

**THE SOVIET UNION AND THE CONVENTIONAL THREAT TO SOUTH AFRICA:**

**A Strategic Analysis**

by

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### INTRODUCTION

The basic approach adopted in this study should be made explicit at the outset. Firstly, I have assumed that the foreign policy of the Soviet Union is dictated primarily by her desire for world domination rather than by considerations of ideology and international communism. I am very much aware that this assumption is questionable. But it offers two major advantages. Unlike the question "Is this in the interests of (the Soviet interpretation of) communism?" the query "Will this measure materially promote the Soviet aim of world domination?" provides a fairly clear guide to what future Soviet policy might be. Further, the assumption offers, in my view, much the best explanation for recently observed Soviet behaviour.

Secondly, I have disregarded virtually all foreign policy pronouncements by Soviet leaders and officials. I have preferred to concentrate on observed behaviour and undoubted military and economic facts. The reasons underlying this decision are threefold. Firstly, it is very much a moot point whether Soviet (or any communist) foreign policy statements reflect the real intentions of their authors. Secondly, the writer does not possess the expertise necessary to present a coherent picture of ostensible Soviet policy towards Africa. And finally, extreme Russian hostility to South Africa is there for all to see.

Thirdly, I have only briefly touched on the threat of unconventional war. This is not because I am unaware of the vital importance of the topic. Rather it is because a proper examination of it would be a separate study in itself. Equally, Russian aid to guerilla movements is only peripheral to the whole insurgency warfare problem, even if it is a *sine qua non*.

A few words about the structure of the paper would also be in order. The first part, as its title suggests, deals with possible motives for Soviet action in Southern Africa, providing the framework in which the Soviet threat to South Africa may be assessed. The second deals with what is probably the best evidence of Soviet imperial ambitions - the expansion in the size and activities of the Soviet fleet. The third winds up the paper with an examination of the military threat to South Africa proper in the light of the other two sections.

## I. POSSIBLE REASONS FOR SOVIET INTEREST IN SOUTHERN AFRICA

### *THE CAPE SEA ROUTE*

The importance of the Cape oil route has undoubtedly occupied pride of place among the various arguments used to emphasize the indispensability of South Africa to the West, and, by inference, it has been presented as the main object of Soviet interest. It therefore seems appropriate to begin this paper with an examination of the actual importance of this route to the Soviets in a near-war situation, and the significance of South Africa's nodal position with respect to the route.

It is a most unfortunate fact that the vehemence of those who stress the vital nature of the Cape Sea route is matched only by their unwillingness to enter into specifics. Invariably, the rationale behind their exhortations goes something like this : "South Africa is vital to the West because half Nato's oil supplies go round the Cape. Q.E.D. !" This reasoning is, to say the least of it, inadequate. In the event of a nuclear war, for instance, the Cape route would be entirely irrelevant to the safety of North America and Western Europe. And even if the Cape sea route *is* vital to the West, it does not follow that South Africa itself enjoys the same status. These objections have not, however, escaped the attention of those who argue against according South Africa's position astride the Cape route much importance.

*The Case against the Cape being of any interest to the Soviets*

The following is a short summary of the reasoning of the "Cape sea route detractors".

Russia will not block the Cape sea route except in the context of a major war because :

(a) such action would precipitate a general war which would rapidly "go nuclear", or:

(b) in view of the superiority of the combined Western navies and the fact that South Africa would undoubtedly let these forces have the use of Simonstown, the NATO nations would be able to re-open the route. In any case, it is argued, if the Russians want to impose a blockade, the Cape is one of the least suitable places to carry it out because the Russian bases are far away and Simonstown is nearby.<sup>1</sup> It will also be difficult to stop the traffic because there is plenty of room between the Cape and the pack ice. The Russians would do far better to block the Straits of Hormuz or, failing that, the Arabian Sea, thus cutting off the oil at its source. The USSR would be even more clever if it directly blockaded the European ports for which the tankers are heading, since these are comparatively close to the Russian bases. Both these alternatives would have the advantage that all the oil would be cut off - the tankers could not steer east instead of west once they had left the Persian Gulf and reach Europe via the Pacific and the Panama Canal.<sup>2</sup>

While all this is not without a certain plausibility, the argument is by no means devoid of flaws. First of all, it is fairly obvious that should the Russians decide on a conventional invasion of Europe they would not be interested in blocking the Cape oil route. The reason is that the very essence of such an invasion would be speed - to overrun or capture 90% of the NATO tactical nuclear warheads before the NATO governments had made up their minds to use them. Europe would have to be overrun before any significant amount of American reinforcements could be brought in. Therefore, the Russian Navy would be heavily committed in the Atlantic and in amphibious operations on the European coast. It would certainly be most foolish to divert part of its forces to impose a blockade that would only start having an effect after a few months - the months in which the outcome of the war would be decided.

Secondly, it is clear that a blockade of the oil route without an invasion would not trigger off a general conventional or nuclear war. It is extremely doubtful whether the Europeans and their governments are anxious to

commit suicide by indulging in a nuclear exchange with possibly the first nuclear power in the world. In view of NATO's tremendous inferiority in conventional forces, it is an even more incredible suggestion that the alliance would embark on an invasion of Eastern Europe. Such an invasion could achieve nothing even if it met with partial success.

It is therefore clear that we must look for a blockade of the oil route in the context, not of a general war, but of a state of tension and a conflict of wills. For example, consider the following "scenario" - The USSR demands that in the interests of its future relations with Western Europe all military ties with the Americans must be broken. This is followed by a series of measures to enforce compliance.

(a) All Soviet-European trade is broken off. If such trade has become substantial, this will mean that large numbers of people will be put out of work - causing considerable social and industrial dislocation.<sup>3</sup>

(b) There will be powerful attempts at subversion by Soviet-backed dissident elements. Their efforts will probably be concentrated in the universities, the labour unions, and the armed forces.

(c) Soviet troops will be fully mobilised and concentrated on the frontiers of Western Europe.

(d) There will be strenuous attempts to block the landing of substantial reinforcements by the US, mainly by the use of the cruise missile submarine.

(e) There may be limited operations to secure important objectives such as the Bosphorus and Northern Norway.

(f) Oil supplies to Western Europe will be cut off.

Such a scheme will confront the leaders of Europe with an agonising choice. They cannot invade Russia nor bomb it without incurring the risk of a nuclear conflagration, therefore their most sensible course would be to:

(i) build up their troop levels until they are in a position to defeat a conventional Russian invasion; and

(ii) attempt to remove the clamps on their economies.

In other words, they will meet the Russians on their own ground. However, there is even now a strong possibility that they will not succeed in attaining either of their objectives. If their efforts are thwarted, the leaders of Europe may well acquiesce in what has been termed "Finlandisation", (defined as a state of affairs where a country does not feel strong enough to cross Russia on any major issue.) *This* is the situation in which a blockade of the Cape route is really possible. The Russians have as little desire as the rest of us to risk a nuclear war, in this way, however, they may be able to gain their ends without that risk. Moreover, if their bluff is called they will have lost very little.

