with Gnat. 1 reconnaissance squadron with Canberra PR-57. 1 maritime recce sqn with L-1049 Super Constellation. (8 to 25 aircraft in a combat squadron). Transports include about 55 C-47, 60 C-119, 20 II-14, 30 An-12, 25 Otter, 12 HS-748 and 15 Caribou.

7.10 INDIA

Population: 114,500,000. Selective military service. Total armed forces: 319,000. Estimated GNP 1970: \$11.6 billion. Estimated defence expenditure 1970: 103 billion rupiahs (\$272,000,000). 378 rupiahs = \$1. Helicopters include about 80 Mi-4, 150 Alouette III, 10 Bell-47 and a few Mi-8. About 50 SA-2 SAM complexes.

7.10.1 Army: 250,000.

15 infantry brigades, formed from about 100 infantry battalions. 8 armoured battalions. 1 paracommando regiment (RPKAD). The KOSTRAD (Strategic Reserve Command) consists of about six bdes and includes paratroops and armour, artillery and engineers. About one-third of the army is engaged in civil and administrative duties. Stuart, AMX-13 and PT-76 light tanks; Saladin armoured cars; Ferret scout cars; Saracen and BTR-152 APC; artillery includes Soviet 57mm AA guns and associated radar. Para-Military Forces: About 100,000 in Border Security Force.

7.10.2 Navy:* 34,000 (incl 14,000 Marines).

12 submarines (ex-Soviet W-class).

1 cruiser (ex-Soviet Sverdlov-class). 4 destroyers (ex-Soviet Skory-class). 11 frigates (including 7 ex-Soviet Riga-class). 18 coastal escorts (14 ex-Soviet, 4 ex-USA). 12 Komar-class patrol boats with Styx SSM. 8 patrol boats. 30 motor torpedo boats. 6 fleet minesweepers. 15 coastal minesweepers. 18 motor gunboats. 25 seaward defence boats (less than 100 tons). 6 landing ships. 7 landing craft. The Marines form two brigades. Naval Air Arm 20 MiG-19 and MiG-21 interceptors. 5 HU-16 and PBY-5A ASW aircraft. About 12 S-55, S-58 and Mi-4 helicopters.

7.10.3 Air Force: 35,000; 122 combat aircraft t.

22 Tu-16 bombers, some with Kennel ASM. 10 Il-28 light bombers. 5 B-25 light bombers. 10 F-51D light-strike aircraft. About 20 MiG-15, 40 MiG-17 and 15 MiG-21 interceptors (mostly in storage). About 60 transports, including Il-14, C-130B, C-47, An-12 and Skyvan. About 30 helicopters, including Mi-4, Mi-6, Alouette II and Bell-204. At least 3 SA-2 sites. Para-Military Forces: A police Mobile Brigade of about 20,000. About 100,000 Militia.

7.11 JAPAN

Population: 104,600,000. Voluntary military service. Total armed forces: 259,000. Estimated GNP 1970: \$195 billion. Defence budget 1971-72: 670,900 million yen (\$1,864 million). 360 yen = \$1.

7.11.1 Army: 179,000.

1 mechanized division. 12 infantry divisions (7,000-9,000 men each). 1 airborne brigade. 1 artillery brigade. 1 signal and 5 engineer brigades. 1 helicopter brigade. 3 SAM groups with HAWK. * It is thought that only about one-third of the Navy is operational. t Only about 80 aircraft are thought to be fully operational. 380 Type 61 and 120 M-4 med tanks; M-24 and 140 M-41 Lt tanks; Type 60 APC; 30 M-52 105mm and 10 M-44 155mm SP howitzers; 203mm howitzers; Type 60 twin 106mm SP recoilless rifles; Type 64 ATGW; 120 aircraft and 220 helicopters. RESERVES: 36,000.

7.11.2 Navy: 38,300.

11 submarines. 1 GM destroyer with Tartar SAM. 37 ASW destroyers. 1 frigate. 20 submarine chasers. 5 motor torpedo boats (2 less than 100 tons). 2 minelayers. 37 coastal minesweepers. 3 tank landing ships. 1 medium landing ship. 6 landing craft. 42 small landing craft (less than 100 tons). Naval air component: 140 combat aircraft.

