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Soviet policies, like the policies of most other countries, are shaped by outside events as much as by internal happenings, and are sometimes affected by the conflicting aspirations of political and military leaders. Mr Jukes shows how Soviet strategic ideas have changed at various times since the war and demonstrates the flexibility of Soviet thinking. He also suggests ways in which Soviet strategy may develop.

This paper fills a gap in the literature by providing a brief outline of the subject and illustrates the sources that are available.

The Development of Soviet Strategic Thinking Since 1945

GEOFFREY JUKES

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THE DEVELOPMENT OF SOVIET STRATEGIC THINKING SINCE 1945

NEITHER THE ROMANOV DYNASTY nor its communist successor has been noted for a liberal attitude towards public discussion of issues of foreign policy, strategy, and defence. Nevertheless, the almost total ban on public discussion of strategic matters by Soviet military men, which existed in Stalin's last years, has long been lifted. Senior officers do not publicly pose direct challenges to Government policy on deterrence of war, current defence expenditure and policy, weapons procurement, or level of, and balance between, the various armed forces. Nor do the serving officers of most countries, so the Soviet Union is not unique in this regard. But by comparison with the United States and most Western European countries it does lack a body of civilians actively engaged in thought, research, and writing on strategy, and a sanctioned political opposition whose function it is to probe governmental policy, question it, and put forward alternatives. Discussion of strategy in the Soviet Union therefore lacks some of the dimensions we are accustomed to in Western writings. It is usually non-polemical, produced by the professional military, and heavily weighted towards expounding the consensus of received military opinion. This emphasis becomes more marked as discussion proceeds up the ladder of importance from 'grand tactics' towards 'grand strategy', and deprives Soviet writings on strategy of much of their bite.

Nevertheless, the writings that are sanctioned are by no means devoid of interest. They illustrate in particular a certain fluidity in assessments of the likelihood of conventional force operations, a still very restricted

interest in the possibility that Soviet forces may be employed in distant theatres, a growing interest in the use of electronics both in combat and in 'management' functions such as logistics. But above and beyond these matters of detail, they illustrate a view of the Soviet Union's position in the world, and of the strengths and weaknesses of its potential antagonists, which in some ways is a mirror image of Western views of the Soviet Union. Where NATO has tended to perceive the Soviet Union as the expansionist centre of a world-wide communist conspiracy, the Soviet military views NATO as a local manifestation of a world-wide, US centred, capitalist cabal, bent not merely on containing communism, but on rolling it back, if necessary by violent means. Although statesmen in both the United States and the Soviet Union have modified former Cold War attitudes of total hostility in favour of a guarded and mutually mistrustful co-existence, the newspapers and journals of the armed forces in both Western and Eastern blocs still maintain hawkish attitudes. Frequently they come close to challenging the wisdom of policies pursued by their civilian masters. These challenges cannot be as overtly expressed in the Soviet Union as they can in Western societies, because the Soviet structure has no place for the lobbyist, journalist, or politician to voice military viewpoints which career officers are precluded from voicing publicly. But there are a number of ways in which the military leaders can indicate to their colleagues, albeit obliquely, the existence and the nature of issues on which they do not see eye to eye with their political masters. These include devices such as straightforward factual description. If senior officers describe new military techniques or equipment adopted by NATO countries without derogating them in any way, such description constitutes implicit endorsement. If the techniques or equipment are not in use in the Soviet armed forces, it constitutes implicit advocacy of their adoption. Generalised adverse comment on particular strategies has also been used to indicate dissatisfaction with government policy. An outstanding instance of this was Marshal Rotmistrov's denunciation in 1964 of 'reliance on one weapon, and that an untried one',¹ after Khrushchev had repeatedly emphasised Soviet reliance on the intercontinental ballistic missile (ICBM),² an 'untried weapon' in the sense that it has never been used in war.

The military journals, both newspapers and periodicals, play an im-

¹ *Red Star*, 25 April 1964.

² E.g. in speeches of 14 January 1960, 7 May 1960, 2 June 1962 and 16 January 1963. References to speeches by Soviet leaders are to date of delivery. The texts of the speeches are to be found in the major Soviet newspapers of the following day.

portant part in disseminating information, guidance, and instruction, particularly to officers. The Soviet armed forces are large, diverse, and deployed in many places, some of them very remote. These factors, and the strongly literate traditions of the General Staff, ensure that the ambitious officer pays close attention to the professional journal of his arm of service, and to pronouncements by military leaders made in the pages of the armed forces newspaper *Red Star*. The Party members and political officers (who bear a specific responsibility for the morale and reliability of their units) receive in the fortnightly journal *Armed Forces Communist* material which is intended for use in educating and indoctrinating troops. The various journals sometimes choose to give differing emphases and nuances to their interpretations of the same event; often these indicate no more than the differences of outlook normal between one arm of service and another, but occasionally they point to more fundamental divergences. The size, nature, and dispersion of the armed forces ensure for the journals an important role as transmitters of 'signals' to the military profession, and an audience which is accustomed to interpreting the 'signals'.

In the euphoria which followed their successful *coup d'état* of 1917, the Bolshevik leaders were inclined to regard professional armed forces as unnecessary. The need to fight a civil war, to cope with 'interventions' by several of Russia's former allies as well as by her World War I enemies, and then to exist in a world of hostile states, soon brought the question of military professionalism to the fore. Once the civil war was concluded, the career officer of the 'Workers' and Peasants' Red Army' (as it was known until the title 'Soviet Army' was introduced in 1946) settled down to a round of regimental duties interspersed with courses not radically different from those of his capitalist counterparts. A number of Tsarist senior officers had gone over to the Bolsheviks, who never totally trusted them but for need of their expertise placed them in commanding positions and charged them to produce the first generation of professional soldiers for the new Soviet state. By the late 1930s the Red Army was among the more advanced armies, especially in its treatment of armour in mass and use of airborne troops, though inadequately mechanised in other arms.³ The savage purge of the high command instituted by Stalin in 1937 caused serious setbacks, both through the reinstatement of outdated doctrines and the replacement of sound professionals by the dictator's personal cronies. This resulted in disastrously inept performances both in the 'Winter War' of 1939-40 against Finland,

³ J. M. Mackintosh, *Juggernaut: A History of the Soviet Armed Forces*, Macmillan, 1967, pp. 67-83.

and in the first few months of the Soviet-German War of 1941-5.⁴

But having survived the catastrophes of 1941, and led by a group of generals from the 'first-generation professionals', the Red Army proved capable of beating the Germans in winter campaigns in 1941 and 1942 and in summer campaigns as well from 1943, and brought Soviet power into Central Europe, where it has remained ever since. The army's effort in Europe was supplemented in the summer of 1945 by a major redeployment into the Soviet Far East and a brief campaign in north-east China against the Japanese Kwantung Army. Although this campaign was more notable for the tremendous logistical feats involved than for its actual battles, it played an important part in shaping subsequent Sino-Soviet, Soviet-Korean, and Soviet-Japanese relations, and its influence has continued to the present day.⁵

THE POST-WAR STRATEGIC CONFRONTATION AND FOUR PHASES OF DEVELOPMENT

For the Soviet High Command, the most important technical features of the post-1945 situation were determined by the need to plan for possible war against an entirely new type of antagonist — the United States — which was not accessible by land as Russia's previous enemies had been. This forced upon the defence planners new patterns of thought, and consequently new strategies, in which long-range weapons (intercontinental bombers and missiles, and missiles capable of being fired from submarines) and nuclear warheads were gradually to become dominant, both as the instruments of deterrence and as the strategic weapons of war. Since nuclear warheads and ballistic missiles were weapons of a new kind, the Soviet defence planners' problems could be paralleled in the United States and other NATO countries. But in one major respect Western planners were at an advantage: both the Americans and the British were well accustomed to the exercise of power at great distances from home, whether by using command of the seas to enable their armies to be transported or by use of air power against the homeland of an enemy. The Soviet Union had no such tradition. While the sheer dimensions of the country had meant that campaigns on the borders — e.g. in the Far East — were in fact fought at great distances from the European USSR, forces had been supplied over interior lines of communication,

⁴ Ibid., pp. 111-59.

⁵ In particular because it is the only campaign in which Soviet forces sustained rates of advance comparable to those prescribed for the European theatre in the event of war,

and the traditional role of all the armed forces was defence of the frontiers and coastlines.

The evolution of new strategies to face contingencies not hitherto contemplated naturally could take place only over a period of years, and because of the interdependence between technological capacity and strategic options often had to wait for developments in industrial capacity. There could be no strategic option involving atomic weapons until the Soviet Union developed these after 1949, and none involving a direct threat to America until the development of intercontinental bombers in the early and mid-1950s.

Because of these various factors Soviet strategic thought since 1945 has developed through a number of stages, and may be viewed in several lights:

1. As a process by which a state hitherto almost totally dependent for defence upon its land forces came to possess, as a consequence of weapons development, a 'balanced' (though still army-dominated) defence posture. In this the air forces ceased to be mere providers of support to the ground forces, the navy developed beyond the role of defender of their coastal flanks towards an independent mission, and the army ceased to be the major factor in deterrence of attack upon the Soviet Union.

2. As a consequence of increased social development, by which the mass employment of almost illiterate peasant infantry gave place to capital-intensive forces manned by smaller numbers of troops with much higher educational and professional skills.

3. As a process by which the re-imposed Stalinist orthodoxy and dogmatism of the post-war years gave way after his death to more questioning and realistic doctrines devised mainly by the leading 'first generation professionals', and later to doctrines espoused by the leaders of the 'second generation', who are less dominated by their wartime experience.

4. As a function of the development of the long-range missile and the nuclear warhead, which on the one hand put the Soviet Union into a position where it could aspire to strategic parity with the United States, but on the other rendered the 'traditional' doctrines of prolonged war fought with mass forces of diminishing credibility.

5. As a by-product of the increased economic and political power of the Soviet Union.

Within the overall context of these factors, Soviet strategy since 1945 falls into four distinct phases.

THE FIRST PHASE 1945-53

PHASE I began in 1945 and extended into the early 1950s. At the outset the Soviet Union possessed a number of advantages, the main one of which was its very large army, which had played the major part in eliminating Germany from the strategic balance, and had as a direct consequence secured a commanding position in central, eastern, and south-east Europe.

In 1945 the Soviet armed forces totalled 11,365,000 men,⁶ the overwhelming majority of them infantry soldiers. The army comprised some 500 divisions, and had achieved most of its major successes through a combination of solid defence with the skilful use of outflanking manoeuvres and encirclements. While Stalin's war leadership had been an important factor in victory, a number of generals had become prominent in the public eye. Stalin, whose suspicion of potential rivals had led in the 1930s to their mass elimination in a series of purges was not prepared to share the limelight with these generals for very long. The majority of them were given honorific but distant postings, but this was not enough. Maintenance of the Stalinist autocracy required that their very victories be attributed to his military genius. So testimonials were elicited from the generals in speeches and articles. The history of the early retreats was rewritten to present them as deliberate withdrawals designed to tempt the Germans into positions where they could be destroyed (as Kutuzov had done with Napoleon in 1812). And above all, certain exhortatory aphorisms of Stalin's were elevated to the status of profound military axioms.

These were the 'permanently operating factors of victory in war'.⁷ In October 1941, with German armies in the Ukraine and at the gates of Moscow and Leningrad, Stalin had laid down that success in war depended not on temporary factors but on permanent ones, such as the stability of the rear, quality of leadership, numbers of troops, supply and so on. These 'permanently operating factors' did not, in reality, constitute the basis of a strategy, because they said nothing about how the desirable state expressed in the various truisms was to be attained. But that was not their purpose. A surprise attack and superior mobility had brought the Germans to the brink of success, and Stalin's aim was to reassure the people and army that final victory in war did not depend on such transient advantages. An additional, highly personal, reason for

⁶ N. S. Khrushchev, speech of 14 January 1960.