It does not seem likely that the Nato surface fleets would be able to re-open the oil route under the circumstances described above. As far as numbers of surface ships go, the US and Soviet Navies are approximately

equal, apart from the American superiority in attack carriers. If there is any qualitative advantage on either side, it lies with the Soviets. Now, of the NATO nations (excluding the US), only Britain and France<sup>3a</sup> have fleets which could be sent to re-open the Cape route, but in view of the war scare, both nations are likely to keep the bulk of their ships at home. Most of the units of the US Navy are likely to be engaged in the Atlantic - protecting troop convoys from the attacks of the highly formidable Russian submarine force<sup>2</sup>. On the other hand, practically all the major surface units of the Soviet fleet would be available for aggressive action. It therefore seems most likely that the Soviet Navy could repulse any attempts to lift its blockade until such time as the new "Battle of the Atlantic" had been won by NATO.<sup>3b</sup>

(It should be noted that all the foregoing does not prove that the Soviets will impose a blockade at *the Cape*. The other possibilities are fully discussed in Appendix I).

However, recent technological developments have presented NATO with what the writer believes is a far more attractive option in respect of the situation described above. A new weapon system, the long range maritime patrol aircraft equipped with Anti-ship missiles, has radically changed the 'equation' of naval power. Although these aircraft operate at relatively low speeds (two out of the three types in production are turboprops), this is largely irrelevant to their major advantage over surface vessels: the fact that they can launch their missiles well out of range of even the superlative anti-aircraft armament of the latest Soviet cruisers. With combat radii of the order of 2 000 nautical miles, they are ideally suited to operate from NATO's only really reliable 'staging posts' along the Eastern half of the oil route; Iran, Diego Garcia, and South Africa. Add to this the fact that these aircraft also possess excellent anti-submarine (ASW) capabilities (which is not really surprising since all three<sup>4</sup> were originally designed as ASW aircraft!) and it appears that a really viable answer has been found. This is especially so in view of the fact that the Western half of the oil route can possess three 'staging posts' which are almost as convenient; Walvis Bay, Brazil and the Azores!

There are, however, two important qualifications that must be stressed. The appearance of a Soviet Carrier accompanying the blockading force would completely change the situation in favour of the Soviets. Even the rather unimpressive Yak 36 V/Stol attack aircraft now aboard the 'Kiev' are capable of shooting down an *Orion*, in the not unlikely event of the carrier's radar 'seeing' the ASW aircraft first. But while the obstacles to NATO success posed by one or two the the '*Kuril*' class carriers could possibly be overcome, there can be little doubt that the emergence of fully fledged aircraft carrier with a fighter of the calibre of the *MIG 23* aboard, would write 'finis' to Western attempts to protect the oil route using long range maritime patrol aircraft. The reason for this is that only the *F-14A Tomcat* could possibly reach Diego Garcia from Iran or South Africa - and it could do this only if it refueled twice during the flight.

Secondly, the loss of either Diego Garcia (to a Soviet amphibious assault) or South Africa would be fatal to the plan. It is just possible that this is one of the factors behind the sudden upsurge of American interest in Southern Africa.

*The Advantages of Soviet Action Along the Southern African Littoral*

If the reader refers to Appendix I he will find that all the other alterna-

tives suggested by the 'Cape sea route detractors' are by no means as attractive as they look at first glance. In contrast to this, Soviet action along the Southern African littoral offers certain significant advantages.

The political advantages are obvious. South Africa is friendless and the NATO nations would be slow to take action on her behalf. Naval manoeuvres ostensibly designed to influence South Africa's domestic policies could be turned into a blockading operation at the last moment.

Secondly the area around the Cape is a bottleneck for shipping bound for Europe. Admittedly the 'neck of the bottle' is fairly wide (the distance between the Cape and the pack-ice being about 1 500 miles), but it must be remembered that modern technology renders it unnecessary for the Russians to establish a cordon across the whole 'gap'. Assuming that the Soviets had the use of facilities in Angola or Mozambique they could employ *Moss*, *Badger*, or *Bear* aircraft to guide the striking units of the fleet to a any tanker attempting to slip through. *Moss*, which would probably be the most effective in this role, carries a radar with a range of at least 230 miles, and could also be used direct land or carrier based fighters. *Badger* and *Bear* are already operating from Conakry.

The sinking of a few tankers would probably be sufficient to bring about an abrupt cessation of the flow of oil around the Cape until the blockading force had been driven off. Few Western shipowners are going to risk their capital if the chances are more than even that their tankers will be sunk. The Russian blockading force will be big because it will probably have to cope with Western counter action - not because maintaining the blockade will be an arduous job.

Thirdly, the Russians would have a much better chance of fending off Western counter action at the Southern end of the Cape sea route than they would in the Arabian Sea. Apart from the South African Navy, there are no navies of any size worth mentioning in the area. Though South African naval forces<sup>5a</sup> will shortly receive important new equipment, our naval build-up cannot compare with that of Iran. (See Appendix II). The South African Air Force is much smaller than that of Iran, and is notably deficient in in-flight refueling capability.<sup>6</sup>

Finally, it should be noted that the Soviets have several potential bases in Southern Africa, such as Lobito, Maputo, and even Diego Suarez. Recent reports of Soviet military construction in Mozambique have given this factor added significance.

## PORTS AND NAVAL BASES

The question of Russia's interest in acquiring naval bases outside its national territory is intimately connected with that pertaining to the Cape Sea route, and has aroused scarcely less comment. More interesting, the acquisition of naval facilities at Lobito (which has an excellent deep water harbour) is seen by several experts, among them Professor Mordechai Abir, as one of the main considerations behind the recent Russian intervention in Angola. We proceed, then, to examine Africa's attractions and Russia's shortcomings in this respect.