4 maritime recce sqn with 2 PS-1, 60 P-2J and P2V-7. 3 maritime recce sqn with 55 S2F-1. 3 helicopter squadrons with HSS-2 and HSS-1N.

7.11.3 Air Force: 41,700; 375 combat aircraft.

7 fighter-bomber squadrons with F-86F. 7 interceptor squadrons with F-104J. 1 reconnaissance squadron with RF-86F. (Deliveries of F-4EJ are due to begin during 1971.) (18-25 aircraft in a combat squadron.) 3 transport squadrons with 30 C-46 and 10 YS-11. 20 helicopters incl S-62 and V-107. 360 trainers incl T-1, T-33, T-34 and F-104 DJ. 4 SAM bns with Nike-Hercules (100 launchers). A Base Air Defence Ground Environment with 24 control and warning units.

7.12 KOREA–DEMOCRATIC PEOPLE’S REPUBLIC (NORTH)

Population: 13,975,000. Military service: Army 3 years, Navy and Air Force 4 years. Total armed forces: 401,000. Defence budget 1971: 2,183 million won (\$849,400,000). 2.57 won = \$1. 48

7.12.1 Army: 360,000.

2 armoured divisions. 20 infantry divisions. 5 independent infantry brigades. 15,000 men in ‘special commando teams’. 750 T-34 and T-54 med tanks; PT-76 It tanks; 950 BA-64, BTR-40 and BTR-152 APC; 200 SU-76, SU-100 and ZSU-57 SP guns; 2,000 AA guns; 6,000 other guns and mortars up to 152mm calibre; about 30 SA-2 SAM sites (about 180 launchers).

7.12.2 Navy: 11,000.

3 submarines (ex-Soviet W-class). 6 Komar- and 9 Osa-class FPB with Styx SSM. 3 torpedo boats. 40 high speed torpedo boats (less than 100 tons). 10 fleet minesweepers. 22 patrol vessels (4 less than 100 tons). 11 motor gunboats.

7.12.3 Air Force: 30,000; 555 combat aircraft.

70 II-28 light bombers. 380 MiG-15 and MiG-17 fighter-bombers. 100 MiG-21 interceptors. 5 MiG-19 interceptors. About 40 An-2, Li-2, II-12 and II-14 transports. 20 Mi-4 helicopters. 70 Yak-11, Yak-18, MiG-15 and II-28 trainers. Para-Military Forces: 25,000 security forces and border guards; a civilian militia with a claimed strength of 1,250,000.

7.13 KOREA-REPUBLIC OF KOREA (SOUTH)

Population: 32,700,000. Military service: Army/Marines, 2 years; Navy/ Air Force, 3 years. Total armed forces: 634,250. Estimated GNP 1970: \$8.3 billion. Estimated defence expenditure 1971: 129,000 million won (\$411,000,000). 314 won = \$1.

7.13.1 Army: 560,000.

29 infantry divisions (10 in cadre only). 2 armoured brigades. 80 artillery battalions. 1 SSM battalion with Honest John. 2 SAM bns with HAWK and 1 with Nike-Hercules. M-4 and M-48 med tanks; Stuart and M-24 It tanks; M-10 and M-36 tank destroyers; M-8 armd cars and M-113 APC; guns up to 155mm. ## DEPLOYMENT 2 infantry divisions and some engineer units are in South Vietnam.

7.13.2 Navy: 16,750.

3 destroyers. 3 destroyer escorts. 4 frigates. 6 escort transports. 11 coastal escorts. 17 patrol boats. 12 coastal minesweepers. 20 landing ships. Marine Corps: 33,000. 5 brigades. DEPLOYMENT: 1 brigade in South Vietnam.