⁷ The 'permanently operating factors' are discussed at length in R. L. Garthoff, *How Russia Makes War: Soviet Military Doctrine*, George Allen & Unwin Ltd, 1954.

his refusal to list surprise among the decisive factors was that German success in achieving it at the outset had been almost entirely due to his own disregard of warnings received. These he had had in good time from sources as diverse as Winston Churchill, the Soviet Embassy in Berlin, and the military commanders in the frontier zone.⁸

But for the imperatives of autocracy and the circumstances of the time, the doctrine of permanently operating factors could have served its purpose in 1941 and then been forgotten. However, the post-1945 situation did not permit this to happen. To correct the major strategic imbalances would take several years, during which Soviet security would continue to depend upon the army. The American nuclear stockpile would for some years be too small to decide a war by itself, and Stalin, while not unaware of the destructive force of atomic bombs, knew better than anyone that Japan had been on the verge of capitulation before they were dropped. (The Japanese had sought Soviet mediation with the Western allies, but Stalin had not passed on their request because of his own war aims in the Far East, which required the war there to continue until the Soviet Union was ready to join in.)⁹ Pending reconstruction of the ruined Soviet economy and fruition of the programs for correcting the imbalances, avoidance of war would be a primary objective of Soviet diplomacy. If it failed, the overrunning of the US bomber bases in Western Europe would be the main purpose of ground operations. This required that the army be not merely large but confident. However, the new potential antagonist, the United States, was not only an unfamiliar beast to Soviet demonology — a wealthy and remote maritime power — but had achieved a technological surprise in its possession of the atomic bomb. If war could be avoided, at least for some years, and the army was to be kept confident, surprise must be denigrated again, and so the permanently operating factors were enshrined as the basis of Soviet strategy until Stalin's death in 1953. The effect was to freeze discussion of military art in professional journals at the level reached in 1945,¹⁰ to ignore almost completely the effects of atomic weapons, and to condemn the Soviet forces to perpetuate doctrines such as massing of forces which in the West were already being questioned as highly dangerous in the atomic age.

It is beyond the scope of this paper to examine Stalin's views on the political future of the world, or to ascribe responsibility for the disrupt-

⁸ G. Perrault, *The Red Orchestra*, Mayflower, 1970, pp. 40-2.

⁹ A. Werth, *Russia at War 1941-45*, Pan, 1965, pp. 919-24.

¹⁰ T. W. Wolfe, *Soviet Power and Europe 1945-70*, Johns Hopkins Press, 1970, pp. 1-69.

tion of the wartime alliance and the outbreak of the Cold War, nor, in a strictly strategic context, is it necessary. The wartime alliance was no blood-brotherhood; it was as much a marriage of convenience as the Molotov-Ribbentrop pact which preceded it, was marked by acrimony over the disproportionate sacrifices imposed on the Red Army and the Soviet civilian population by the facts of geography, and by Stalin's mistrust of Churchill, who had played a prominent part in efforts to strangle the Bolshevik régime at birth. The one factor that united the 'Big Three' was war with Germany. Once their common efforts had succeeded it would have taken a much greater degree of mutual trust to divide Germany's former sphere of influence than had been shown in the turbulent past, even by countries not divided by ideological barriers as were the Western allies and the Soviet Union. Given that amiable co-operation was probably not possible, it makes no difference whether Soviet objectives were merely defensive or envisaged some future expansion, as neither could be achieved by a posture which was militarily weak. That the objectives were primarily defensive appears probable from the way in which the Soviet forces were re-equipped. But political expansionism does not necessarily entail the use of armed forces. This was shown in the take-over of Czechoslovakia in February 1948. No Soviet forces were in the country, but the knowledge that there *were* strong forces in the adjacent countries would certainly have given pause to any Western effort to restore the situation by armed intervention, had this been contemplated.

From the strategic angle, the Soviet position in 1945 was not an enviable one, given Stalin's suspicions of the West, where Roosevelt's death had brought the violently anti-communist Truman to power, and Churchill had been succeeded by a Labour administration which had no love for the communists. On the credit side the Soviet Union possessed the largest army in the world, with an impressive record of success. This force had succeeded in creating a buffer zone several hundred miles wide between its advanced positions and the frontiers of the Soviet Union proper, a fact relevant not merely to a possible war on land, but to the use of strategic bombers by the Americans and British if war broke out.

But in 1945 the list of assets virtually ended with the army and its gains. In every other respect the Soviets stood at a considerable, possibly decisive, disadvantage. Germany had at least been accessible to Soviet land power once developed; America was not, nor was Britain, without a sea crossing. These two countries between them had a virtual monopoly of sea power which the Soviet navy could not hope to challenge in the near future. In particular both possessed large numbers of aircraft car-

riers, giving them an offensive capability far away from their own shores, which could be challenged only by air and submarine forces. And though the Soviet Union had a large air force, as well as a numerically strong submarine arm, neither was strong enough to survive the attentions of the very much stronger air and anti-submarine forces then deployed by the Americans and the British, nor sufficiently long-range to cope with carriers before they could approach Soviet coasts.

Soviet offensive air power consisted mostly of light bombers and ground attack aircraft, designed primarily for tactical support of the army. The Soviets had experimented with heavy bombers in the 1930s, but their Long-Range Air Force (ADD) was small.

The central problem faced by Soviet defence planners in the immediate post-war years was that of the two major strategic imbalances. America possessed a small number of nuclear weapons, and facilities for producing many more. It also possessed a strategic bombing force capable of delivering nuclear weapons, as well as large quantities of conventional explosives, onto Soviet targets. The Soviet Union possessed neither, and was therefore in a position of strategic inferiority to the United States to a degree unparalleled in its relationships with the states of Europe. While these could press up against Russia's western borders, and occasionally cross them, the existence of land frontiers at least made them accessible should the strategic balance change to Russia's advantage. But given US possession of nuclear weapons, long-range bombers, and airfields in Western Europe, America possessed a unique ability to devastate the Soviet Union, against which the strongest Soviet weapon, the Red Army, could not be directly employed because of the US and British navies' control of the high seas. Thus despite the conquest of Germany and the advance of Soviet power into Central Europe, the Soviet Union was vulnerable to an extent which Russia had never been before in modern times.

A number of steps were taken to minimise the possible adverse effects of the strategic imbalances in the short term, and to eliminate them altogether in the longer. A nuclear weapons research program had already been initiated in 1942, and would be continued. American proposals for a ban on such weapons, made in 1946, were rejected, because to have accepted them would have exposed the Soviet Union to possible 'nuclear blackmail' at some time in the future by an America which alone possessed the knowledge and installations for manufacture of atomic bombs. Research into and development of long-range bombers were initiated, and pending the manufacture of Soviet models, the American B-29 (four of which had crash-landed in the Soviet Far East

after a raid on Japan) was copied, emerging as the Tu-4 ('Bull'). This was not a true intercontinental bomber, but as the longest-ranged military aircraft of the day could at least be used to provide attack capacity against US airfields in Europe and Japan if need arose. It could also provide operational training experience for the Long Range Air Force in handling larger and more complicated aircraft than they had hitherto possessed, thus preparing them for the time when true intercontinental-range aircraft became available.

In the naval sphere, the problem of shortness of reach was also acute. The navy consisted in the main of small vessels, and, though Stalin had toyed briefly with the concept of a high seas fleet, the approach of war had caused its main role to be reasserted as protection of the coastal flank of the land front.¹¹ In fact, because of the rapidity of the German advance along the Baltic and Black Sea coasts, it had not been able to fulfil this role very effectively; the Baltic Fleet had been shut up in its most easterly base at Kronstadt, able to make only limited sorties during the ice-free period of the year, while the Black Sea Fleet's main base at Sevastopol had been captured from the land. It had been forced back to the inadequate subsidiary ports in the Caucasus, from where its major contribution had been in support of small- and medium-sized amphibious assaults. The Pacific fleet had had little or nothing to do until after the end of the war in Europe, because of Soviet neutrality in the Pacific war, and only the Northern Fleet had been regularly engaged in a 'traditional' naval task, that of convoy protection. But here its role had been entirely subsidiary to that of the much larger Royal Navy, which escorted the Murmansk convoys the whole way to their destination, receiving Soviet assistance only over the last 100 miles of the journey. Never at any time had the Northern Fleet been strong enough to take over operational control of any sector of the route, and the most hazardous part of it—the passage between the North Cape of Norway and the southern edge of the Arctic ice cap—had been entirely a British responsibility. The navy, therefore, had been very much the junior service, and most of its major distinctions had been gained by sailors who fought as infantry in some of the crucial defensive battles, or who manned supply launches on the Volga at Stalingrad (the present Commander-in-Chief, Admiral Gorshkov, was one of these).

As the late antagonist, Germany, was not a major naval power, and the two late allies, America and Britain, were, Soviet naval weakness

¹¹ R. W. Herrick, *Soviet Naval Strategy*, U.S. Naval Institute, Annapolis, 1968, p. 47, and V. D. Sokolovskii (ed.) *Voyennaya Strategiya (Military Strategy)*, 2nd ed., Voenizdat, 1963, p. 396.

had not mattered very much in the main conflict. But the replacement of Germany as a potential antagonist by the two leading naval powers gave a new importance to the navy. In the event of war, the Soviets could expect American and British fleets at the least to launch air strikes from carriers against coastal targets, military and civilian, and perhaps to escort major forces to make landings in the rear of Soviet armies certainly on the Baltic coastline, and possibly the North Sea, Black Sea and Pacific coasts as well.

In these circumstances, 'defence of the coastal flank' acquired new dimensions. Aircraft carrier task forces must be attacked well out to sea, and preferably before they are close enough to their targets to launch their aircraft, while amphibious assault forces must also be attacked well out at sea if possible, and if this is not possible (e.g. in the relatively confined spaces of the Baltic), must be subjected to harassment as they approach their intended landing points. It could also be expected that in the event of war, Western forces in Europe would rely heavily on seaborne reinforcements and supplies from the United States, which would be convoyed to destinations in the United Kingdom or France. While the Soviet contingency planning for the European theatre in global war envisaged overrunning Western Europe at a pace so fast that supplies and forces from across the Atlantic would probably arrive too late to affect the campaign, some provision was to be made for attacks upon them. There was also a requirement not merely to defend the coastal flank of the Soviet forces, but to protect attempts by them to outflank Western defensive positions by landing troops behind them, which implied local command of at least the Baltic and Black Seas, and a capacity to protect Soviet shipping in them from attacks by Western surface warships and submarines.

The combined effect of these requirements was to dictate a considerable expansion of the navy, especially of its submarine force and smaller surface ship forces up to destroyer size. A plan for a force of 1,200 submarines was devised, and series construction of several classes of surface warship began.¹²

The status of the air forces in 1945, like that of the navy, was very much that of a support force for the army. Each 'Front' (army group) had its own 'Air Army', equipped predominantly with fighter and ground attack aircraft, the strategic bombing force (the Long Range Air Force) was small, mainly equipped with short-range twin-engined air-

¹² M. McGwire, 'Soviet Naval Procurement' in *The Soviet Union in Europe and the Near East: Her Capabilities and Intentions*, Royal United Service Institution, London, 1970, p. 78.

craft, and used mostly for attacks on facilities (such as rail junctions) which directly supported the land battle.