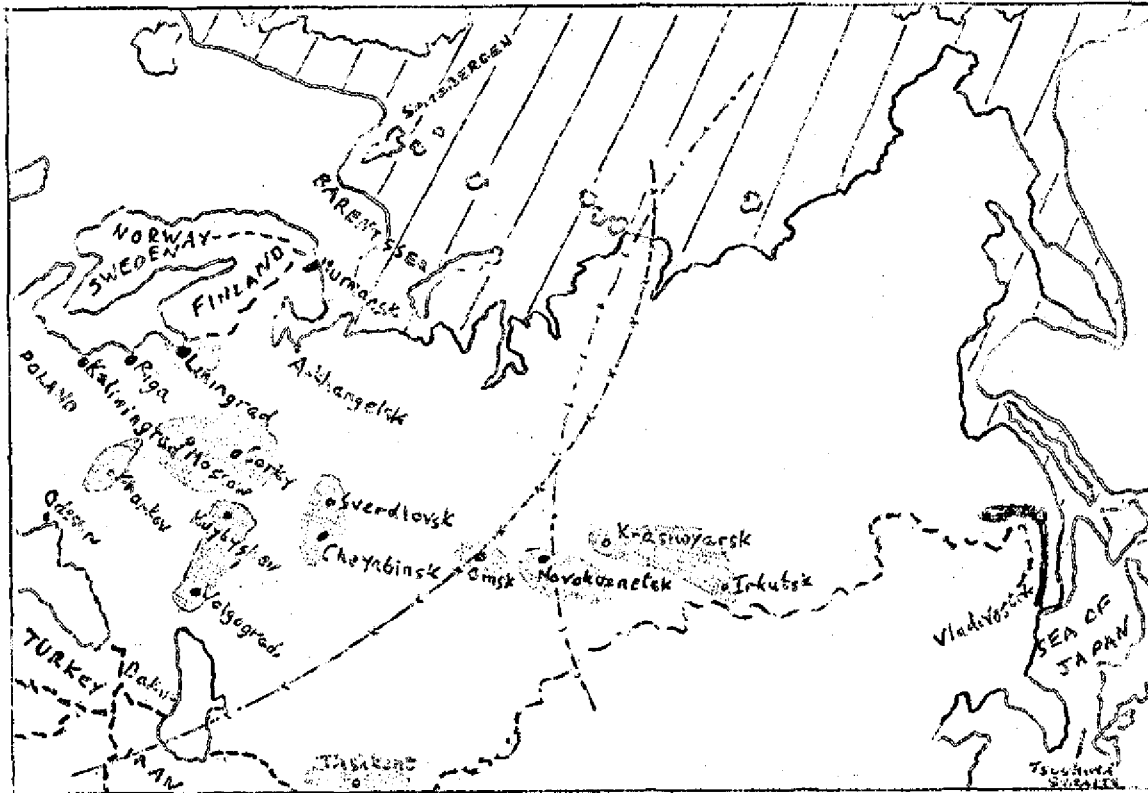
Russia is anything but a natural seapower. A glance at the map below will assure the reader that the USSR has only one port that has access to the open sea and is ice-free all the year round. This port is Murmansk. But Murmansk has its problems too. As can be seen from the map, there is only a fairly narrow channel, approximately 500 miles wide, between Murmansk and Spitzbergen. This channel is further narrowed by pack ice during winter. There is a danger that the Americans might be able to sow this channel with undersea submarine detection devices, not to mention the far more formidable "CAPTOR" Mine, and there is also the possibility that the fleet could be severely embarrassed by aircraft operating from Northern Norway. The action of the Luftwaffe against the Arctic convoys sailing to Murmansk during World War II immediately springs to mind.

The Russian port of Kaliningrad in the Baltic is open all the year. But the outlets from the Baltic are effectively blocked by Denmark, a member of NATO. Similarly, Turkey, another NATO member, blocks access to the Mediterranean from the Russian Black Sea ports. In the Pacific, Vladivostok can be kept open most of the year by icebreakers, but the Sea of Japan is virtually closed off from the open sea. If the Russian fleet were to try to break out, it might well suffer another disaster in the Tsushima Straits - this time at the hands of Japanese aircraft. But it must be noted that the Russians would experience no difficulty in getting to the open Pacific during the summer months.

It is obvious from all this that the operational capability of the Soviet Navy is severely hampered by geography. Such ports as exist in the USSR would only suffice if the Russians were bent on using their fleet in a purely defensive manner. Such a deployment seems unlikely in view of the size of the ever-growing Soviet naval arm. We must therefore expect that the modern Russians will follow the traditions of their ancestors and attempt to gain control of warm-water ports. However, since they cannot attain their historic targets of Istanbul and Port Arthur without precipitating a major war, it seems reasonable to expect that they will try their luck elsewhere. What precisely will the Russians be looking for?

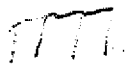
First, it is likely that they would want the host country to be politically reliable. Obviously, no Western country is likely to give the Russians a base, so the choice must fall on one of the countries of the Third World. But a chronic problem in the Third World is the instability of governments. Therefore, the Russians are likely to go for a country where they can stabilize the local political scene for their own purposes. The country should preferably be poor, since in this case Russian economic aid would have the greatest impact and it would be comparatively easy for her to become the country's major trading partner. Secondly, the country should be small and thinly populated so that in the event of some sort of coup d'etat the Russians would (a) find it easy to protect their



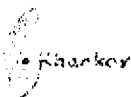


MAP 1. THE SOVIET UNION

Key



Area normally covered by pack ice in winter



Main Soviet industrial areas



Operational arc of a Polaris A-3/Poseidon ballistic missile fired from Scottish coast area (range 2 500 nautical miles)

Operational arc of the same missile fired from Tokyo Bay

base and (b) find it easy to suppress the revolt with the aid of the pro-Russian elements. Thirdly, the neighbours of the country should not themselves be rich or populous. The reason for this being that a power of medium rank would probably take it as an affront if the USSR impinged on what was previously considered her sphere of influence. Such a country could provide a base for attacks by dissident elements of the host country's population. The fourth requirement is that the country should be in a strategically important position for the Russians.

So far, both Russian bases have been set up in Africa, for the reason that many countries in Africa conform to the requirements listed above. For example, Guinea and Somalia are small, underpopulated underdeveloped and very dependent on Russian aid as a result. In addition, Somalia is overwhelmingly dependent on Soviet military aid for the realization of its territorial ambitions. The table below illustrates the position.

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TABLE III : GUINEA AND SOMALIA<sup>10</sup>

	Guinea	Somalia
Population (in millions)	4,3	3,15
Estimated GNP (million dollars)	410 (1972)	300 (1972)
Soviet Economic Aid over the last 5 years (million dollars)	94	32
Soviet Military Aid over the last 5 years (million dollars)	39	132

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It is also worth noting that Russia has become a major trading partner for Guinea. In 1960, 42% of Guinea's imports came from Communist states, and 22,9% of her exports went to these states.

The strategic requirement is also fulfilled in that Guinea provides easy access to the middle and north Atlantic, and Somalia commands the Red Sea and is within easy range of the Persian Gulf. Finally, Southern Africa was a power vacuum, with hitherto only the weakest of the "big three", China, showing any real interest in the sub-continent. (In recent years, with the construction of the Tanzam railway,<sup>12</sup> Chinese aid to Sub-Saharan Africa has exceeded Soviet and U.S. aid combined<sup>12</sup>.) Though the European powers are to some extent dependent on imports of African raw materials, they, like China, lack navies strong enough to intervene effectively against the Soviets in Africa.

It may be noted that the situation in the other regions of the world is somewhat different. Western Europe and North America are areas where the establishment of a Russian base must be regarded as highly unlikely.<sup>13</sup> South Asia is the location of two major powers; China and India. A Soviet naval base in North Korea or Indochina is certain to provoke a strong reaction from the PRC, and would undoubtedly arouse Japanese concern. Though India has a treaty of friendship with the USSR, she has consistently denied offering the Russians base facilities<sup>14</sup> and has supported proposals that the Indian Ocean area be declared a "zone of peace". Russian naval facilities in South America<sup>15</sup> or the islands in the Pacific have the drawback that they would bring home the reality of the Russian threat to the American public - just as the

Cuban missile crisis did. There can be no doubt that the Russians are well aware of the economic power of the United States, as well as her lead in technology. The last thing they want is a renewed arms race at this juncture<sup>16</sup>. The Middle East, of course, has been the target of a great deal of Soviet effort, but in view of the dramatically increased oil revenues the states in that area are receiving, it appears that where there is reliance on the Soviet Union, it is very far from total.

In view of the foregoing, in addition to the fact that Angola is conveniently situated near one of the nodal points of the Cape oil route, it seems probable that one of the objects of the Russian intervention was to establish a facility for her fleet.