7.13.3 Air Force: 24,500; 235 combat aircraft.

18 F-4 fighter-bombers. 110 F-86F fighter-bombers. 77 F-5 tactical fighters. 20 F-86D AWX (with Sidewinder AAM). 10 RF-86F reconnaissance aircraft. 35 transports including C-46, C-47 and C-54. Helicopters include 6 H-19. Para-Military Forces: A local defence militia with a strength of 1 to 2 million is being formed. LAOS Population: 3,030,000. Estimated GNP 1970: \$0.2 billion. 500 kip = \$1. 1. ROYAL LAO FORCES Military service: conscription. Total strength: 55,000. Estimated defence expenditure: 10,800 million kip (\$21,600,000).

7.13.4 Army: 52,600. 58 infantry battalions.

1 artillery regt of 4 bts. M-24 and PT-76 It tanks; M-8 armd cars; M-3 scout cars; BTR-40 and M-113 APC; 85mm guns and 75mm, 105mm and 150mm howitzers.

7.13.5 Navy: about 400.

4 river squadrons consisting of: 36 patrol craft and lighters, 10 landing craft (all under 100 tons, most not operational).

7.13.6 Air Force: 2,000; 75 combat aircraft.

49 About 75 T-28 light-strike aircraft. 20 C-47 and AC-47 transports and gunships. About 8 helicopters. Para-Military Forces and irregulars: 36,000.

2. PATHET-LAO FORCES: Total strength about 45,000 men (incl dissident neutralists). PT-76 It tanks; BTR-40 armd cars; 105mm howitzers. The Pathet-Lao are believed to be integrated with about 75,000 regular North Vietnamese combat and logistics troops, and have received arms and ammunition of Soviet and Chinese origin. The Pathet-Lao and North Vietnamese control all the eastern half of Laos.

7.14 MALAYSIA

Population: 11,200,000. Voluntary military service. Total armed forces: 50,000. Estimated GNP 1970: \$3.95 billion. Defence budget 1971: Mal. 570*million*(US186,000,000). 3.06 Malaysian dollars= \$US1.

7.14.1 Army: 43,000.

7 infantry brigades, consisting of: 24 infantry battalions, 3 reconnaissance regiments. 3 artillery regiments. 1 Special Service unit. 3 signal regiments. Engineer and administrative units. Ferret scout cars; 105mm howitzers. RESERVES: About 50,000. Navy: 3,000. 2 ASW frigates (1 with Seacat SAM). 4 fast patrol boats (less than 100 tons). 24 other patrol boats (less than 100 tons). 6 coastal minesweepers. RESERVES: 600.

7.14.2 Air Force: 4,000; 30 combat aircraft.

10 CA-27 Sabre fighter-bombers. 20 CL-41G Tebuan light training and strike aircraft. 8 Herald and 12 Caribou transports. 5 Dove, 2 HS-125 and 2 Heron liaison aircraft. 24 Alouette III and 10 S-61A helicopters. (1 squadron of Mirage III are on order.)

7.15 MONGOLIA

Para-Military Forces: 50,000 - 14 bns field police.

Population: 1,315,000. Military service: 2 years. Total armed forces: 29,000. Estimated GNP 1970: \$0.63 billion. Estimated Defence expenditure 1971: 90 million tugrik (\$22,500,000). 4 tugrik = \$1.

7.15.1 Army: 28,000.

2 infantry divisions. 40 T-34 and 100 T-54/55 med tanks; 10 SU-100 tank destroyers; 40 BTR-60 and 50 BTR-152 APC; 130mm guns and 152mm guns/howitzers.

7.15.2 Air Force: 1,000 men; no combat aircraft.

Operates in support of the Army, and employs some Soviet technical advisers. 30 An-2, Il-14 and An-24 transports. Yak-11, Yak-18 and MiG-15 UTI trainers. 10 Mi-1 and Mi-4 helicopters. 1 SAM battalion with SA-2. Para-Military Forces: About 18,000 Security police.

7.16 NEW ZEALAND

Population: 2,880,000. Voluntary military service (supplemented by selective national service of 14 weeks for the Army). Total armed forces: 12,750. Estimated GNP 1970: \$US5.77 billion. Defence budget 1971-72: NZ\$110,450,000(US\$123,704,000). \$NZ 1 = \$US1.12.