While the development of intercontinental bombers was set in train, a more urgent need was the strengthening of the air defences. These had performed well in World War II, but the threat which could be posed by American and British strategic bombing forces, even without nuclear weapons, was of a higher order of magnitude than that presented by the Luftwaffe in 1941-2, in terms of numbers of aircraft, bombloads, and range. The satellite status of the Eastern European states made it possible to advance the forward edge of the air defence zone several hundred miles west of the Soviet borders, but new and more sophisticated interceptor aircraft were urgently required, especially as the 'jet age' had just arrived. The possibility of a serious technological lag in aero-engines was averted by purchase of some British 'Nene' turbojets, and a jet interceptor aircraft, well up to contemporary standards, was designed and built. This aircraft, the Mig-15, was in quantity production by 1950, and was turned out in large numbers. On its performance in the Korean War it appeared likely that its qualities as an aircraft were not matched by ground facilities as elaborate as those developed by the British before 1940 or by the Germans in the later years of the war. On the whole it seemed that in the event of war a large part of the Mig-15 force would have been launched into 'free search' and standing patrols, because ground radar and control were not adequate to enable the aircraft to be retained on the ground until the last moment and then directed precisely to the vicinity of large bomber streams. This discrepancy between performance of the aircraft and capabilities of the system as a whole arose for a number of reasons, the main one being that the production capacity for airframes and engines outran that of the electronic industry, as had been the case in the recent war. In any event, the process resembled that adopted in ground operations in both first and second world wars, where lack of integrated heavy industry had often left no alternative to the use of masses of light-armed infantry. The discrepancy was gradually removed, but at least into the early 1950s the poor capability of the air defence system, especially against night attacks, must have been seriously worrying to the General Staff.

The relative boldness of Soviet foreign policy in this period caused serious concern in the West. The communist block appeared far more monolithic than at any later time. Revolts, apparently orchestrated in Moscow, raged over South-east Asia, while the take-over in Czechoslovakia and the blockade of Berlin in 1948 caused sufficient doubt about Soviet intentions in Europe for the formation of NATO and rearmament

of Germany to be hastened. The Chinese communist victory at the end of 1949 seemed to have brought the world's most populous country into an expansionist bloc headed by the world's largest and the North Korean aggression in June 1950 provided further evidence of expansionist ambitions. But in fact the period was one of considerable Soviet weakness. The major strategic imbalances had not been fully corrected, the process of reconstruction was nowhere near complete, and Soviet military caution was shown in a number of ways. For example, the blockade of West Berlin was attributed to simultaneous need to repair all the surface routes, and as it was clearly thought impossible to supply the city from the air, no interference with the air routes was contemplated. When this assessment turned out to have been mistaken, the Soviets accepted the fact; only minor incidents occurred in the air corridors, and Soviet ground controllers collaborated in the work of the Berlin Air Safety Centre throughout the blockade. Had they not done so, the airlift could probably have operated only in daylight, and could not have kept the city supplied. The episode suggested that the Soviet wish to 'confront' was considerably less than total, especially as its ground forces could have occupied the Western sectors of Berlin in, at most, a few hours. In Korea, Soviet assistance to the North was lavish, but apart from a few Mig-15 pilots, stopped short of actual involvement, and advocacy of violent revolution in Asia ceased early in 1950, mainly, it would appear, because of the total failure of the policy in India and Indonesia, and its very limited success elsewhere. As a precaution against the possibility that American involvement in the Korean War might presage an intention to use the nuclear monopoly while it lasted, and initiate a third world war, the term of conscript service in the army and air force was increased by one year in the latter half of 1950.¹³

THE SECOND PHASE 1953-60

By the second phase, which began with the death of Stalin in 1953, the major strategic imbalances had been overcome. The first atomic test explosion had taken place in 1949, and was to be followed by a thermonuclear weapon tested in 1954, while two designs of intercontinental strategic bomber were sufficiently far advanced to be displayed at the 1953 Soviet Air Show. At the same time, early versions of short- and medium-range missiles, and a new medium bomber (the Tu-16, labelled 'Badger' by NATO) promised to provide a speedier means

¹³ *Pravda*, 13 October 1967, pp. 5-6.

of destroying the American bomber bases in Europe, once the stockpile of nuclear material was large enough to permit the provision of nuclear warheads and bombs for them. This provision would have to be made over several years. The 'direct deterrent' against America—the intercontinental strategic bomber force and the missile-firing submarines, some of which were to be equipped with a 350 nautical mile ballistic missile, for use against American cities on or near the coasts—would be the first to receive nuclear equipment. But as the long-range 'Bear' and 'Bison' bombers came into operational service only slowly, and in relatively small numbers, and the missile submarines (the diesel-powered Z Class Conversion) took even longer to materialise, emerging only after 1956, it is possible that growth of the nuclear stockpile outpaced the delivery rate of intercontinental bombers and submarines, so that it became feasible to divert some nuclear weapons to equip the medium bomber and medium range ballistic missiles (MRBM) forces. Alternatively, the process may have been planned so as to provide weapons for the European theatre soon, for economic reasons.

The problem here lay in the completely novel nature of the intercontinental force. It was essential to deploy it in order to eliminate the strategic imbalance. But the initial costs of establishing the force were high, and there was no short-term possibility of making counterbalancing economies by abolishing or reducing some other force. Soviet capability to attack US territory was new; no other force had had it until the intercontinental bomber force was established, and therefore no other force could be cut as a consequence of its establishment.

In the European land theatre the position was different, in that a threat was already being posed to Western Europe by the Soviet ground forces. To provide nuclear weapons for these would enable their manpower to be reduced. If the US bomber airfields, main concentrations of NATO ground forces, and naval bases servicing the aircraft carriers, could be eliminated by nuclear weapons, it would be less necessary to plan to overrun them in a conventional campaign. The post-Korean War reductions in the American armed forces also made it reasonable for the Soviet leaders to assume that the danger of world war had receded, and make corresponding reductions in their own forces. Whatever the weights attached to the various factors, substantial reductions in armed forces manpower were announced in 1955, 1956, and 1958.¹⁴

The decision to reduce manpower levels was probably reinforced by circumstances arising from the political power struggle among the

¹⁴ Soviet Government announcements of 13 August 1955 (640,000), 14 May 1956 (1,200,000) and 6 January 1958 (300,000).

collective leadership in 1953-5. Although Khrushchev sought the support of the military leaders by frequent reference to the need to give continuing priority to heavy over light (consumer goods) industry,¹⁵ he began to renege on this position soon after gaining the post of First Secretary of the Party. If Stalin's terroristic methods of rule were to be given up, their place had to be taken by incentives, especially in the fields of consumer goods and housing. The armed forces, then standing at about 5.75 million men,¹⁶ not only made large demands on resources, but tied up much young able bodied manpower which was sorely needed in the civilian economy to complete reconstruction of war-damaged areas, and enable the new policies to be implemented. Defence expenditure was therefore to be closely examined with a view to reduction, and military manpower scrutinised to see how much of it could be released to civilian employment, particularly in the construction industry. But the extent to which cuts in defence would be feasible depended on what Western intentions were thought to be. Undoubtedly these were evaluated, and certainly Soviet architects sent abroad (especially to Western Europe) to study large-scale housing projects would have noticed that none of them made provision for air-raid shelters, such as the Soviet Union had been installing in new buildings since 1946. With this evidence of Western non-preparedness for war before them, the Soviets terminated the shelter-building program in 1958.

The effect of the manpower cuts was to reduce army manpower by about half. This was achieved by disbanding 25 to 30 divisions, downgrading some others to lower categories of readiness, and reducing conscript service in army and air force by one year, bringing it back to the two years laid down in the 1939 'Law on Universal Military Service'.

While the weapons developments were improving the Soviet position *vis-à-vis* NATO and the United States, new threats were emerging in other parts of the world. Stalin's death almost coincided with the advent to power in America of a Republican administration committed to ending the Korean War (which Stalin's successors also favoured) and to replacement of Truman's policy of 'containment' of communism by one described as 'rollback'. Though it was not stated how 'rollback' was to be achieved, the implications for the Soviet leaders were that war was not excluded. It was not their intention that areas under communist control should permit themselves to be retroceded to the 'capitalist

¹⁵ E. Crankshaw, *Khrushchev's Russia*, Pelican, 1959, pp. 44-5.

¹⁶ N. S. Khrushchev, speech of 14 January 1960.

world'; they assumed the Americans knew this, and therefore regarded the proclamation of 'rollback' as indicating a more forward policy, which would include intensified subversion and possibly military threats.

The first manifestations of the new American policy were not in fact greatly different from the previous one, but involved an attempt to extend the formal mechanism of 'containment' from the European theatre eastwards to the Pacific, by formation of two new US-sponsored alliances—the Baghdad Pact (later renamed the Central Treaty Organisation), and the South-East Asia Treaty Organisation. In contrast to what happened during the later dispute with China, the Soviet riposte to these moves did not involve precautionary redeployment of forces towards the southern and eastern borders. Instead a combination of diplomatic effort with military and economic aid was employed to ensure that Egypt remained hostile to the alliances, that Afghanistan (made uneasy by US supply of arms to Pakistan) was immunised against attempts to draw it into either alliance, that India's non-alignment was bolstered (thus preventing the two alliances from becoming a continuous 'line of encirclement'), and Indonesia was fortified in the anti-Western policies it was then pursuing. These efforts were successful in the sense that the two alliances never acquired sufficient cohesion to come anywhere near equalling NATO as politico-strategic instruments of US policy.

In the field of purely military theorising on the conduct of war, the 1953-5 period was unique, in that the removal of a virtual ban on discussion which had been in force for at least eight years occurred at a time when military support was being actively sought by the contenders for power within the 'collective leadership'. For the first time since the war no single person could arrogate to himself *ex officio* the right to make definitive pronouncements on matters of strategy. This created a situation in which the military could freely discuss the Stalinist doctrines and the ways in which they should be modified to take account of nuclear weapons.¹⁷ The main outcome of the military debate was a conclusion that the chief protection lay in high mobility and dispersion.¹⁸ There would be no continuous front lines as there had been in past wars. Forces would be mechanised and fast-moving, aiming to close with the enemy as quickly as possible, so that he would be unable to use his nuclear weapons for fear of destroying his own troops. The role of surprise naturally received particular attention,

¹⁷ For a list of contributions to the debate see Wolfe, *op. cit.*, p. 60.

¹⁸ H. S. Dinerstein, *War and the Soviet Union: Nuclear Weapons and the Revolution in Soviet Military and Political Thinking*, Praeger, 1962, pp. 36-64.

and the somewhat paradoxical but common-sense conclusion reached was that war could not be won by achieving surprise, but could be lost by being surprised.

Left undecided was the question of force levels. On the one hand it could be, and, indeed, was argued that the dispersion enforced by nuclear conditions made it impossible to maintain forces at their old level; on the other, that since attrition rates in nuclear war would be unprecedentedly high, force levels must be high enough to allow for this. Another argument was that the speed of modern warfare would make it impossible to reckon, as in the past, on mobilising behind a covering force over a period of weeks or months. A war, therefore, would have to be fought with the forces in being at the outset of it, and these forces would have to be of a suitable size. Much argument on these points undoubtedly took place behind the scenes in the ensuing years, and signs of it were found in the published literature on defence matters.¹⁹ But the crucial factor was what line would be taken by the eventual winner of the leadership struggle.

Khrushchev emerged victorious in 1955. During the battle he had courted military support by contesting Malenkov's belief that nuclear war would destroy both sides,²⁰ maintaining that communism alone would survive. He had also advocated development of heavy industry over light. But on succeeding to the First Secretaryship he began by his actions to make it clear that provided deterrence was ensured, military demands on resources would not be given high priority. With the intercontinental bombers entering squadron service in 1955, a cut of 1.2 million in the army was announced, and following the successful full-range ICBM test in July 1957, and the orbiting of Sputniks I and II in October, early 1958 saw announcement of a further cut, this time of 1.8 million. That some elements of the military opposed the reductions can be taken for granted, as during these years NATO forces were not only being improved qualitatively, as were the Soviet and East European, but also their numbers were increasing rapidly. However, the Minister of Defence, Marshal Zhukov, supported the reductions, and so, judging from their public statements, did the Commanders-in-Chief.²¹

¹⁹ E.g. P. Rotmistrov, in *Voyennaya Mysl (Military Thought)*, 1955, and Colonel-General Gastilovich, Chapter 7 of Sokolovskii, op. cit., p. 396.