#### *AFRICA AS AN ARENA FOR DEMONSTRATIONS OF STRENGTH*

One way of looking at the Soviet intervention in Angola is to see it as an operation precedent to securing a naval base in the South Atlantic. Another, perhaps better, way is to see it as the first successful Soviet demonstration of strength outside Eurasia<sup>17</sup>.

As an exercise in overseas troop deployment, and as an exhibition of naval capability, the Soviet actions compare not unfavourably with the US landings in Lebanon in July 1957. The following facts should prove illuminating:

The equivalent of almost 1½ Cuban infantry divisions were shipped or flown into Angola. (In the latter case Soviet Air Force *Antonov An-12* and *An-22* transport aircraft were used.) 17 *MIG 21* fighter-bombers, 110 medium and 68 light tanks, 218 armoured personnel carriers, 877 reconnaissance vehicles, 100 *Bm 21* rocket launchers, 2 800 anti-tank weapons, 1 000 mortars, 290 heavy belt fed machine guns and 30 000 rifles were, inter alia, handed over to the communist forces, at a cost estimated at between 100 and 200 million dollars<sup>18</sup>.

Soviet naval manoeuvres were equally impressive. In mid-January, a 3 885 ton *Kotlin* Class guided missile cruiser put into the port of Conakry, in Guinea. At the same time, a 7 500 ton *Kresta II* put out to sea from Conakry. Two other Soviet ships - an *Alligator* Class tank landing ship with Soviet Marines aboard - and an oiler, were observed moving out of the Gulf of Guinea. The landing ship had been cruising off the West African coast for several weeks. In the same area, four Soviet tankers were noticed, while a 19 000 ton *Sverdlov* command and control cruiser moved across the Eastern Mediterranean, and later joined up with a 5 200 ton *Kashin* Class guided missile destroyer which was operating South of Portugal. It can readily be seen that the vessels used constituted some of the most modern elements of the Soviet fleet<sup>19</sup>.

What would the object of such a demonstration be? Presumably to show that the USSR (unlike the US, at present) can protect its friends and frustrate its enemies in any part of the world. A concurrent aim would be to test the nature of Western reactions.

If one accepts that these considerations at least partly influenced the decision to assist the MPLA, then it appears that one must also acknowledge that the operation was a virtually unqualified success. African reaction was generally favourable (with the exceptions of Zambia and Zaire, whose governments do not appear to be too stable at the moment), with two of the most influential non-aligned states, Nigeria and Tanzania, warmly supporting the MPLA. No African state directly recognized the pro-Western 'liberation movements'.

In comparison with the reaction to the Cuban missile crisis, the Western response, in other than verbal form, was virtually nil. The former US Secretary of Defence, Mr James Schlesinger, noted that the Cuban operation 'indicated a decline in awe of American strength', and added that even in Western Europe US allies 'are prepared to question the American will and to doubt whether a divided America is capable of effective action'.<sup>20</sup> This, he said, in itself, 'reflects a major change in the power balance.' At the same time, the Senate Majority Leader, Mr Mike Mansfield, characterized Dr Kissinger's threats of action against Cuba as useless rhetoric<sup>20</sup>, while the West German Foreign Minister, Mr Hans-Dietrich Genscher expressed disappointment with the way the United States had reacted to the Communist action in Angola<sup>21</sup>. While the House of Representatives Armed Services Committee voted to increase the Administration's request for Defence funding, the Senate Armed Services Committee rejected President Ford's requests for about R442 million to build an additional 4 FFG-7 GM frigates and R170 million for research into STOL carrier-borne aircraft.<sup>22</sup> In spite of promises to evacuate, between 15 000 to 16 000 Cuban troops remain in Angola.<sup>23</sup>

As the Angola operation appears to have confirmed, Africa is an ideal arena for demonstrations of strength of this type, for much the same reasons as it is an ideal area for establishing Russian naval bases.

South Africa, however, is very much less than ideal, for the following reasons. Firstly, as I will demonstrate - (see Part III below), nothing short of direct Russian intervention with Red Army units would have a reasonably good chance of successfully invading South Africa, and there can be little doubt that a conquest of South Africa in which the chief actors were Russian troops would, at least in the medium term, cause a steep rise in European (and perhaps even U.S.) defence budgets and spell a temporary end to 'détente'. Now, it seems incontestable that 'détente', in its present one sided form, is of much greater value to the Soviet Union than South African ports, or mineral wealth, could ever be.

It therefore seems reasonable to conclude that, in the medium term, direct Russian aggression against (and hence a successful invasion of) South Africa would prove counter-productive.

### Minerals

One of the views most frequently expressed by South Africans is that "they want our mineral resources". This view fits in admirably with the popular conception of the Soviet Union as a sort of international robber baron, and has enough superficial plausibility to make it widely accepted.<sup>24</sup>

From the military-strategic point of view, the following minerals are of major importance: coal for general production; petroleum for motive power; copper and iron for weapon production and industry in general; nickel for steel-making and ammunition; lead for ammunition; mercury for detonators; aluminium and titanium for aircraft; platinum for chemical apparatus; antimony, manganese and chrome for steel-making and metallurgy in general; asbestos for munitions and machinery; mica as an insulator; sulphur for explosives. To this list I have added tin and zinc because of their industrial importance; gold because of its obvious monetary value, and uranium for its nuclear significance.

South Africa is well endowed with most of these minerals. However, the Soviet Union is even better endowed in practically every case.<sup>24a</sup> Paradoxically, Russia's only shortage is of bauxite, a mineral which South Africa does not as yet produce. The table below shows quite clearly that the USSR does not need our minerals, and hence that it will certainly not invade the country for that reason.

*PRODUCTION OF MAJOR STRATEGIC MINERALS, <sup>24b</sup> 1972*  
(Thousand short tons)

	USSR	South Africa	World	S A production as a % of world production
Antimony	7 700	16 062	75 035	21,4
Asbestos	1 345	356	4 083	8,7
Beauxite +	4 600	-	64 795	-
Chromite	2 040	1 635	6 841	23,9
Coal (Bituminous)	466 000	62 946	1 831 447	3,4
Copper	733	178	7 313	2,4
Gold +++	6 900	32 164	44 711	65
Iron Ore +	204 715	11 146	756 826	1,5
Lead	510	0,2	3 725	negligible
Manganese Ore	8 598	3 606	22 832	15
Mercury ++	50 000	-	279 508	-
Mica (thousand pounds)	N.A.	9 363	440 016	2,1
Nickel	140	12,8	698	1,8
Crude Oil	2 895	-	18 598	-
(million barrels				39
Platinum group +++	2 350	1 800	4 613	(79% of free world output)
Sulphur + (elemental)	500	30	25 795	negligible
Tin	28	2,125	236,2	0,8
Titanium	N.A.	0,47	356	negligible
Uranium Oxide	N.A.	5,59	27,2	20,5
Zinc	717	13,9	5 615	negligible

+ Thousand long tons

++ Flasks

+++ Thousand Troy ounces

There is, however, a more sophisticated version of the 'minerals' argument. "Russia wants to deprive the West of the raw materials on which she is dependent, and South Africa is a major supplier of these."<sup>25</sup> But precisely how dependent is the West on mineral supplies from South Africa? And how serious would the damage to NATO's military and industrial capacity be if these supplies were to be cut off? In examining these questions the table below should prove helpful.