7.16.1 Army: 5,600.

1 infantry battalion. 1 artillery battery. Regular troops form the nucleus of a Combat Brigade Group, a Logistic Group and a Reserve Brigade Group. These units would be completed by the mobilization of Territorials. 10 M-41 It tanks; 9 Ferret scout cars; 40 M-113 APC; 28 105mm howitzers. DEPLOYMENT: 1 infantry bn (less one company) in Singapore. 1 infantry company in South Vietnam. RESERVES: 11,300 Territorials.

7.16.2 Navy: 2,900.

1 general purpose (GP) frigate with Seacat SAM (a second is due to be delivered in 1971). 2 ASW frigates with Seacat SAM. 50 2 escort minesweepers.

12 patrol craft (less than 100 tons). 2 Wasp hel (1 operates from the GP frigate).

RESERVES: 600 men, 5 patrol craft (less than 100 tons).

7.16.3 Air Force: 4,250; 27 combat aircraft.

1 fighter-bomber squadron with 10 A-4K and 4 TA-4K Skyhawk. 1 fighter-bomber squadron with 8 Vampire FB-5. 5 P-3B Orion maritime reconnaissance aircraft. 5 C-130 Devon and 9 Bristol Mark 31 med trans- ports. 14 Iroquois and 13 Sioux helicopters. DEPLOYMENT: 1 transport squadron in Singapore.

7.17 PAKISTAN

Population: 126,300,000. 2 years selective military service. Total armed forces: 392,000. Estimated GNP 1970: \$16 billion. Defence budget 1971-72: 3,400 million rupees (\$714,000,000). 4.76 rupees = \$1.

7.17.1 Army: 365,000 (including 25,000 Azad Kashmir troops).

2 armoured divisions. 12 infantry divisions (2 more being raised). 1 independent armoured brigade. 1 air defence brigade. 100 M-47, 100 M-48, 100 T-54, 50 T-55 and 225 T-59 med tanks; 200 M-24, 75 M-41 and 20 PT-76 It tanks; 300 M-113 APC; about 900 25-pounder guns, 105mm and 155mm howitzers; 200 130mm guns; Cobra ATGW; 20 H-13 helicopters.

7.17.2 Navy: 10,000.

4 submarines. 1 light cruiser/training ship. 2 destroyers. 3 destroyer escorts. 2 fast frigates. 4 patrol boats. 8 coastal minesweepers. 2 small patrol boats (less than 100 tons). 2 UH-19 air-sea rescue helicopters.

7.17.3 Air Force: 17,000; 285 combat aircraft.

1 light bomber squadron with II-28. 2 light bomber squadrons with B-57B. 2 fighter-bomber squadrons with Mirage IIIE. 8 fighter-bomber/interceptor squadrons with F-86. 4 interceptor squadrons with MiG-19. 1 interceptor squadron with 6 F-104A. 1 recce squadron with 4 RT-33A and 2 RB-57. (With the exceptions noted, combat squadrons have 16 aircraft). Transports include 8 C-130B and 1 F-27. 40 Sioux, Huskie, Alouette III and Mi-8 helicopters. Para-Military Forces: 280,000. 30,000 frontier corps; 250,000 militia. A new force is being raised - the East Pakistan Civil Armed Force.

7.18 PHILIPPINES

Population: 39,800,000. Selective military service. Total armed forces: 34,600. Estimated GNP 1970: \$5.9 billion. Defence budget 1971-72: 871 million pesos (\$135,500,000). 6.43 pesos = \$1. (Before 21 February 1970 - 3.9 pesos = \$1.)

7.18.1 Army: 17,600.

2 light infantry divisions (understrength). 2 infantry brigades. 15 engineer construction battalions. M-4 med tanks; M-24 and M-41 It tanks; M-113 APC.

7.18.2 Navy: 8,000 (including naval engineers).

1 destroyer escort. 4 coastal escorts. 7 patrol vessels. 47 patrol boats (less than 100 tons). 2 coastal minesweepers. 11 landing ships. 1 marine battalion. 5 engineer construction battalions.