²⁰ G. Malenkov, speech of 13 May 1954.

²¹ Unlike the reductions of 1960, those of 1955-8 led to no criticism, however oblique, at the time or later, and led to no resignations or dismissals of senior officers.

The second period witnessed a substantial change in direction in naval policy. The aims of the large construction programs initiated in the late 1940s had been fairly classical for an aspirant naval power, but defensive in principle. This fact tended to be obscured by reference to the large numbers of ships built or on order, because insufficient account was taken in the West of two important circumstances. One was that the Soviet Union's allies were all negligible as naval powers, whereas all the other maritime powers were ranged alongside the United States in its various alliances, so that the Soviet navy would have to meet them all in the event of a war. The other was that its four fleet areas were widely separated, so that, apart from movement of small units between the three European fleets via the inland waterways, possible during April to November, units could not be transferred between fleets except via seas controlled by the navies of the United States and its allies. Each fleet, therefore, had to be self-contained, and this naturally increased the number of ships needed. The large numbers of submarines procured naturally invoked the memories of Germany's submarine campaigns against allied shipping in both world wars, and it was assumed that the Soviet submarine fleet was intended for a similar purpose. In fact heavy reliance on the submarine was not new for the Soviet navy; it had possessed the world's largest submarine fleet as far back as 1939. It is unlikely that the 'W' class submarine which formed the bulk of post-war construction possessed the range to operate in the Western Atlantic for militarily useful periods. The danger posed to the very long and exposed Russian coastlines by the naval forces of America and all the maritime powers allied with it provided adequate grounds for a large submarine force.

Whereas the United States, and, to a lesser extent, Britain, disposed of a considerable strategic strike capacity through their carrier task forces, and the US navy foreshadowed its intention to deploy strategic missiles aboard submarines, the large Soviet naval building programs indicated no similar clear-cut objectives. The surface ships comprised a relatively small number of heavy cruisers and large numbers of destroyers and frigates, fairly direct counterparts to those already in service with the navies of NATO; failure to build aircraft carriers indicated a reluctance to embark again on the search for a 'High Seas' role briefly sanctioned by Stalin in the 1930s. Khrushchev's frequent disparagement of surface warships such as carriers and cruisers in the mid-1950s suggested, as did his remarks on war in general, that he did not envisage involvement of the Soviet armed forces in anything below a general

world war, in which he expected that such units would be destroyed quickly.²² Under his aegis the cruiser-building program was curtailed—only 15 of the projected 24 'Sverdlov' class cruisers were completed, and four already partly built were dismantled on the stocks.²³ In 1958 large-scale construction of smaller ships began to taper off, and from 1960 an entirely different pattern of naval building emerged, under which many ships were modernised (usually through replacement of part of their gun armament by air defence or ship to ship missiles, or both) and new or modified designs emerged far more frequently but were built only in small numbers.²⁴ This process began with the emergence of conversions of the 'Kotlin' class destroyers in 1958. It suggested that before the end of the second period there was already considerable uncertainty in naval circles about the likely role and desirable composition of the surface navy, and that the building of a 'World War II' type fleet in the 1940s and 1950s had been recognised as in part mistaken—a conjecture confirmed by the sale or gift of a number of the ships built in those years to 'Third World' countries such as Indonesia and Egypt.

But while the second period saw something of a recession in the importance of the surface fleet, it saw a tentative beginning to a strategic deterrent role for the submarine force, beyond the purely defensive deterrent threat to Western carrier forces. At first this role was probably seen as a temporary one, and for many years the Soviet navy deployed no direct equivalent to the American Polaris missile. While from 1961 onwards the US navy developed and installed several versions of a ballistic missile, with ranges increasing from 1,200 to 2,500 n.m., all using a common launching platform—a nuclear fuelled steam-turbine submarine, of almost unlimited range, and able to carry 16 of the missiles—the Soviet counterpart was a mixture of cruise and ballistic missiles, with ranges of 300-700 n.m. These were carried in a heterogeneous collection of submarines, variously diesel or nuclear powered, and many of them conversions from other submarine classes. It was customary to attribute this makeshift quality in the strategic submarine force to factors such as a technological lag in submarine construction, or in miniaturisation of missile components and nuclear warheads, or to domination of defence decision-making by soldiers. All these factors may well have contributed to the relatively slow pace at which the Soviet submarine-

²² E.g. in 1959 in United States 'Warships are good only to make trips for state visits' (Herrick, op. cit., p. 71) and 'Surface ships can no longer play the part they once did' in speech of 14 January 1960.

²³ *Jane's Fighting Ships*, 1963-4, p. 417.

²⁴ M. McGwire, op. cit., p. 78.

borne missile program advanced, but it is probable that adequate explanation requires yet further factors to be added. Certainly there was no lack of recognition on the Soviet side of the advantages to be expected from a mobile and virtually undetectable deterrent force.²⁵ It is even possible that the first makeshift form of the deterrent for direct use against targets in the United States would have been a nuclear-warhead torpedo, to be fired into the harbours of large coastal cities such as New York and San Francisco.²⁶ There is no direct evidence on the point, and it is unlikely — though not impossible — that in the 1950s the Soviets would have been able to manufacture a nuclear warhead small enough to fit into a standard torpedo tube. But in any event, it is certain that by the mid-1950s a submarine-borne missile force had begun to function in a limited way as an adjunct to the newly-operational bomber force.

The missiles used by this force were of relatively short range — a ballistic missile of about 350 n.m. and a cruise missile (or pilotless aircraft) of about twice that range. Both could be used against static targets such as cities, ports, and naval bases, or against ships — the cruise missile would probably be the more useful in the latter role, because of its greater accuracy, though its relatively low speed could lead to its being shot down. Compared with Polaris both were unsophisticated, as were the majority of the submarines which carried them, though both had the advantage of entering service before Polaris. They are still in service, but will probably be superseded in the next few years by the new 'Y' class submarines, which embody a concept very similar to Polaris in that each carries 16 missiles of a range of about 1,500 to 2,000 n.m.

One can only conjecture at the reasons for which the Soviets, having clearly attached fairly high priority in the 1950s to a missile-firing submarine, then contented themselves for many years with a simple and relatively short-range system, before beginning to deploy one very similar to the American one. A number of explanations are possible, but it is not feasible to attach relative weights to them.

Probably the main reasons for the early installation of the short-range ballistic and cruise missiles were a compound of economic, political, and purely military factors. The cruise missile, with its obvious anti-ship utility, was probably developed in the first instance as armament for the boats patrolling the anti-carrier line in the Atlantic, while the 350-mile ballistic missile may have originally been intended for use against static

²⁵ E.g. by Admiral Alafuzov in *Morskoy Sbornik (The Naval Anthology)*, January 1963, pp. 88-96.

²⁶ M. MacGwire, op. cit., p. 78.

targets in the European theatre. However, it would have been realised at an early stage that since most of the major American cities lie within 250 miles of the coast, submarines equipped with these missiles could operate with considerable room for manoeuvre in the Western Atlantic as part of the direct deterrent to America. At the same time, it would have been difficult for the navy to convince the senior defence decision-makers, or the political leaders, that there was anything to be gained by developing a more sophisticated system. Submarine-borne missile systems are far more expensive than land-based ones, since the submarine itself costs about five times as much as its missiles, if it carries 16 of them, and relatively far more if it carries only three or four, as did the earliest Soviet ballistic missile submarines, and the seas normally dominated by potentially hostile maritime powers are an uneasy medium for the deterrent, compared with airfields or missile sites deep inside the Soviet Union. So with the intercontinental bombers coming into service, and the intercontinental ballistic missile program well advanced (its first full-range test took place in July 1957), the political and military leaders would probably have seen the submarine missile deterrent as an interim expedient, and been reluctant to spend money beyond that required for submarines to carry the cruise missile (which could revert to the anti-carrier role when displaced from strategic deterrence by bombers or land-based missiles). Thus the force did not initially possess a missile system which could be fired underwater, and did not deploy one until the mid-1960s. By then it had become clear that the surface-launch system was excessively vulnerable, especially when launches would have to take place close to the American coast, and a decision had been taken to proceed with a Polaris-type system.

The doctrines of the Stalin period made no distinction between general and limited war. Since nuclear weapons then in service were sufficient to cripple but not destroy a major antagonist, it was held that a war would comprise a nuclear exchange followed by a 'broken-backed' conventional war of uncertain duration.²⁷ Non-nuclear warfare was therefore an intrinsic and important element of general war, and the ability to wage it could be decisive in a situation where each side could fire off its entire nuclear stockpile without forcing a surrender. But because it was intrinsic to general war doctrine, and Stalin envisaged nothing of lesser scope, there was no requirement for a specific 'limited war' doctrine to cover situations where one or both sides would wish to stop short of the maximum use of force.

²⁷ R. L. Garthoff, *The Soviet Image of Future War*, Public Affairs Press, Washington, D.C., 1959.

During the second period there were various changes in emphasis, not so much changes in policy as differences of opinion within the military establishment or between it and the political leaders. The increases in yields and numbers of nuclear weapons and in the ranges and capabilities of their delivery vehicles during the 1950s rendered it far more likely that a general war, if it broke out at all, would result in the destruction of the belligerents as organised societies. With the administrative and industrial centres destroyed, and crops and water supplies contaminated by fall-out, it was unlikely that survivors of a nuclear exchange would be in any position to wage a conventional broken-backed war. This meant that armed forces maintained solely for defence against general war would have less need for conventional forces. Although this proposition was not accepted by the more conservative among the military leaders, who continued to refer to the expected high attrition rates as a justification for large conventional forces, those with the power to decide acquiesced in Khrushchev's reductions of the numbers in the armed forces in 1955 and 1958.

But during the late 1950s, a number of works on strategy, published in Western countries, dealt with questions of sub-general warfare.²⁸ It was argued that while the very destructiveness of strategic nuclear weapons made it difficult to conceive of their being used, the knowledge that a nation would be reluctant to use them could lead to an increased danger of conventional aggression against it. During this period, also, the United States, though deprived of its monopoly of strategic delivery capability, was considerably ahead of the Soviet Union in numbers and diversity of tactical nuclear weapons intended for use in 'battlefield' situations. This advantage was to prove transitory; it arose from the fact that smaller-yield weapons require relatively much more fissile material than those of high yield, so that a nation building a stockpile will be unlikely to begin stocking tactical nuclear weapons until it has satisfied its strategic requirements. The Soviet Union was in precisely this position in the late 1950s, and it could be foreseen that by the early 1960s, it too would be deploying tactical nuclear weapons. But the probable temporary nature of the imbalance was ignored and a body of literature on limited nuclear war appeared in the West, alongside that on other forms of sub-strategic war, limited either in geographical extent or in the weapons employed or both (e.g., conventional war in Europe).