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ALTERNATIVE SUPPLIERS OF MAJOR STRATEGIC MINERALS  
(Brackets indicate a relatively low output compared to that of South Africa)

Antimony	Mexico, Bolivia
Asbestos	Canada
Chromite	(Philippines, Turkey)
Coal	United States
Copper <sup>26</sup>	Chile, Peru, Zambia, Zaire
Gold	-
Iron <sup>26</sup>	Canada, Brazil
Manganese	Brazil, Gabon, India, Australia
Platinum	(Canada)
Uranium <sup>26</sup>	Australia, Canada

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The table indicates that the only real problems the West would encounter in replacing supplies from South Africa would be in respect of gold, platinum, and manganese. Undoubtedly the cessation of supplies of these minerals to the West would hurt economically. However, in a war situation, it would appear that the only real problem would be in securing - (for war production only) - an adequate supply of chromite, since the two major alternative suppliers are at the end of long and vulnerable sea lanes. However, this consideration applies equally to South Africa.

In any event, one cannot help reflecting that the Soviet autocracy could produce a far bigger effect with far less trouble by occupying the Gulf states.<sup>26a</sup> Even more important, is it likely that in the event of her becoming anything less than a Russian colony South Africa (or Azania) is going to pass up vital export earnings simply to please the Soviets?<sup>26b</sup>

Agricultural Land

What else does Africa have that Russia does not have? One answer might be 'good agricultural land that has not yet been turned to the plough'. With the Russian grain deficits very much in the news, one might expect this argument to become widely popular. There is no doubt that the idea has its cogency. Europe cannot feed itself, and nor can South Asia. Africa is nearer to the Soviet Union than the major wheat producing regions - North America and Australia - and would certainly be easier to conquer than the former. Although Africa is at present a grain importing region, she has a lot of potentially arable land, as the table below indicates.

TABLE II : LAND RESOURCES IN SELECTED AREAS  
(In thousands of hectares)

Region	Ultimate maximum arable land	Land in the cultivation cycle	Land harvested per year
North America	392 000	220 000	111 000
Eastern Europe including USSR	382 000	280 000	193 000
Sub-Saharan Africa excluding S.A.	423 000	167 000	73 000
Australasia, South Africa	150 000	58 000	19 000

SOURCE: *'Mankind at the turning point'*; Mesarovic and Pestel p168.

But it must be remembered that this land poses considerable problems to those who would bring it into cultivation - much of it is tropical rain forest. It is also true that Africa, although at present sparsely populated, has a population that is growing fast, and that unless drastic birth control methods are applied, the country could find itself a food importer even if the extra land were brought into production.

It is thus doubtful whether the Soviets would find much use for Africa (and even more so for Southern Africa) in this respect, even if they could conquer it in its entirety.

#### Southern Africa and Chinese Influence

Undoubtedly a subsidiary aim of the Soviets is to minimize this influence. The Chinese have been more active in the aid field in Black Africa than the USSR, and unlike the USSR they have gained a reputation for altruism - which is not entirely unfounded.<sup>27</sup> In particular the Chinese have great influence in Tanzania, and have supplied naval vessels to that country as well as to Pakistan and Sri Lanka.<sup>28</sup> The PRC is, of course, opposed to the presence of the 'big two' in the Indian Ocean, and is undergoing a modest naval expansion program.<sup>29</sup>

The successful application of force in Angola and subsequently elsewhere in Africa might make the Africans more hesitant about accepting aid from one who obviously cannot protect its friends as yet. It would also clearly establish that China is not the most influential of the great powers in Africa.

A NOTE ON SOVIET AID TO SOUTHERN AFRICAN GUERRILLA MOVEMENTS

It may be argued that the foregoing analysis does not explain why the Soviets have consistently given military and other assistance to Southern African guerilla movements. Insurgent movements, in the short term at least, can offer but little return for the continuing Soviet investment and can therefore offer small attraction to the exponent of Realpolitik, which I have assumed the Soviet Union to have become.

However, it is fairly easy to explain aid to terrorists in terms of Realpolitik. Fruitful diplomacy between South Africa and the Soviet Union has been practically impossible from the start. The Soviet Union can expect no co-operation of any sort from the present South African government. It therefore seems both natural and logical that the Soviets should make some investment (which has not been particularly large) in bringing into being a government in this country that is more favourably inclined to their interests. The guerilla menace causes nightmares for the incumbent, hostile, government with whom dealings are impossible, at minimal cost to the Russians. Aid to the guerillas can therefore be seen as the purest form of diplomacy by other means (in the sense that the costs are not too disparate).

It is not denied (nor is it necessary to do so for the purposes of this paper) that some of the aid may be inspired by the distinctly Marxist leanings of most of the 'liberation movements'. It is merely queried whether the said leanings are the cause of the aid, or the result of it.<sup>30</sup>

II. INDICATIONS OF A CHANGE IN SOVIET NAVAL POLICY

THE EXPANSION OF THE SOVIET NAVY

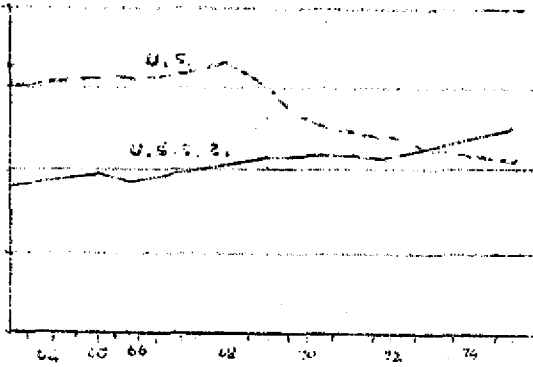
"The Soviet Navy has been converted in the full sense into an offensive type of long range force ... which could exercise a decisive influence on the course of armed struggle in theatres of military operations of vast extent ... and which is also able to support state interests at sea in peacetime." These words were spoken on the 28th July 1967 by Admiral of the Fleet S G Gorshkov.<sup>31</sup> The following year the first Russian squadron appeared in the Indian Ocean.

When these words were uttered, however, the capability actually possessed by the Soviet Navy would better be described as 'defensive-offensive'. The primary offensive role was still allotted to the Army. The task of the Navy was simply to ensure that it was left to 'chew up' the NATO forces in Europe in peace.

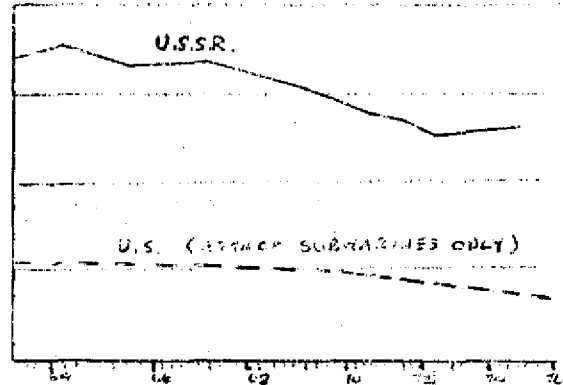
Almost a decade has passed since 1967. During this period there have been increasing signs that the Soviet Navy is becoming more offensively orientated. With the commissioning of the first *Kuril Class* carriers,<sup>32</sup> the USSR is undoubtedly acquiring some kind of intervention capability, though it is still far behind the United States in this respect. The Russian *Kara* and *Kresta Class* cruisers are clearly the most formidable ships of their type in the world.<sup>33</sup> The graphs overleaf illustrate the position.