7.18.3 Air Force: 9,000; 57 combat aircraft.

20 F-5 fighter/ground-support aircraft. 8 T-28 ground support aircraft. 26 F-86F day-fighters. 3 T-33 armed trainers. Transports include 28 C-47 and 1 F-27. About 16 helicopters, incl UH-1H and H-34. Para-Military Forces: 23,500 Philippine Constabulary and about 400 armed civilian self-defence units.

7.19 SINGAPORE

Population: 2,100,000. Military service: 24-36 months. Total armed forces: 16,000. 51 Estimated GNP 1970: \$US1.82 billion. Defence budget 1971-72: S 484*million*(US158,170,000). 3.06 Singapore dollars= \$1.

7.19.1 Army: 14,000.

2 brigades, which include 1 armoured regiment, 6 infantry battalions, 1 artillery battalion, 1 engineer battalion, 1 signals battalion. (A third brigade is being formed.) 50 AMX-13 tanks; M-706 Commando APC; 25-pounder guns; 120mm mortars; 32 106mm recoilless rifles. RESERVES: 7,000, planned to increase to 9,000 by the end of 1971,

7.19.2 Navy: 500.

1 seaward defence boat. 3 fast patrol boats (and 3 more on order). Air Force: 1,500; 36 combat aircraft. 1 GA sqn with 16 BAC-167 and 4 Hunter. I interceptor/recce sqn with 16 Hunter. 1 tpt/liaison sqn with 8 Cessna-172 and 2 Airtourer. 1 helicopter squadron with 4 Alouette III. 28 Bloodhound SAM launchers. Para-Military Forces: 2 police companies.

7.20 THAILAND

Population: 35,000,000. Military service: 2 years. Total armed forces: 175,000. Estimated GNP 1970: \$6.1 billion. Defence budget 1970-71: 5,413,800,000 baht (\$260,300,000). 20.8 baht= \$1.

7.20.1 Army: 130,000.

4 infantry divisions (including 3 tank battalions). 1 regimental combat team. 1 SAM battery with HAWK. M-24 and M-41 It tanks; M-2 and M-16 armd half-tracks; M-8 armd cars; M3A1 scout cars; about 200 M-113 APC; 105mm and 155mm howitzers; 16 FH-1100 and 6 OH-23F hel. DEPLOYMENT: 11,250 in South Vietnam\$.

7.20.2 Navy: 21,500 (including 6,500 marines).

1 destroyer escort. 3 frigates (and 3 on order). 1 escort minesweeper. 17 submarine chasers.

4 coastal minesweepers. 2 coastal minelayers. 11 gunboats (1 less than 100 tons). 3 patrol gun boats. 8 landing ships. 8 landing craft. 1 maritime recce squadron with HU-16 and S-2. All due to be withdrawn by February 1972.

7.20.3 Air Force: 23,500; 144 combat aircraft.

11 F-5A and F-5B fighter-bombers. 20 F-86F day fighters. 2 RT-33A reconnaissance aircraft. 55 T-28D, 40 T-6 and 16 OV-10 COIN aircraft. 25 C-47 and 13 C-123B transports. About 60 hel, including 35 CH-34 and 23 UH-1H. 4 battalions of airfield defence troops. Para-Military Forces: 10,000 Volunteer Defence Corps; 8,000 Border Police.

7.21 VIETNAM-DEMOCRATIC REPUBLIC (NORTH)

Population: 22,675,000. Military service: 3 years minimum. Total armed forces: 492,000. Estimated defence expenditure 1970: 2,150 million dong (\$584 million). 3.68 dong = \$1.

7.21.1 Army: 480,000.

14 infantry divisions. *1 artillery division (of 10 regiments). 2 armoured regiments. About 20 independent infantry regiments. 50 T-34 and 60 T-54 med tanks; 300 PT-76 It tanks; BTR-40 APC; SU-76 and JSU-122 SP guns; 75mm, 105mm, 122mm, 130mm and 152mm artillery; 57mm, 75mm, 82mm and 107mm recoilless rifles; 82mm, 100mm, 107mm, 120mm and 160mm mortars: 107mm, 122mm and 140mm RL; 6,000 37mm, 57mm, 85mm and 100mm AA guns. 35 SAM battalions (each with 6 SA-2 launchers). DEPLOYMENT: about 90,000 in South Vietnam, 75,000 in Laos and 40,000 in Cambodia. Navy: 3,000. 2 coastal escorts. 4 motor gunboats. Infantry divisions normally total about 12,000 men including 3 infantry and 1 support regiment. =ex-Soviet. + =ex-Chinese. 52 About 24 motor gunboats (less than 100 tons). About 3 motor torpedo boats (less than 100 tons).** About 12 small patrol boats (less than 100 tons).