During the second period, statements on war by Soviet political and

²⁸ The most influential of which was undoubtedly Henry Kissinger's *Nuclear Weapons and Foreign Policy*, published by Harper for the Council on Foreign Relations in 1957.

military leaders showed no evidence of interest in limited war in areas away from Soviet borders and denied the possibility that a limited war in Europe, or a war involving the nuclear powers, could remain non-nuclear.²⁹ They clearly regarded escalation to strategic weapons as inevitable if nuclear weapons were used at all (which in the circumstances of the time, with the Soviet Union possessing only strategic nuclear weapons, was hardly surprising). Furthermore, the advocates of larger forces continued to justify them in terms of 'broken-backed' war, and the Soviet lack of interest in involving themselves in lesser wars was further indicated by reduction of the forces in East Germany by two divisions, and the beginning of a process of replacing some of their artillery by short-range missiles, as chemical and tactical nuclear warheads began to become available early in the 1960s. The effect of these two measures was to increase the firepower of the reduced force in Central Europe, but at the expense of reducing its ability to function in a limited war, because the missiles, being of longer range but more expensive and of lower accuracy than the withdrawn artillery, were clearly suitable for use only for making or repelling attacks on the scale of a general war.

At this time, also, an unobtrusive retreat was made from the one doctrinal point in the Soviet position on arms control which suggested willingness to contemplate the non-use of nuclear weapons. This concerned a long-standing Soviet proposal that states possessing nuclear weapons should undertake not to use them unless an antagonist did so first.³⁰ The proposal had first been advanced in the days when Soviet conventional forces had grossly outnumbered those of NATO, which had consistently rejected it on the grounds that to accept it would deprive its forces of an 'equaliser'. It is doubtful whether unrestricted use of nuclear weapons would really favour the numerically weaker side, but since the threat of escalation is considered a potent factor in deterrence, and since the United States was unprepared to sign away the right to weapons in which it then possessed a large numerical superiority, there was no incentive to examine the arithmetical arguments. However, in the late 1950s, as a result of reductions in the Soviet armed forces and increases in those subordinated to the NATO Supreme Commander, the superiority of the Soviet conventional forces was being considerably reduced, so that the advantages to the Soviet Union of a 'no first use'

²⁹ E.g. letter from Soviet Prime Minister Bulganin to President Eisenhower of 10 December 1957.

³⁰ First noted in Soviet disarmament proposals made at Geneva on 10 May 1955.

proposal were diminishing. In addition, Khrushchev's oft-proclaimed doctrine that deterrence of war was far and away the most important objective of the Soviet armed forces, and the shift, already mentioned, from the ground forces to the nuclear weapon vectors (bombers and missiles) as the instruments of deterrence, rendered the proposal an embarrassment. No official statement of its abandonment was made, but Khrushchev ceased to refer to it as a measure useful in its own right after 1959, and when asked his view on it in 1961 refused to give it his endorsement.³¹

It would appear, therefore, that the thrust of policy and thought in the second period away from conventional forces and war-fighting capability towards a concept of deterrence which relied heavily on the danger of escalation for its effectiveness, had no place in it for the use of Soviet forces away from the boundaries of the Soviet bloc. Nor did Soviet leaders contemplate using them in conventional campaigns in Europe, beyond perhaps such spatially and temporally restricted operations as they could carry out with their existing resources. This policy received its most unequivocal exposition in a speech, made by Khrushchev on 14 January 1960, deriding the idea of a close correlation between security and the numbers of men in uniform, announcing an intention to reduce forces manpower by a further one-third by the end of 1961, and declaring that the basis of Soviet defensive power would be missiles with nuclear warheads. At the time it was made, this last statement had a strong element of bluff in it, since the number of operational ICBM's was certainly very small (probably less than ten), but showed clearly the directions in which Khrushchev intended Soviet defence policy to move.

THE THIRD PHASE 1960-1964

THE third phase was noteworthy for the gradual erosion of Khrushchev's support by the military leaders, for reassertions by some of them of the importance of conventional forces, and, during the earlier years of the period, for an extensive campaign in pursuit of far-reaching measures of arms control. In terms of the actual forces and their capabilities, however, the trends were (as Khrushchev had indicated) towards increased nuclear and missile capacity. This was expressed in a number of ways. For example Strategic Rocket Forces were elevated to the status of an Armed Service, on a par with the Ground, Air, Air Defence and Naval Forces, early in 1960,³² tactical nuclear weapons began to be supplied

³¹ N. S. Khrushchev, interview of 8 September 1961.

³² N. S. Khrushchev, speech of 7 May 1960.

to the ground forces, a 58 megaton nuclear weapon was tested in 1961, and it was disclosed in 1963 that a 'global rocket' (a missile able to attack the United States or any other antagonist via the 'long way round' thus, it was hoped, outflanking any attempts at anti-missile defence) had been developed.³³

The elevation of the status of the offensive element in the deterrent force was followed in 1962 by developments in its counterpart and complement—ballistic missile defence (BMD). In 1962 it was claimed that a missile (designated 'Griffon' by NATO), capable of intercepting and destroying incoming ballistic missile warheads, had been developed.³⁴ In 1964 another missile (which NATO christened 'Galosh'), claimed to be capable of destroying enemy rockets hundreds of miles from their targets, was displayed in Moscow.³⁵ Khrushchev stated that Soviet BMD could 'hit a fly in outer space',³⁶ but military claims on its behalf were somewhat less flamboyantly worded, though they nevertheless said that Soviet BMD was operational and effective.³⁷ Subsequent developments tended to indicate that their claims were over-optimistic; deployment of Griffon proceeded by fits and starts and was confined to Leningrad and the Baltic States (suggesting that the 'missiles' against which it was designed were not ballistic at all, but the air-breathing cruise missiles which might be launched by American or British bombers flying in over Scandinavia), while the Galosh missile found even more restricted employment as part of the defences of Moscow.

The third period was marked by criticism, sometimes only very thinly veiled, of Khrushchev's missile-oriented defence philosophy, of his pursuit of spectacular disarmament measures, and of his insistence that if Soviet troops were called upon to fight, it could only be in the context of a nuclear war. Some of the criticisms could be put down to outraged parochialism, but probably the main reasons had more to do with international developments, especially in the United States. There the Kennedy administration had taken office in January 1961, pledged to undertake some radical changes in the US defence posture. It had expressed concern at America's alleged weaknesses in conventional war-

³³ N. S. Khrushchev, interview with US newspaper editors, *New York Times*, 17 July 1962.

³⁴ T. W. Wolfe, *Soviet Strategy at the Crossroads*, Harvard University Press, 1964, pp. 190-3.

³⁵ *Pravda*, 8 November 1964.

³⁶ N. S. Khrushchev, interview with US newspaper editors, *New York Times*, 17 July 1962.

³⁷ R. Ya. Malinovskiy, *Pravda*, 25 October 1961; P. N. Kuleshov, *Red Star*, 18 November 1961, for example.

fare and taken steps to increase and modernise the conventional forces, urging its NATO allies to do the same. But at the same time, alleging that a 'missile gap' existed, that the US nuclear forces were vulnerable to surprise attack, and that there was an urgent need to improve both the numbers and the ability to survive of the American nuclear deterrent, it accelerated procurement of the Polaris and Minuteman missile systems. While some justification for alarm could be found in boastful statements made by Khrushchev and his colleagues, the actual position was that the Soviet intercontinental ballistic missile force was still small in 1960, the intercontinental bomber force was far smaller than that deployed by America, and the conventional forces were undergoing their third major reduction since 1955. Much of the argument advanced by the Democrats during the 1960 Presidential election was therefore spurious, and in fact the incoming Kennedy administration let it be known soon after taking office that no 'missile gap' existed.³⁸ But the build-up of both nuclear and conventional forces proceeded, nevertheless, and Soviet defence planners could not but take note of it. The first casualty was the 1960 program for a one-third cut in manpower. This had been scheduled for completion by the end of 1961, but in fact was abandoned in the spring of that year. Later in 1961 Khrushchev initiated pressure for a settlement of the Berlin issue, breached the unilaterally-declared moratorium on nuclear testing which had been in force since 1958, and allowed a series of tests, one of which, at 58 megatons, was the largest explosion ever conducted. To lend additional force to the new posture of truculence, he delayed demobilisation of time-expired conscripts for several months after induction of the 1961 class, thereby maintaining the forces at a level about 700,000 higher than normal, and thus indicating that if the West wished to increase its conventional forces, the Soviet Union could outmatch its efforts without undue difficulty.³⁹

The critics of Khrushchev's policy could only express themselves indirectly but there was no doubt of their determination or that they included very senior military men who had hitherto been known as supporters of Khrushchev. The signs that all was not well began with Khrushchev's announcement on 14 January 1960 that manpower would be reduced by one-third, from 3.6 to 2.4 million (i.e., to a lower level than that of the US forces). On the very next day the Minister of

³⁸ The reasons behind the increase in US strategic strike forces in the early months of the Kennedy Administration are examined in D. J. Ball, *The Strategic Missile Programme of the Kennedy Administration 1961-63*, unpublished Ph.D. thesis, ANU 1972.

³⁹ N. S. Khrushchev, speech of 27 October 1961.

Defence, Marshal Malinovskiy, made a speech in which, while endorsing the reduction, qualified his approval by extended references to the need for large armies in wartime, implying that cuts in the 'forces in being' would have to be compensated by arrangements for the maintenance and mobilisation of the pool of reservists.⁴⁰ The second and third ranking members of the military hierarchy, the Commander-in-Chief of the Warsaw Pact Forces, Marshal Konev, and the Chief of General Staff, Marshal Sokolovskiy, went further. They refused to give the reduction their public endorsement, and within three months both were replaced.⁴¹ The armed forces newspaper *Red Star* frequently published denunciations of Western 'warmongering',⁴² while Khrushchev attempted to secure arms limitation measures with the same 'warmongers'. In 1962 the Soviet Ministry of Defence published a stridently anti-Western pamphlet, 'Vigilantly Stand Guard in Defence of Peace',⁴³ which may have been written by the Minister of Defence himself and in any event set forth views which he had frequently expressed, that the West was actively planning to initiate war against the Soviet Union, and therefore, by implication, was not genuinely interested in the detente which Khrushchev was then seeking.

The Cuban crisis of late 1962 provided further evidence of dissonance between Khrushchev and the generals. Shortly after it had been resolved the Chief of General Staff, Marshal Zakharov, and two of his deputies were transferred to less responsible posts. No explanation was offered, but that the moves resulted from opposition to the undertaking rather than over-enthusiastic advocacy of it, or failure to plan it adequately, was indicated by Marshal Zakharov's early reinstatement as CGS after Khrushchev's overthrow, his retention of the post for seven years since, until he was well over 70 years of age, his subsequent attacks on Khrushchev's arbitrary and wanton interferences in military matters, and his insistence on a cautiously professional approach to strategic problems.⁴⁴

⁴⁰ R. Ya. Malinovskiy, speech of 15 January 1960.

⁴¹ Their departure was not announced until July, but presence of their successors on the podium at the May Day parade showed that they had left before 1 May 1960.

⁴² E.g. by Malinovskiy, on 11 November 1961, Kuleshov on 18 November 1961, Zheltikov and Larionov, 29 November 1961, Sidelnikov, 11 May 1962, Zemskov and Bulatov on 5 October 1962.

⁴³ *Vigilantly Stand Guard in the Defence of Peace*, Voenizdat, November 1962.

⁴⁴ M. V. Zakharov, in *Red Star*, 4 February 1965, and *O nauchnom podkhode k rukovodstvu voiskami (A scientific approach to leadership of troops)*, Voenizdat, 1965.

The humiliation caused by the unsuccessful confrontation with America over Cuba proved temporary, but was to have more lasting effects on strategy. It gave an impetus to the study of 'distant limited war' and the amphibious forces necessary to sustain it. The inability of the Soviet forces to reinforce Cuba or to break the American blockade had been clearly illustrated during the crisis. So had the inability of the Soviet deterrent to inhibit the United States from strong non-nuclear unilateral action.