Major Operational Combat Surface Ships



Cruise Missile and Attack Submarines



Another significant factor has been the revitalization of the Soviet naval infantry, which now comprises some 17 000 men.<sup>34</sup> "With the new carriers capable of providing these marines with sea based tactical air support, and the sizable gun-cruiser capability still in the Soviet Navy, plus recent amphibious exercises, an entirely new and important Soviet capability is emerging."<sup>34a</sup> Amphibious exercises were a particularly interesting feature of Exercise OKEAN II, which we will deal with later.

What Do the Soviets Need Such a Large Navy For?

This is undoubtedly the most worrying feature of the Soviet naval expansion. Unlike the U.S., Japan and the nations of Western Europe, the USSR does not have any vital interests on the high seas. She is virtually self sufficient in raw materials,<sup>34b</sup> and could undoubtedly do without imports of Western technology (at the cost of slowing of her growth rate). Her merchant fleet, though large, is there primarily to earn foreign exchange for the motherland. On the other hand it is true that the USSR is dependent on the sea for a large part of its food supplies - though it could, at the cost of a general lowering of the standard of living, do without these as well. The oceans are also becoming of increasing importance as a source of minerals, but their potential will not really start to be realized for some time.

It is therefore not without reason that several Western analysts, among them John Moore,<sup>35</sup> editor of *Jane's Fighting Ships* see the purpose of the Soviet Navy as at least partly aggressive. In this regard, the newer Russian cruisers, the carriers, and the naval infantry are especially significant.

Changes in Soviet Naval Doctrine

There have also been certain indications from the Russians themselves that their view of the role of the navy is changing. Undoubtedly the most authoritative of these 'windows' to Russian thought is Admiral Gorshkov's *Navies in War and Peace* which was serialized in *Morskoi Sbornik*, the journal of the Russian Navy, in 1972.<sup>36</sup> Although this work adopts primarily an economic argument for the expansion of the navy, and contains the usual reference to 'the continued aggression of the Imperialists', there are at least some indications that a new doctrine is being enunciated which is more assertive than before. Some of the most interesting features of the work are summarized below.

(a) there is Gorshkov's well-known plea for the construction of a 'balanced force' - it is becoming increasingly clear that he wants more surface capability.

(b) ominous for South Africa is his marked attention to using the navy in peacetime to deter interventions against the 'national liberation movement', which seems to foreshadow the Soviet involvement in Angola. This must be balanced against the fact that Gorshkov denies that he would ever practise 'gunboat diplomacy'.

(c) more important for Europe and the Indian Ocean area is the fact that Gorshkov defines one of the missions of the Soviet Navy as 'gaining temporary command of the sea in the main directions'.

(d) there is a new emphasis on attaining the political goals of an armed struggle, rather than defeating the armed forces of the enemy. This may mean that the Admiral believes that naval shows of force or limited attacks may achieve political objectives without destroying the enemy's principal forces.

(e) he argues strongly that the USSR cannot afford to limit the scope and capabilities of her navy if she is to act as a great power.

#### *Changes in the Pattern of Soviet Activity and Bases Outside the USSR*

One might expect the activities of the Soviet fleet to reflect the changes in naval thinking, and this is indeed the case. Exercise OKEAN II<sup>37</sup> in 1974 was the most interesting exposition of Soviet power as yet. The exercise involved 220 ships, with groups in the north Atlantic, the Eastern Mediterranean, the Black Sea, the Arabian Sea and the Western Pacific. Support by naval strike and reconnaissance aircraft took place in the north Atlantic and Pacific from bases in the USSR, in the Central Atlantic by BEAR aircraft based in Guinea and Cuba, and in the Indian Ocean by planes based in Somalia and the USSR. Two of the most interesting features were the simulated attacks on convoys in the North Atlantic and the appearance of forces in the Arabian Sea.

In the Indian Ocean area, Russian activity has shown a steady increase - from about 2 000 ship-days in 1968<sup>38</sup> to about 8 000 in 1974. (One ship operating for one day constitutes a ship-day.) Since the Indo-Pakistani war of 1971 the number of ships deployed in the Indian Ocean and their time in port has doubled. (See above - p8-9 - for a description of Soviet Naval Activity in support of the Angola Operation).

One of the main indicators of the shift in Soviet strategy has been the construction of bases outside the USSR. There can be no doubt now that a Russian airbase at Conakry exists.<sup>39</sup> Patrol craft and a dry dock were delivered to Guinea in 1974, and Soviet vessels call there quite regularly<sup>40</sup>. A glance at the globe will show that Guinea is a long way from the main sea lanes between Europe and America (the United States). This may mean that the Russians feel that they are strong enough to block traffic in the central Atlantic as well.

The other naval base is, of course, Berbera in Somalia. Here the Russians have recently included a modern floating dock and a depot to their other facilities which include a barracks, a POL storage 'farm', missile storage bunkers, a major communications station, and a large new airfield<sup>41</sup>. The port facilities have been developed to take vessels up to 12 000 tons, and consequently Berbera can accommodate anything the Soviets have except the *Kuril Class* carriers<sup>42</sup>, the *Moscow Class ASW* helicopter carriers,<sup>43</sup> and the old *Sverdlov Class* cruisers<sup>44</sup>. Berbera is now regarded as being the most important of the Soviet fleet facilities overseas. It can handle major repairs such as engine changes, and is apparently under total Russian control. However, it must be remembered that it is not so difficult to justify this base in defensive terms, since the Arabian Sea is one of the best places for launching *Polaris A-3* or *Poseidon* missiles<sup>45</sup> (see Map 1) against the USSR. The Omsk, Novokuznetsk and Tashkent industrial areas can be hit only from the eastern Mediterranean, the Indian Ocean (either from the Arabian Sea or the Bay of Bengal) or areas near the Russian coast. The eastern Mediterranean is likely to be very dangerous for nuclear submarines because of the nearness of the Soviet bases in the Black Sea and the powerful Soviet squadron operating there. It is unnecessary to elaborate on the dangers of operating near the Soviet coast.