7.21.2 Air Force: 9,000; 165 combat aircraft.

10 Il-28 light bombers.t 40 MiG-21F/PF interceptors with Atoll AAM.t 25 MiG-19 interceptors. 60- and 10* MiG-17 interceptors. 10+ and 10* MiG-15 interceptors. 8 An-2, 3 An-24, 10 Il-14 and 20 Li-2 transports. 20 Mi-4 and 2 Mi-6 helicopters. Para-Military Forces: 20,000

Frontier, Coast Security and People's Armed Security Forces; about 425,000 regional armed militia.

7.22 VIETNAM-REPUBLIC OF VIETNAM (SOUTH)

Population: 18,800,000. Military service: 2 years minimum. Total armed forces: 500,000. Estimated GNP 1970: \$4.0 billion. Estimated defence expenditure 1971: 155,000 million piastres (\$564,000,000). 275 piastres = \$1 (before 4 Oct 1970, 117.5 = \$1).

7.22.1 Army: 414,000. 10 infantry divisions.

1 airborne division (3 brigades). 6 independent armoured cavalry regiments. 3 independent infantry regiments. 18 ranger battalions. * =ex-Chinese + =ex-Soviet. I With normally three regiments, each of 4 battalions, to an infantry division, there are some 150 infantry battalions in the regular army, but most units are below establishment; the actual strength of a battalion averages 500, and a regiment 2,000. 1 Special Forces Group. 35 artillery battalions. M-24, 200 M-41 and 40 AMX-13 tanks; 250 Commando and Greyhound armoured cars; M-3 scout cars; M-59 and M-113 APC; 105mm and 155mm SP guns. DEPLOYMENT: about 23,000 in Cambodia.

7.22.2 Navy: 31,000.

1 destroyer. 3 destroyer escorts. 6 patrol escorts. 2 patrol vessels. 3 coastal minesweepers. 70 fast patrol boats. 20 motor gunboats. 23 landing ships. About 200 landing craft. most less than About 600 river patrol boats 100 tons. About 350 motorized coastal defence junks.

7.22.3 Marine Corps: 15,000. 1 division.

7.22.4 Air Force: 40,000; 275 combat aircraft.

1 tactical fighter squadron with F-5. 6 fighter-bomber squadrons with A-37. 3 fighter-bomber squadrons with Skyraider. Some RC-47 reconnaissance aircraft. 80 O-1 armed light aircraft. 20 AC-47 armed transport aircraft. (Combat squadrons have from 15-20 aircraft.) 25 C-47 and 25 C-119 transports. 35 Choctaw, 230 UH-1 and 10 CH-47 helicopters. Para-Military Forces: 555,000. Regional Forces - 285,000, forming about 1,700 rifle companies, at the disposal of the provincial governors. Popular Forces - 250,000, a home guard of about 7,500 platoons, with light arms. Police Field Force - 20,000, including special internal security units with armoured vehicles and helicopters. There is also a People's Self Defence Force of about 1,500,000.