The two years between the Cuba crisis and the deposition of Khrushchev saw further indications of military dissatisfaction with his policies. He stated in 1963 that a further reduction would be made in military manpower in the next year,⁴⁵ but it did not eventuate, and towards the end of the year the Commander-in-Chief of the army, Marshal Chuikov, published an article which drew attention to the increases, in manpower and conventional firepower, of the NATO armies and air forces.⁴⁶ In itself the article was mostly straight exposition, but the fact that the C-in-C himself lent his name to it naturally gave it more authority than normal, while his failure to denigrate the NATO measures as inadequate to counter Soviet superiority, or as worthless in the face of Soviet nuclear weapons, indicated to his professional audience that he regarded them as changing the military balance to NATO's advantage, and that he believed the Soviet Union should take similar steps. The immediate result was his relegation to the full-time headship of Civil Defence, with temporary abolition of the post of C-in-C Ground Forces. This indicated that Khrushchev still possessed the authority to 'hire and fire', but the necessity to do it at all pointed to a severe deterioration in the relations between Khrushchev and his military advisers—the more so as Marshal Chuikov had been a close associate of Khrushchev since 1942, when both had served, as Lieutenant-Generals, at Stalingrad.

In 1964 the then Commander of the Tank Forces' Academy, Marshal Rotmistrov, a leading military theoretician as well as a distinguished World War II armour commander, publicly queried reliance on 'one weapon, and that an untried one',⁴⁷ an obvious dig at Khrushchev's insistence on missiles as the basis of defence policy; unlike the C-in-C of the army he was not retired, but almost immediately elevated to the post of Assistant to the Defence Minister for higher military training, which suggested that military opposition to Khrushchev was gaining

⁴⁵ *Izvestiya*, 15 December 1963.

⁴⁶ M. V. Chuikov, in *Pravda*, 10 December 1963 and *Izvestiya*, 22 December 1963.

⁴⁷ P. Rotmistrov, in *Red Star*, 25 April 1964.

ground. Further controversy over the role of armoured forces in modern war, and over the relative importance of heavy and light industry to a war effort, marked Khrushchev's last months in office.⁴⁸ His attempt to secure military acquiescence in his efforts to curtail defence expenditure, by promoting his wartime colleagues in the 'southern group' of generals into the key posts, had apparently failed.

However, Krushchev's departure at the end of 1964 apparently owed nothing to direct military pressure. The arguments between the 'southern' and 'GHQ' generals had long become academic and ceased to have any relevance to current policies as the GHQ group retired and members of the southern group were introduced into the leading posts. The palace revolution was not a take-over by a new group; it was the removal of a leader by his colleagues, and there were no immediate command changes as a result of it, except for the reinstatement of Marshal Zakharov as Chief of the General Staff *vice* Marshal Biryuzov, who was killed in an air accident a few days after the transfer of power.

Nevertheless, changes in the military leadership could not be long postponed. Marshal Malinovskiy and almost all his Deputies (the C-in-C Warsaw Pact, Chief of General Staff, Commanders in Chief of the forces, Heads of Rear Services and Military Construction) were elderly men who had held marshal's or general's rank since 1945 or earlier, and most were well into their sixties. They were, in fact, a military gerontocracy, and in view of this must soon give way to a younger generation of officers, less dominated by their World War II experience. At the same time, the ageing marshals could not be hustled into retirement *en masse*, even if the new leaders wanted to replace them. They were a body of national figures, most of them war heroes, they represented the only possible alternative source of power to the Party, and they had a number of matters of unfinished business to settle. For although almost all of them were Khrushchev appointees, most had had reservations about his handling of military affairs, and the new leaders, themselves long-standing members of Khrushchev's government, were almost as strongly identified with the policies as Khrushchev himself.

These reservations related particularly to the relationship between conventional and nuclear forces, and to the levels appropriate to each. Khrushchev had exerted his influence to restrain defence expenditure, decried the idea that military power depended on the numbers of men under arms, and had declared in January 1960 that in future the basis of Soviet military might would be the ballistic missile—at a time when the number of ICBMs capable of reaching America probably did not

⁴⁸ N. S. Khrushchev, speeches of 2 June 1962 and 19 September 1964.

run into double figures. He had curtailed naval construction programs, refused to authorise the building of aircraft carriers (which Soviet admirals had been requesting since the 1930s), and referred with contempt to the prospects of conventional forces' survival in a nuclear war. His insistence that a war involving the nuclear powers would inevitably escalate almost instantaneously may well have been designed to maximise deterrence, the rationale being that if the West thought Khrushchev believed escalation even of minor incidents likely, it would take care not to provoke them. But the Cuba crisis had shown the limitations of Soviet capabilities against a power which not only possessed global nuclear strike forces but had strong conventional forces in the crisis area. It had driven home the point that the Soviet Union was still a strong regional power rather than a true global one, and that however meaningless for war numerical superiority in nuclear weapons might be (Khrushchev had pointed out on numerous occasions that American ability to 'kill' the Soviet Union several times over meant nothing in view of Soviet ability to 'kill' the United States once),⁴⁹ both the outside world in general, and the US government in particular, obviously believed that it counted for something when it came to handling an actual crisis. The US ability to 'guarantee' Cuba, and Soviet inability to counter the blockade without running a risk of war, had been clearly a function of strength in the area, and of general ability to deploy further conventional force, relying on Soviet inability to match the conventional deployment and the unlikelihood that they would be prepared to risk a nuclear outcome.

Between 1962 and 1964 a number of articles analysing Western amphibious operations of World War II appeared in Soviet military journals,⁵⁰ suggesting that interest had been aroused in the methods by which military power could be projected into areas remote from Soviet frontiers. However, no immediate changes in policy resulted from this interest, beyond the creation of a small marine force during 1963-4, and the tasks which it exercised suggested that it was mainly intended for amphibious operations in support of a land campaign in general war, rather than for a 'distant limited war' role.⁵¹

⁴⁹ N. S. Khrushchev, speeches of 21 and 28 June 1961, and interview of 8 September 1961.

⁵⁰ *Voyenno-Istoricheskiy Zhurnal (Journal of Military History)*, 1962-4 *passim*.

⁵¹ Creation of the marines was announced in July 1964, but they had existed for almost a year before that, first with the Black Sea and Baltic Fleets, later with the other two fleets as well. All published reports of exercises have featured them in short-range assaults, and they have not been seen with forces in long-range 'distant-water' cruises, which do not generally include ships suitable for

THE FOURTH PHASE 1965-1972

In the fourth period, which began with Khrushchev's overthrow in October 1964, his 'single option' strategy was jettisoned. 'Minimum deterrence' was abandoned, and a build-up in strategic weapons eventually brought about an approximate parity with the United States in land-based ICBMs, while the navy, although still receiving no aircraft carriers, was authorised to proceed with the large anti-submarine helicopter carriers, and with a true 'Polaris-type' submarine missile system, of about 1,700 n.m. range, deployed in a nuclear submarine which, like its American counterparts, carried 16 missiles, and could launch them from under water.

Since Khrushchev, despite his 'strait-jacketing' of Soviet defence policy, had not been able to muffle all professional discussion of it, as had Stalin, there was no direct counterpart to the spate of articles which had appeared in the immediate aftermath of Stalin's death. But nevertheless, a number of theorists, and some senior commanders as well, made public their views in ways which illustrated both deep dissatisfaction with some aspects of the Soviet defence posture, and considerable divergence as to the remedies.

The basic problem facing those who were thinking about these problems was that of defining the nature of future war. Khrushchev had laid down that the Soviet Union would avoid direct involvement in local or limited wars of the Korean or Vietnamese type.⁵² Its armed forces would be employed only if the Soviet Union or its Warsaw Pact allies (until about 1963, China also), were attacked. His view was that such an attack could occur only by 'accident' (in which case it would be ended speedily), by deliberate American decision (in which case it would inevitably involve the early use of nuclear weapons), or through 'catalysis' by one of America's allies, especially Germany (in which case it would either be ended quickly by diplomacy or would escalate).⁵³ As he saw it, none of the contingencies could involve the Soviet Union in a long conventional war. In the power-struggle of 1953-5 he had denied Malenkov's contention that a nuclear war would prove fatal to both sides, but by 1960 had come to share it,⁵⁴ and therefore had given almost total primacy to deterrence. This left considerable doubt

their operations.

⁵² Summarised in Sokolovskii, *op. cit.*, Chapters 2 and 5 of 1st ed., 1962, 2nd ed., 1963, 3rd ed., 1967.

⁵³ N. S. Khrushchev, speech at luncheon for President Kekkonen of Finland, 24 November 1961.

⁵⁴ N. S. Khrushchev, speech of 16 January 1963.

as to the residual purpose of the conventional forces, deprived the Soviet posture of flexibility, and raised problems of morale in the forces as well, as a consequence of the undefined nature of their role.

Much of the post-Khrushchev debate therefore centred on possible future war, the circumstances in which it might arise, its duration, the role of nuclear and conventional forces in it, and, in particular, whether it was possible to 'win' a general nuclear war.⁵⁵ From this stemmed a number of sub-topics, for example whether the aim of 'victory' could be furthered by striving in peacetime to attain 'superiority' by building both more and 'better' missiles than likely adversaries, or by including anti-ballistic missiles in the inventory. Some signs of lack of enthusiasm for the ABM were apparent among the political leaders, who foresaw that installation of it would prompt pressures in the United States for an increase in offensive missiles, which in turn would lead to Soviet military pressures on themselves for both additional ABMs and ICBMs. However, this opposition was not expressed by the putting forward of counter-arguments to the effect that stable deterrence required deliberate toleration of mutual vulnerability. Instead the government decided to negotiate with the United States for limitations on the numbers of both offensive and defensive weapons.⁵⁶ Politically, the achievement of approximate parity with the United States in delivery vehicles, and of superiority in total deliverable megatonnage, though at the expense of a considerable inferiority in the number of deliverable warheads, made it easier to defend such an agreement both to Soviet public opinion and to the military, than when no such parity existed. By showing Soviet willingness and ability to compete in an arms race it also increased the likelihood that the Americans would contemplate an agreement to regulate the pace of competition. Research and development went ahead on both offensive and defensive systems, but only the offensive missiles were deployed in large numbers because, in the paradoxical world of nuclear strategy, an increase in offensive system was less destabilising—initially at least it represented only the closing of a 'missile gap', while extended deployment of 'defensive' ABMs would almost inevitably have led to a new round in the arms race.

⁵⁵ These mostly appeared in fortnightly numbers of *Kommunist Vooruzhennykh Sil* (*Armed Forces Communist*), the most important being contributions made by Colonels Rybkin and Bondarenko in September 1965 and September 1966 respectively.

⁵⁶ The first indications of interest in a Strategic Arms Limitation Agreement had been made in various proposals put forward as suggested ways to implement General and Complete Disarmament in 1959-60, but the present SALT talks did not begin until 1969.

The large increase in missile numbers—from about 350 ICBMs at the end of 1966 to about 1300 at the end of 1970⁵⁷—was accompanied by upgrading of the quality of the seaborne missile force. This had remained a mixture of relatively short-range missiles, lacking the ability to launch without surfacing, and including both diesel and nuclear-powered submarines. This was partly because of reluctance to commit large funds to a system designed to operate in a hostile and largely unfamiliar environment, and partly because submarine-borne missile systems are very much more expensive per installed missile than those on land, while the nearness to the coast of most major US cities had rendered installation of long-range SLBM less urgent than would otherwise have been the case. However, with a number of years' operating experience of the existing force, it had probably become clear to the Soviet submariners, as to their colleagues in anti-submarine warfare (ASW), that the most effective way to protect a missile submarine force is to use long-range missiles. These greatly increase the area to be searched by a defender (in this case, from a few hundred miles off the US eastern seaboard to the entire North Atlantic and large parts of the Pacific and Arctic Oceans as well), and, provided the missile can eventually be developed to a sufficient range, would make it possible for Soviet missile boats to carry out their deterrent missions from waters close to home territory, and therefore safer from Western ASW ships and aircraft. Increases in missile accuracy during the 1960s threatened to make land-based fixed-site missiles more vulnerable than was thought when they were first installed, whereas the long life of an SLBM system would go some way to offset its very high first cost. This altered Soviet defence thinking about the very expensive missile submarines, rendering them more attractive in 'cost-effectiveness' terms because of their ability to move and hide and reducing the hazards of the hostile maritime environment as an emplacement zone for an important part of the Soviet strategic deterrent. It is probably for these reasons that production of the 'Y' class submarine has been accelerated since the end of 1967.