On the other hand, the vast majority of industrial targets in the USSR can be hit from the North Sea, and those in the Soviet far east can be accounted for by missiles fired from as far away as Tokyo Bay. It would therefore be a mistake to believe that the Western powers would have to have a SSBN in the Indian Ocean in order to wreak unacceptable damage on the USSR in the event of a nuclear war. (See Map 1)

There have also been indications that the purpose of the base at Berbera extends beyond forcing the western SSBN's out of range of the Soviet industrial sites<sup>45a</sup>. One of these was the appearance of a *Charlie Class* missile firing submarine in the Indian Ocean,<sup>46</sup> and another the photographic evidence of ship-to-ship (*SSM*)<sup>47</sup> missile storing facilities at Berbera. Now, cruise missile firing submarines and *SSM*'s are of decidedly limited use against *Polaris* missile submarines. It might be argued that the Soviets are afraid of nuclear strikes from the Indian Ocean by carrier-borne aircraft. But of the American carrier based aircraft, only the *Grumman A-6 Intruder* has the range to get to one of the main Soviet industrial areas (Tashkent).<sup>48</sup> Even if it carried only one nuclear bomb and full external fuel, this aircraft, which is subsonic, would only be able to reach Tashkent if it flew the whole way at high altitude.<sup>49</sup> In view of the extremely efficient Soviet interceptor force,<sup>50</sup> to say nothing of their world lead in surface to air missiles, this would be little short of suicidal. Consequently, the threat of nuclear strike from aircraft carriers in the Indian Ocean is not very credible. This in turn leads to the conclusion that at least one of the purposes of the base at Berbera is to facilitate the domination of the Suez Canal and the Indian Ocean by Soviet forces. This conclusion is reinforced by the fact that until recently, the Soviets had important port of call facilities at Alexandria.

Apart from the bases above, the Soviets have access facilities to the following ports in Africa: Point Noire in the Democratic Republic of the Congo; Dar-es-Salaam in Tanzania and Chisimiao and Mogadishu in Somalia.<sup>51</sup>

### III. THE THREAT TO SOUTH AFRICA

We have seen that there could be a number of reasons for the Soviet presence in Africa and the Indian Ocean. These are:

- (a) interdiction of the Cape sea route;
- (b) the establishment of naval bases outside the USSR;
- (c) demonstrations of strength; or
- (d) deterring intervention against the 'national liberation movement';
- (e) extinguishing Chinese influence in Africa as far as possible;
- (f) counteracting the *Polaris/Poseidon* missile threat.

It is clear that only the first four need concern us, since the other two portend no threat to South Africa. We proceed then, to examine the threat to South Africa in the context of these four scenarios.

#### *Interdiction of the Cape Sea Route*

If the Russians wanted to do this, they would basically have four policy alternatives.

- (a) they could try to maintain the blockade out of range of any aircraft but the long range maritime patrol type;
- (b) the Soviet blockading fleet could provide its own air cover;
- (c) the South African Navy and Air Force, together with any NATO contribution, could be neutralised by:
  - (i) pre-emptive air strikes from bases to the north of the country; or
  - (ii) invasion of South Africa proper.

It is certainly possible that the Soviet blockading force would keep its ships out of range of South African and Iranian fighters and fighter-bombers. This means that the Soviets would operate either off the Tanzanian or the Northern Angolan coasts. However, as we have noted, in the absence of air cover, the Russians would have to rely on the anti-aircraft armament<sup>55</sup> and ECM fit of their ships either to shoot down the anti-ship missiles or direct them off course. They would not be able to strike back at the aircraft launching the missiles. Under these circumstances it seems likely that the Russian squadron would gradually be wiped out, especially since it would eventually run out of 'ammunition'. The use of the ASM launching aircraft could be combined with naval action<sup>53</sup>. It should also be noted that intervention by a NATO carrier task force would be made much easier if the Russian blockading fleet was in the Atlantic.

Probably the most sensible course for the Soviets would be to carry their own air cover with them. The new *Kuril* class carriers are quite large enough to carry high performance fixed wing aircraft, though extensive alterations would undoubtedly be required.<sup>54</sup> Two of these carriers, or about four *Kurils* carrying an advanced *Yak 36*, would provide more than adequate protection from Harpoon or Exocet armed maritime patrol aircraft,

with the result that the blockading fleet would be able to operate off the Tanzanian coast with impunity. This mode of action has, moreover, two other major advantages: it opens up the possibility of a pre-emptive strike by the Soviets against our coastal airbases, and it is highly cost effective. (The Soviets could probably build two advanced *MIG 23* equipped *Kurils* for well under \$1 000 million). 3-6 carriers, with approximately 35 aircraft each, would make the South Africans think twice about attacking. It is highly doubtful whether, mindful of the threat to the north, South Africa will be prepared to sacrifice her own air force to sink the blockading force - which is what she might have to do to achieve success in the face of the heavy *SAM* armament<sup>55</sup> of the Soviet ships and the aircraft defending them. This, of course, also opens up the possibility of a pre-emptive strike by the Soviets against our coastal airbases. The South African Navy might also be crippled from the air.

The third course is less attractive, though it has some advantages. First, it would require the establishment of airbases in Mozambique, or, conceivably, the Malagasy Republic. Secondly, it would require the use of very high performance aircraft if it were not to risk costly defeat through lack of surprise. (By this I mean that the aircraft would have to be capable of flying long distances at low level<sup>56</sup> - it is very unlikely that a raid from Southern Mozambique would take us by surprise, since the construction of the airbase in Mozambique would have been noted.) If the preparation for such a move were discovered, South African counter-action would follow, and even NATO might be alarmed. On the other hand there is the advantage that even if only a part of the SAAF was destroyed in the initial strike, most of the rest of it would be drawn into an air war in the north, leaving the Soviet fleet in the south to operate with minimal interference.

In the light of the objective to be achieved, the fourth alternative would certainly not be very cost-effective, so we need not consider it here. (The cost of such an effort could not be under \$7 000 million).

#### *A Russian Base in South Africa?*

Undoubtedly such a base would be very useful to the Russians. Besides its strategic position, South Africa also has the advantage of having a sound industrial base which would undoubtedly facilitate the maintenance of Soviet equipment. Militarily, however, South Africa is no pushover, and it is doubtful whether Russia would consider the overthrow of the present government worth her while unless a naval base here was absolutely essential for some major stroke of policy - such as the "Findlandisation" of Western Europe. The fact that bases in Angola and Mozambique would be almost as useful as one in South Africa, must also militate against this possibility.

#### *Demonstrations of Strength*

We have already noted that an invasion of South Africa by Russian troops is likely to prove counter-productive at the moment. What other possibilities are there?

(a) the Russians could intervene on the Egyptian/Syrian model and provide massive arms supplies to South Africa's neighbours as well as to such groups as the ANC and the PAC.

(b) a mix of Cuban and African units could be employed.<sup>57</sup>

The first alternative would have important political advantages; The invading force would be able to pose as a black nationalist liberation army, and this would presumably deter the NATO nations from supporting South Africa. The political support of the Third World would be forthcoming and the operation would be a useful preliminary to any future blockade of the Cape route.

Nevertheless, there are serious drawbacks. The preparation of the African states for war would inevitably be a long-term process and could hardly escape the vigilance of South Africa. An arms race in Southern Africa would ensue, which would enhance our own military capability. (With her superior industrial base, there is no reason why South Africa should not surpass Israel's military preparedness<sup>58</sup>.) This would in turn mean that the Russians would have to become even more heavily involved.

Secondly, there are serious doubts as to the ability (and the willingness) of the states bordering on South Africa to absorb the sort of aid that has made Egypt into a major military power. Without exception these states are thinly populated, industrially backward, and completely lacking in the necessary technical and educational skills.<sup>59</sup> They do not have the infrastructure to wage the sort of war of which the Arabs are capable. Unlike the Arabs, they have no means of paying for the arms that the Soviets might supply.