8 1. ESTIMATES OF COMPARATIVE STRATEGIC STRENGTHS

2 TABLES 55 ## (A) Nuclear Strike Forces UNITED STATES AND SOVIET UNION

NOTE: Figures in brackets are approximate. 4 56 OTHER NATO AND WARSAW PACT COUNTRIES

(B) Growth of ICBM|SLBM Strength, 1961-1971 (mid years)

a China is not included in this table. Her ability to deliver nuclear weapons appears to be limited to some Tu-16 and Tu-4 medium-range bombers, Il-28 short-range bombers and a few MRBM. b Including those in IRBM/MRBM fields. c In addition, there are about 300 Tu-16 Badgers in the Naval Air Force, configured for attacks on shipping, which could deliver nuclear weapons. d These aircraft are dual-capable and could have a non-nuclear role. e These became operational on 2 August 1971. f These missiles and aircraft are operated by a number of countries but may have non-nuclear roles. 57 # 2. NUCLEAR DELIVERY VEHICLES 1971* ## (A) Long and Medium Range MISSILES (USA)

8.1 MISSILES (USSR)

AIRCRAFT (USA)

- Listed by countries of origin. SAM and ASW missiles are not included. 58 AIRCRAFT (USSR)

8.2 MISSILES (OTHER COUNTRIES)

8.3 AIRCRAFT (OTHER COUNTRIES)

9 (B) Short Range Missiles and Artillery

USA

9.1 NOTES

a ICBM=inter-continental ballistic missile (range 4,000+miles) IRBM=intermediate-range ballistic missile (range 1,500-4,000 miles); IRBM=medium-range ballistic missile (range 500-1,500 miles); SRBM = short-range ballistic missile (range under 500 miles); SLBM=submarine-launched ballistic missile. b L=liquid; SL=storable liquid; S=solid; J=ram- or turbojet; HE = high explosive. c Operational range depends upon the payload carried; use of maximum payload may reduce range by up to 25 per cent below maximum. d MT = =megaton=1 tons of TNT equivalent (MT range= 1 MT or over); KT = kiloton=thousand tons of TNT equivalent (KT range= less than 1 MT). e The majority of Polaris A3 missiles, if not all, have been modified to carry three warheads of about 200 KT each. 1 Numerical designations for Soviet missiles (e.g. SS-9) are of US origin; names (e.g. Scarp) are of NATO origin. g SS-9 missiles have also been tested (i) with three warheads of 4-5 MT each, (ii) with a modified payload for use as a depressed trajectory ICBM (DICBM) or fractional orbit bombardment system (FOBS). n A mobile IRBM (SS-XZ Scrooge) has been displayed and tested but is not known to be deployed operationally. 1 A mobile solid-propellant missile (SS-14 Scapegoat), apparently with MRBM range, has been displayed and tested but is not known to be deployed operationally. I Launched only from the surface. k Possibly small propellant. I Long-range bomber=maximum range over 6,000 miles; medium-range bomber=maximum range 3,500-6,000 miles, primarily designed for bombing missions. m Theoretical maximum range, with internal fuel only, at optimum altitude and speed. Ranges for strike aircraft assume no weapon load. Especially in the case of strike aircraft, therefore, range falls sharply for flights at lower altitude, at higher speed or with full weapons load (e.g. combat radius of A-7, at operational height and speed, with typical weapons load, is approximately 620 miles). 12 Mach 1 (M=1.0)=speed of sound. o ASM=air-to-surface missile. P F-104 are no longer in active service as strike aircraft with the US Air Force but remain in service with other NATO air forces. a Names of Soviet aircraft (e.g. Bear) are of NATO origin. r Naval Air Force versions of the Tu-16 carry 2x Kelt or 2x Kennel ASM for anti-shipping use. 60 ## 3. DEFENCE EXPENDITURE AND NATIONAL ECONOMIES

t Excluding financial assistance to West Berlin which included would make the entry read: 7,067 6,860 4.7 119 4.2 4.2 3.8 61 3. DEFENCE EXPENDITURE AND NATIONAL ECONOMIES-continued

- Column 1 represents the estimated out-turn of defence expenditure in 1970. Column 2 represents planned defence expenditure for the current year, in most cases according to the budget statements of national governments. ** The GNP figures are estimated at current market prices and the percentages may differ from those published by national governments and international organizations. The valuation of the Soviet GNP and the rate of exchange used for the defence expenditure were explained in The Military Balance 1970-1971, pp. 10-11. n.a. = not available. # 4. COMPARATIVE DEFENCE EXPENDITURE, GROSS NATIONAL PRODUCT AND MANPOWER FIGURES 1951-1970 Defence Expenditure (in \$ million)a