The ground forces remained the largest component of the defence establishment, as they had throughout Russian and Soviet history. They comprised between 1.75 and 2 million men, about two-thirds of the total forces manpower, organised in about 150 divisional structures. About half of these were at full strength, and they remained as always

⁵⁷ Increases in the missile numbers are illustrated in the successive annual issues of *The Military Balance*, International Institute for Strategic Studies, London, 1960-72.

deployed mainly in and adjacent to the European theatre—32 in Central Europe, about 60 in the European USSR, 30 in the Caucasus and Central Asia and about 28 in the Far East (including 2 in Outer Mongolia). Of the 30 or so divisions deployed in the Caucasian and Central Asian regions, about half were located facing the NATO/CENTO area (Turkey and Iran), the rest facing the border with China in Sinkiang. So despite a shift of forces eastward, over two-thirds of the Soviet Army was still deployed to face NATO—while of the 28 divisions in the Far East some were maintained for the ‘traditional’ post-war task of confronting coastal assaults by the United States and its allies, Japan and South Korea.⁵⁸ However, the worsening of the dispute with China between 1963 and 1969 is illustrated by the fact that almost one-third of the Soviet army is now deployed along the Sino-Soviet border, compared with less than a quarter in 1960.

The debate on ‘flexible response’ in the United States during the late 1950s and early 1960s was initiated in the belief that US and NATO conventional forces had been allowed to become unduly dependent on nuclear weapons because of their numerical inferiority. It is perhaps ironic that measures to increase the numbers and non-nuclear capabilities were taken in 1961, when the signs were already evident that Soviet defence policy was being fastened more firmly than ever into the strait-jacket of ‘massive retaliation’ by Khrushchev. However this may be, the Soviet ground forces were to be actively concerned in the search for ‘flexible response’ after 1965. But predominance of the idea that, in the most important European theatre, main forces would be engaged only if general war had broken out is so firmly established that the emphasis has been placed on conventional operations not as an alternative, but as a complement, to operations using nuclear weapons. The post of C-in-C Ground Forces was re-established only in 1967,⁵⁹ almost three years after Khrushchev had abolished it, and the same year saw important improvements in the army’s non-nuclear equipment. These included increases in field and anti-aircraft artillery, in the infantry component of the tank armies, and improvements in the supply services.⁶⁰ Developments in the air forces also had relevance to the land battle, new types of aircraft to improve tactical air support and airlift of troops, weapons and supplies being displayed for the first time at the 1967 Air Show.⁶¹ Confirming this general picture of 1967 as a

⁵⁸ Figures for ground force deployments from *ibid.*

⁵⁹ J. Erickson, *Soviet Military Power*, Royal United Service Institution, London, 1971, p. 18.

⁶⁰ *Ibid.*, p. 67.

⁶¹ *Strategic Survey*, 1967, Institute for Strategic Studies, London, 1968, pp. 13-21.

crucial year for the ground forces was a large-scale exercise ('DNEPR'), held in the early autumn, to a non-nuclear scenario.⁶² However, subsequent exercises involved the assumed use of nuclear weapons, and writings on them and on general problems of war have emphasised the complementarity of nuclear and conventional operations.⁶³ In theatre strategy, and in tactics, the main effect of the re-evaluation of ground forces operations in the post-Khrushchev period has been to reaffirm the importance of fast offensive movement, with the object of overrunning Europe in a matter of 10 to 20 days. All writings on the conduct of the land battle continue to assume massive and early use of nuclear weapons by both sides, and there have been no expressions of preference for an attempt to keep the non-nuclear phase of a general war as long as possible. It is quite clearly postulated that the 'limited war' doctrines, once purveyed in the West, involve unrealistic and artificial self-denying ordinances which a losing side would jettison in a real situation, and the signs of a slight interest in the possibility of limited nuclear or non-nuclear war involving Soviet forces, shown in 1962-5, have not been sustained. In that sense Soviet doctrine for ground battle, despite improvements in organisation, equipment and supply, remains that of the Khrushchev years.

The air forces, like their Western counterparts, fulfil many functions on behalf of the other services, but their main rationale for an independent role is their contribution to the strategic nuclear strike. Despite the massive growth in the missile forces during the fourth period, the Long Range Air Force has suffered no appreciable reduction in size. It has maintained a force of intercontinental bombers, mostly of the M-4 turbojet ('Bison') type (about 100) and a slightly smaller number of the slower turboprop Tu-95 ('Bear'), but both types are being gradually relegated to the less exacting naval reconnaissance and strike role, and no successor for either appears to be contemplated. The Tu-16 ('Badger') medium range bomber is in course of at least partial replacement by the Tu-22 ('Blinder'), suggesting that for target systems in Europe and Asia, where warning of the approach of aircraft would be shorter because of the shorter distances involved, and where air defences are in general weaker than those of the United States, manned bombers still have a role.

For the still shorter range duties of interception, support for ground forces, and combat airlift, the fourth period has seen increases in

⁶² *DNEPR*, Voenizdat, 1968, describes this exercise.

⁶³ E.g. by General Zavyalov 'Novoye Oruzhiye i Voennoye Isskustvo' (New Weapons and the Art of War) in *Red Star*, 30 October 1970.

numbers and introduction of a range of new types. The 'status' of the air forces has been raised since the 1950s by the appointment of airmen to command the autonomous 'Air and Missile Defence of the Homeland' service (PRO i PRO Strany), which, besides manned interceptors, incorporates observation, early warning, surface to air missiles and guns and, to a limited extent, anti-ballistic missiles, all manned by army troops. But the dominance of the army in the overall defence structure is shown by the control arrangements for strategic nuclear missiles. In both the United States and the Soviet Union these replaced manned bombers. In the United States the air force retained control of those deployed on land, the navy of those deployed at sea. The Soviet Union, on the other hand, placed all landbased missiles of medium, intermediate and intercontinental range under control of an autonomous service (the Strategic Rocket Forces), set up in 1960 and always since then commanded and staffed by army personnel.

The navy's main innovations during the fourth period were the commissioning of two 18,000 ton anti-submarine helicopter carriers. It has been suggested that these could 'become' aircraft-carriers by use of vertical take-off and landing aircraft (VTOL), but this seems unlikely for several reasons—among them the weight and range penalty imposed by use of the VTOL capability makes it likely that even ships designed to take them would be configured for them to use a short take-off and landing (STOL) technique. With a superstructure extending right across the ship, as on the two Soviet helicopter carriers, the only way in which this technique could be safely used for take-off would be by the operationally unlikely procedure of steaming full-speed astern into the wind, while no safe procedure for STOL landings appears possible. In addition the narrowness of the lifts makes it highly unlikely that even a folding-wing aircraft could be taken below decks for storage, servicing, and to clear the relatively small flight deck for use by other aircraft.⁶⁴ It seems therefore that the ships were not designed for the regular use of fixed-wing aircraft, and could not do more than accommodate a small number of VTOLs for a very short period.

Another possibility is that the ships are intended as 'commando carriers' for distant limited wars, but this seems equally unlikely. In the five years or so since their appearance, no marines have been seen on board, only anti-submarine helicopters have been observed to operate from them, and they have spent most of their time in the

⁶⁴ The 'Soviet Union' section of *Jane's Fighting Ships* for 1969-70 contains a vertical photograph and scale drawing from which the dimensions can easily be established.

Mediterranean, where they provide ASW protection to the Soviet naval squadron and exercise anti-Polaris operations. While they could no doubt find some use in an emergency as short-term aircraft carriers or commando ships, their operations (closely observed by NATO) and structural features suggest that they were not designed with either role in mind, but are what they are claimed to be—‘anti-submarine cruisers’. The Soviet surface fleet has continued to refit existing ships with additional anti-aircraft missile systems, and to introduce new ships heavily equipped to defend themselves against air attack. It continues, however, to fall behind the Western programs for new construction. For offensive air capability, or manned defence against air attack (e.g. from carriers) the Soviet fleet is still forced to rely on land-based aircraft, and therefore would be a doubtful quantity when more than a few hundred miles from Soviet-bloc coasts. This constitutes its major weakness as a credible fighting counterpart to the US navy’s carrier task forces.

The submarine fleet underwent a qualitative improvement during the fourth period with an increase in 1968 of nuclear submarine construction, which until then had been at a lower rate than the American, and introduction of the Y-class 16-missile nuclear submarines from 1967.

The new developments noted in 1967, from increases in ICBM deployment to appearance of new air and naval weapons, suggested that a major policy revision had taken place, probably in the immediate aftermath of Khrushchev’s departure, or perhaps even earlier, as his personal influence waned. In October 1967 came a new conscription law, which, among other things, reduced the age of call-up by one year, cut the period of service by the same amount, introduced two call-ups a year instead of the previous one, and increased the amount of pre-military training to be carried out in schools. This measure was aimed at reducing the defence load on the economy, while retaining the principle of universality, which had tended to become discredited in the mid-1960s, when the products of the post-war ‘bulge’ in the birth-rate provided an annual contingent about three times as large as the forces required. In addition, by revising the ‘age for rank’ retirement provisions for officers, it provided the basis for a planned rejuvenation of the officer corps.⁶⁵

In summary, the fourth period saw the evolution of a more ‘rounded’ defence posture, which while not rejecting outright Khrushchev’s in-

⁶⁵ The law and its implications are examined in G. Jukes, ‘Changes in Soviet Conscription Law’, *Australian Outlook*, August 1968, Vol. 22, No. 2, pp. 204-17.

sistence that deterrence must be paramount, made far more provision for a breakdown of deterrence and consequent need to fight a war. Government and military were to some extent in opposition, with the civilian leaders seeking to reach some form of agreement with the United States to regulate the pace of arms competition, and the military pressing for increased allocations. But the antagonisms were contained and minimised. The civilians avoided 'Utopian' proposals, such as Khrushchev's advocacy of general and complete disarmament in 1959-60. They allowed the military theorists to argue about the feasibility of 'winning' a nuclear war in 1965-6 (though they firmly reiterated in 1967 that the prime objective of Soviet defence policy was the deterrence or avoidance of war),⁶⁶ and they left pronouncements on strategic matters mainly to the Minister of Defence, unlike Stalin and Khrushchev, who had arrogated the privilege to themselves. The end of the period saw approximate parity in strategic nuclear weapons and defences against them, ratified by formal agreement with the United States at the Moscow Summit meeting in May 1972.