a Exchange rates used are the same as in the GNP table below except for the USSR, which are calculated on the basis used in the country section (pp. 5-7) and explained in The Military Balance 1970-1971, pp. 10-12. b NATO definition of defence expenditure has been used. Gross National Product AT CURRENT MARKET PRICES AND EXCHANGE RATES (\$ billion)

a Net Material Product converted at a constant exchange rate of 0.9 roubles = \$1. The UN accounts definition has been used. This consists of: individual and collective consumption, net fixed capital formation, and net exports of goods and productive services. ## Total Armed Forces (in thousands)

a National Police Reserve. b Security Force. c Self Defence Forces. d Excluding forces enlisted outside Britain. # 5. TANK CHARACTERISTICS

§ Excluding China, which makes a copy of the Soviet T-54 known as the T-59 and a light tank, the T-62. * A number have been rebuilt with 152mm combined gun and Shillelagh missile launcher and are designated M-60 A1 E1 and E2: neither of these versions is operational. ** Also manufactured in Britain. t Combined gun and Shillelagh missile launcher. # 6. OVERSEAS DEPLOYMENT OF FORCES* (A) AFRICA - SOUTH OF THE SAHARA

- Excluding Europe, all forces stationed in colonies or metropolitan territories, and small contingents such as military advisory groups, training teams, seconded personnel and United Nations observer teams. a A CF Regt (RIAOM) is a regimental group containing infantry and armour with supporting services. b On the Beira patrol. Frigates on this patrol are found from ships based in United Kingdom or Singapore.

(B) MIDDLE EAST AND MEDITERRANEAN

c There is a United Nations peace-keeping force in Cyprus (UNFICYP), military personnel strength about 2,950, with contingents from Austria, Britain, Canada, Denmark, Finland, Ireland and Sweden and 175 civilian police from Australia, Austria, Denmark and Sweden.

d Britain has a DDG and 2 frigates stationed in the Mediterranean, reinforced from time to time by other ships. These are normally based in Malta. . British forces are to be withdrawn by the end of 1971. (c) EAST ASIA

(D) LATIN AMERICA

f The United States has substantial naval forces in the Pacific, based in a number of countries.

(E) REST OF ASIA

, = After 1971. Under Five-Power defence arrangements taking effect from 1 November 1971 (see p. 43) Britain is to keep five frigates or destroyers on station East of Suez, including Hong Kong. Australia is to provide a submarine in the Singapore area for most of the time. A Less a detachment in Singapore. 1 15-20,000 in Laos and North Vietnam. I In May: the figure is to be reduced to 6,000 by November 1971. k Mid-June. # 7. MAJOR IDENTIFIED ARMS AGREEMENTS, JULY 1970-JUNE 1971 (A) WESTERN EUROPE

n.a. = not available. a Another 600 are to be built under licence in Italy.

b France has since banned deliveries and the United States is holding action on these deals in abeyance. n.a. = not available. c Cost of leasing for 4 years.

(F) AFRICA - SOUTH OF THE SAHARA

(G) NORTH AMERICA

n.a. = not available. NOTES may include sub-contractors in the purchasing country, as well as prime contractors in the supplying country. No licensing agreements are included. American, Soviet and Chinese military aid to Vietnam, Cambodia, Laos and Korea, and Soviet deliveries to members of the Warsaw Pact are excluded. This table lists major agreements on a firm-to-government and on a government-to-government basis, and covers both credit and cash sales. Costs to recipients may include spares, support, etc., and reflect the value of goods taken in part-exchange where applicable. Payees 8. SECONDARY ARMS' PRODUCERS*

NOTES * Countries other than the United States, the Soviet Union, Britain and France which are considered to be primary producers. t SS = Supersonic. P= Arms of producer country's own design. L = Arms produced or assembled, not of own design. Most aircraft come in this category because the engines are licensed. a All fighter, bomber or COIN aircraft except where indicated. b Includes ASW missiles. Includes MCM and landing ships. d Includes landing craft. Includes armoured car, scout car and APC. / Includes Tu-16 medium bomber. g Includes Japanese designed MR aircraft.

References