FUTURE POSSIBILITIES

It remains to conclude this brief survey with some reference to possible trends. At the close of the fourth period the Soviet Union had become an incipient wielder of global power, expressed particularly in the wider sphere of operations accorded to relatively small forces of its navy. Despite this, geography and politics will combine to ensure that the main focus of Soviet concern remains in Europe, which has twice in this century been the source of major threats to the fabric of Russian society. The strains of World War I eventually toppled Tsarism, those of the World War II came close to doing the same to the successor régime. The continent is split between the two largest power blocs (whether power is viewed in political, economic, or strictly military terms), and a number of potentially explosive issues (above all, the division of Germany) remain unsettled. The main centres of the Soviet Union lie closer to the NATO area than to anywhere else, and quite apart from their vulnerability to attack from the air in the event of war, all are under threat from American and British Polaris submarines patrolling in the Arctic Ocean, eastern Atlantic, and Mediterranean. Since the NATO area contains both the major threats to Soviet security, and all its major trading partners, it is obviously more important to the Soviet leaders than any other, and on a number of

⁶⁶ *Red Star*, 24 January 1967.

occasions they have put forward proposals aimed at securing a reduction of the level of armaments in it. Some of these have been advanced within the context of arms control and disarmament, but for most of the post-war years both Soviet and Western proposals were strongly loaded with attempts to gain propaganda advantage. For example, it was common practice in the 1950s for the Soviets to propose package deals involving the abolition of nuclear weapons coupled with percentage reductions in armed forces manpower. From the Western side these proposals were quite unacceptable. At the time Soviet forces considerably outnumbered those of the NATO countries, but were greatly deficient in nuclear weapons and, in particular, possessed no tactical ones for battlefield use. From the NATO angle, therefore, nuclear weapons were an 'equaliser', and their abolition would enhance the advantages conferred on the Soviets by their larger numbers. The other half of the Soviet proposals, for percentage reductions in armed forces, sounded reasonable on the surface, but if carried far enough would have taken NATO, with its smaller initial numbers, below the minimum adequate force-to-space ratio while leaving the Warsaw Pact well above it—there is a minimum level below which the NATO forces would be so thinly spread that they could no longer resist an attack even by a force of equal or lesser size.

Equally unsatisfactory to the Soviets were Western proposals which normally attempted to fix ceilings for conventional forces (invariably requiring the Soviets to make larger cuts than the West) but made no proposals at all in respect of nuclear weapons, or made only proposals which would ratify the Western advantage (e.g. the 'freeze' proposal made by President Johnson in 1964). Abandonment of this unsubtle procedure by both sides was a feature of the fourth period, motivated by desire to restrain the growth of defence demands on resources in both countries, while at the same time marking their special status as 'super-powers'. Soviet pressure for a European Security Conference is a recognition of the special need to reduce the explosive potential of the area's unsolved problems.

The preoccupation with Europe was explicable also in terms of an absence of major threats from other directions. The possession of colonies and dependencies enabled threats to be posed from south and east, but they were posed by the same powers which threatened from Europe. These powers might use bases in their colonies, or negotiate base rights and alliances with former colonies, as the United States did in 1953-5, but this did not alter the nature or origin of the threat so posed.

In the complex of contingency planning necessitated by the diversity of Western forces, bases, and alliances, one consolation to the Soviets was the absence of any direct threat along the long, and, in places, very vulnerable border with China. In modern times China had been too weak to pose such a threat, and the main danger for Russia had been the possibility that an expansionist country other than itself would gain control of all, or a significant part of, China. This had happened in 1904-5 when Russian influence in Manchuria and Korea had become strong enough to provoke a Japanese riposte in the form of the Russo-Japanese war. 'Interventions' by Japanese and American forces in the Russian Civil War and Japanese incursions into Soviet and Outer Mongolian territory in the 1930s had also required Soviet military action. But in all these cases the threat had had its origin in China's weakness and inability to deny access to the Sino-Soviet border areas to predatory third parties. The advent to power of the Chinese Communists appeared to ease the situation. Under a strong central government, foreign powers would no longer be able to intervene in China, while the presumed ideological bonds seemed to preclude the possibility that China itself would become a danger.

The causes and course of the Sino-Soviet dispute are outside the scope of this study, but the implications for Soviet defence planning are not. For the first time in over 200 years it has become necessary to take account of a China both united and hostile. However insignificant China might be as a global military power, its abilities to fight in areas contiguous to its borders had been demonstrated in the Korean War, and were to be demonstrated again during the border conflict with India in 1962. The proximity of many large Soviet southern and eastern cities and industrial areas to China's borders gave China an ability to some extent to 'deter' the Soviet Union by possession of nuclear weapons and relatively short-range delivery systems for them. In the circumstances, the incipient growth in the Indo-Pacific region of a multi-polar power balance creates new hazards, because of the danger that one of the participants will find the others linked against it. Since the United States already has strong links with Japan, Soviet strategists have naturally viewed with great suspicion American moves to improve relations with China. However, in attempts to reconstruct a classical balance of power in the Indo-Pacific area, pure military-strategic concepts are likely to take second place to diplomacy and trade. Efforts will be made to enlist Japanese aid in developing the Soviet Far East in return for raw materials, and judicious concessions of some of the islands annexed in 1945 may reduce Japanese political reservations

about Soviet 'friendship'. Some amelioration of Sino-Soviet relations is also likely, in terms of settlement of border issues and a revival of trade from its present minimal level. The vulnerability of the main supply route to Soviet Far Eastern forces—the Trans-Siberian Railway—and the numbers of the opposing Chinese forces, would make a conventional campaign of any length difficult, though not impossible, to sustain. On the other hand, the political undesirability of being seen to threaten a non-white power with nuclear weapons, and the vulnerability of some Soviet cities to Chinese nuclear attack, render use or threat of use of nuclear weapons unlikely. The contribution of military strategy to a solution of the Sino-Soviet dispute is therefore likely to be inconclusive.

Indian and Pacific Ocean operations play a secondary role in the Soviet depictions of future war. This is natural enough, since the Soviet Union has no coastline on the Indian Ocean, and its Pacific provinces are far from its most vital areas. The Soviet Pacific Fleet's main duties in war would be the defence of the coastline and coastal shipping routes (the main form of transport in the Soviet Far East, both rail and road systems being rudimentary). The large submarine component of the Pacific Fleet is at least in part designated for operations against Japanese deep sea and inter-island merchant shipping, as well as against the US Seventh Fleet's carrier forces, but all Soviet works on strategy refer to the Pacific theatre as something of an afterthought. The Indian Ocean ranks even lower, barely meriting a mention in Soviet strategic writings. The small squadron maintained there since 1968 has a flag-showing role, and is probably concerned to accumulate operating experience in case US missile submarines are ever deployed to the Arabian Sea, whence they could attack almost all Soviet targets from Moscow in the west to Central Siberia in the east. It is highly unlikely that the Soviet Indian Ocean squadron is intended for action against Indian Ocean sea routes, or to cut off Western oil supplies. It is difficult to imagine the Soviets, whose own seaborne trade moves through narrow, NATO-controlled outlets into seas dominated by Western navies, attempting such interference with world oil supplies in anything bar a major international crisis. Were circumstances such that they believed this interference necessary, there are three ways in which it might be done. The first would be to use diplomatic pressure, backed by military threats, to persuade the local governments to cut off oil supplies at source. The second would be to bomb the wells, pipelines, pumping stations and terminals from airfields in the Caucasus, little more than an hour's flying time away. The third recourse—naval

warfare against tankers—would seem likely to be more hazardous than either of the first two because of the long distance from main fleet bases, and less effective, because of the possibilities of counteraction.⁶⁷

Some question marks hang over the military's potential role in the event of a succession crisis. Although the Soviet career officer has a long tradition of subordination to civil authority, characteristic of his Tsarist predecessors and reinforced by the apparatus of the present state order, as well as by his own preoccupations with his career, the senior military have three times found themselves involved in determining the succession. In 1953 troops of the Moscow garrison were positioned to prevent action by the autonomous Ministry of the Interior forces in defence of their head, Beria, when senior officers of the Ministry of Defence arrested him on the instructions of the other members of the 'collective leadership'. In 1957 the Minister of Defence, Marshal Zhukov, exerted his influence to retain Khrushchev in office after he had been outvoted in a meeting of the Party Presidium; and while the military stood aloof in 1964 while Khrushchev's colleagues deposed him, it was their very aloofness which made the deposition possible.

It is highly unlikely that the military would ever attempt to seize power, or that the combined resources of the Party, the ideological commitment of many senior officers, the Party's own branches in the armed forces, and the security services, would fail to detect conspiracies before they could reach fruition. But at the same time, military officers regard lobbying for their projects as legitimate professional activity, and political leaders aspiring to widen their power base have not been slow in the past to court military support. Khrushchev did so during the succession struggle with Malenkov in 1953-5, and thereafter retained responsibility for liaison with the military in his own hands. The present leadership believes in separation of powers, and has sedulously avoided permitting the same person to be both First Secretary of the Party and Chairman of the Council of Ministers, as were Stalin after 1941 and Khrushchev after 1957; but Brezhnev has repeated Khrushchev's practice of retaining in his own hands the function of link-man between the Party and military leaderships.

The orderly processes by which power is distributed within the present leadership could be disrupted in the future because of the oligarchical methods by which leaders are 'evolved', and it is likely that contenders for power would again attempt to enlist the military in

⁶⁷ For a more detailed examination of these aspects of Soviet naval strategy see G. Jukes, *'The Indian Ocean in Soviet Naval Policy'*, *Adelphi Paper No. 87*, International Institute for Strategic Studies, London, May 1972.

support of their claims. But the military would be only one of the pressure groups involved in such a struggle—in the past the Party apparatus, the technocrats, the planners, have all proved at least equally important, and the fact that the military have the guns has not had to be taken into account; with no private arms industry to lobby on behalf of particular services, no pressure from politicians for lucrative arms contracts to be placed in their constituencies, no public hearings on defence appropriations to provide a forum for pressures by particular armed services, and a tradition of military abstention from political activities, the Soviet Union, whatever reservations we may have about its modes of government, is well placed to maintain civilian control over its military.

Military pressure upon resources will continue because of the costs of new weapons systems, but it is probable that the military's demands will be confined to attempts to ensure that their requirements for 'tools for the job' continue to be met. Neither they nor the theorists who articulate and expound military thinking are therefore likely to acquire a dominant influence over Soviet foreign policy, and 'strategy' will hardly be conceived in primarily military terms. It will therefore be unwise in the future, as in the past, to attempt to interpret the likely directions of Soviet foreign and defence policies solely by reference to known or inferred views of the military.

Any attempt to prove that the Soviet Union is more prone than Western nations to employ the use of threat of force as a foreign policy instrument must fail, when the behaviour of Western countries is taken into account. There has been no Soviet counterpart to the American (or Australian) involvements in Korea and Vietnam. Apart from the handfuls of troops, mostly frontier guards, involved in incidents on the Sino-Soviet border, no Soviet forces have been in action against another army since the invasion of Hungary in 1956. So almost no Soviet officers with less than sixteen years' service have seen action, and the very small Australian armed forces possess more men with recent combat experience than do the Soviet armed forces. At the same time, it is prudent to recognise that while Marxism does not advocate the pursuit of violent solutions to political problems, it does not reject them out of hand. Soviet forces have been employed much less often since the war than have those of Western countries, but military power has been employed to preserve the status quo in East Germany (1953), Hungary (1956) and Czechoslovakia (1968), and demonstrative movements of troops have been made in order to influence the behaviour of Poland (1956 and 1971) and China (1968-70). In respect to Western

forces, Soviet behaviour has in recent years been cautious, circumspect and non-provocative, but there have been exceptions, notably at sea. In the Khrushchev period the deployment of strategic missiles in Cuba in 1962, and of troops around West Berlin at various times during 1958-61, showed that military pressure was regarded as an appropriate form of 'leverage' in certain circumstances. The SALT agreements limit the chances of a strategic arms race, and to that extent enhance stability. But they also indicate a degree of mutual understanding which could lead to an increased likelihood of minor confrontations. If such confrontations are judged unlikely to escalate to major war, the incentive to avoid them is to some extent reduced. Whether it is reduced enough to make them more likely remains to be seen.

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