Thirdly, the NATO nations would be given time to ponder the consequences of the Soviet involvement and might even resume arms sales to South Africa.

Given the additional fact that the Soviets could not be certain that their protégés would emerge victorious, they would probably decide that the 'game was not worth the candle'.

In the light of the Angolan situation, the second alternative merits very serious consideration.<sup>+</sup> The first thing that must be realized here is that the South Africans are a vastly different proposition from the FNLA and UNITA. Far from 16 000 Cubans gaining any sort of victory, they would certainly be wiped out. The reason is not far to seek. There are 790 000<sup>60</sup> white men of military age in this country - not to mention loyalist elements of the other population groups. This is why any invasion that is in the realm of the possible would have to feature black infantry, with Cubans operating the tanks, aircraft, artillery, etc. However, this would entail utilizing every pilot in the Cuban air force, since that arm only operates about 200<sup>61</sup> combat aircraft, more than half of which are out of date. A similar situation would probably prevail with respect to the artillery and armour. The Soviets may have a lot of influence over Fidel Castro, but I doubt that this extends so far that they will be able to persuade him to denude his country of defenders in order to fight a war in which he really has no vital interest.

It is also true that any invasion of South Africa would entail extensive preparation of the country from which it was to be launched. Roads, railways and airbases would have to be constructed and made defensible against air attack. This in turn would mean that South Africa would arm at a rapid rate and that any element of strategic surprise would be out of the question.

Thirdly, any African leader, however Marxist, is going to have qualms about letting, say, 50 000 Cubans into his territory, not to mention the African contingents from other countries. (It must be stressed here that an African leader who is in firm control of his country is in a very different position from an ex-guerilla movement that is struggling against an adversary of almost equal strength.) Such a leader would also have to consider the possibility that *his* country might become the battleground if the course of the struggle turns against the invading force. One can also foresee problems arising as to who is to have supreme command of the allied army.

We can therefore conclude that in view of the fact that such a foray would have little more than an even chance of success at best, it is highly improbable in the foreseeable future.

#### *Detering Intervention Against the 'National Liberation Movement'*

This 'scenario' appears only to have relevance in the long term. Presumably, the West would only bestir itself to intervene against the 'national liberation movement' in South Africa if the white South Africans were losing the war, if then.

It is also possible that in the event of substantial terrorist successes, the Soviets may decide to make things difficult for South Africa in a limited way. For instance, they might prevent ships carrying arms from entering South African ports or even institute a sort of 'Beira patrol', preventing the importation of strategic commodities. This, however, would have implications concerning the nature of Soviet seapower that the West would find difficult to ignore.

#### *CONCLUSION*

It is worth restating that, for the Soviets, South Africa is strictly a means to an end; that end being Western Europe.<sup>62</sup> The population, wealth, technological expertise, strategic position and excellent warm water ports of Western Europe, present an attraction for the Soviets that would be impossible to resist, if it was not for the existence of nuclear weapons.

It is my belief that Western Europe is still the ultimate aim of the USSR. There is little doubt that domination of this continent would give it the world supremacy that it so ardently desires.<sup>62</sup>

The Soviet perception of European realities therefore dictates their policy to the rest of the world to a large extent. If they feel that a demonstration of strength in Southern Africa will serve to intimidate the

the European powers, then, there is every reason to think that they will go ahead with it. If, on the other hand, (which is more likely,) it inspires the European powers to move closer to the United States and strengthen their common defence, then there would be no reason for the Soviets to expend the effort necessary to defeat us beyond possibly gaining the goodwill of a few radical African governments.

The safety of South Africa thus depends on the internal developments in Europe and on the assertiveness of the United States. The more leftist and pacifist the European States become, and the more isolationist the US becomes, the greater will be the probability of Soviet intervention in South Africa producing the desired effect without prejudicing the paramount interest of the Soviets in Europe. It seems fairly certain that at present the decline of the US and Europe has not gone far enough for a policy stroke such as an invasion of South Africa to be worthwhile.

It must be made clear, however, that the reasoning above affords no justification for assuming that South Africa's military and economic strength is irrelevant to the policy of the USSR towards us. By increasing her military preparedness, South Africa can steadily raise the probable cost of an invasion of the Republic by the Soviets to the point where the Russians feel that the objective is not worth the cost involved plus the risk of failure.



APPENDIX I

THE ALTERNATIVES TO THE CAPE BLOCKADE : A DETAILED ANALYSIS

A. Blockade of the European Ports

In regard to this possibility, I have already indicated that the harbours of Western Europe *will* be blockaded to some extent - but by submarines. Using their surface ships to disrupt the control of the Atlantic by the Americans is not something that the Russians will find profitable to do at the moment. The fact is that the American carrier will give the NATO forces a tremendous range advantage as well as superior firepower and flexibility. For example, the Russian SSM with the longest range can hit targets 460 nm. away,<sup>63</sup> while the carrier-borne American A-6 has a maximum combat radius of 1 000 nautical miles.<sup>64</sup>

Moreover, the submarine forces of the Soviets provide them with a sea-denial capability that is second to none. They could inflict tremendous damage on the Atlantic convoys with their cruise missiles,<sup>65</sup> and might even be able to stop significant numbers of American troops from landing in Europe.

It therefore seems apparent that the Russians will not waste their surface forces where they can be countered. Rather, they will be used to gain control of the seas where the Western navies are too weak to stop them. One such area is the Indian Ocean.

B. Invasion of the Gulf States

The probability of such an attempt by Russia is low. Any invasion would have to pass through Iran and probably Iraq, both of which are increasingly well armed, the latter by the Soviets themselves.

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TABLE IV : ARMIES AND AIR FORCES OF IRAN AND IRAQ AND ESTIMATE OF SOVIET FORCES NECESSARY TO ENSURE SUCCESS<sup>66</sup>

	Iran	Iraq	USSR	Proportion of Soviet forces in the West
Troops (000)	282 + 300 reserves	112	600	.69
Battle Tanks	1 780 <sup>68</sup>	1 390	5 000	1/5
Combat Aircraft	200 + over 300 <sup>67</sup> on order	200	800	1/6

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There is also the fact that the invasion route passes close to the Turkish border, and there is an even chance<sup>70</sup> that the Turks would go to the

aid of the Iranians. (See Map 2). Iran furthermore has a defensive alliance with Pakistan. All this means that the number of Soviet troops facing the West would be seriously weakened - to the extent that the Western forces would become stronger in some respects, notably in strike aircraft. This is illustrated by Table V.

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*TABLE V : ARMIES AND AIR FORCES IN THE WEST<sup>71</sup>*

	NATO	Warsaw Pact	Warsaw Pact less forces in Table IV
Troops (000)	1 200	1 240	-72
Battle Tanks	10 500	26 250	21 250
Strike Aircraft	1 858	2 195	1 495
Interceptors	625	2 625	2 525

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The country through which the invasion would have to pass is mountainous, and therefore, suitable for defence. The quality of the Iranian equipment is far higher than that of the Warsaw Pact - much of it is of better quality than that possessed by the richer NATO nations.<sup>73</sup>

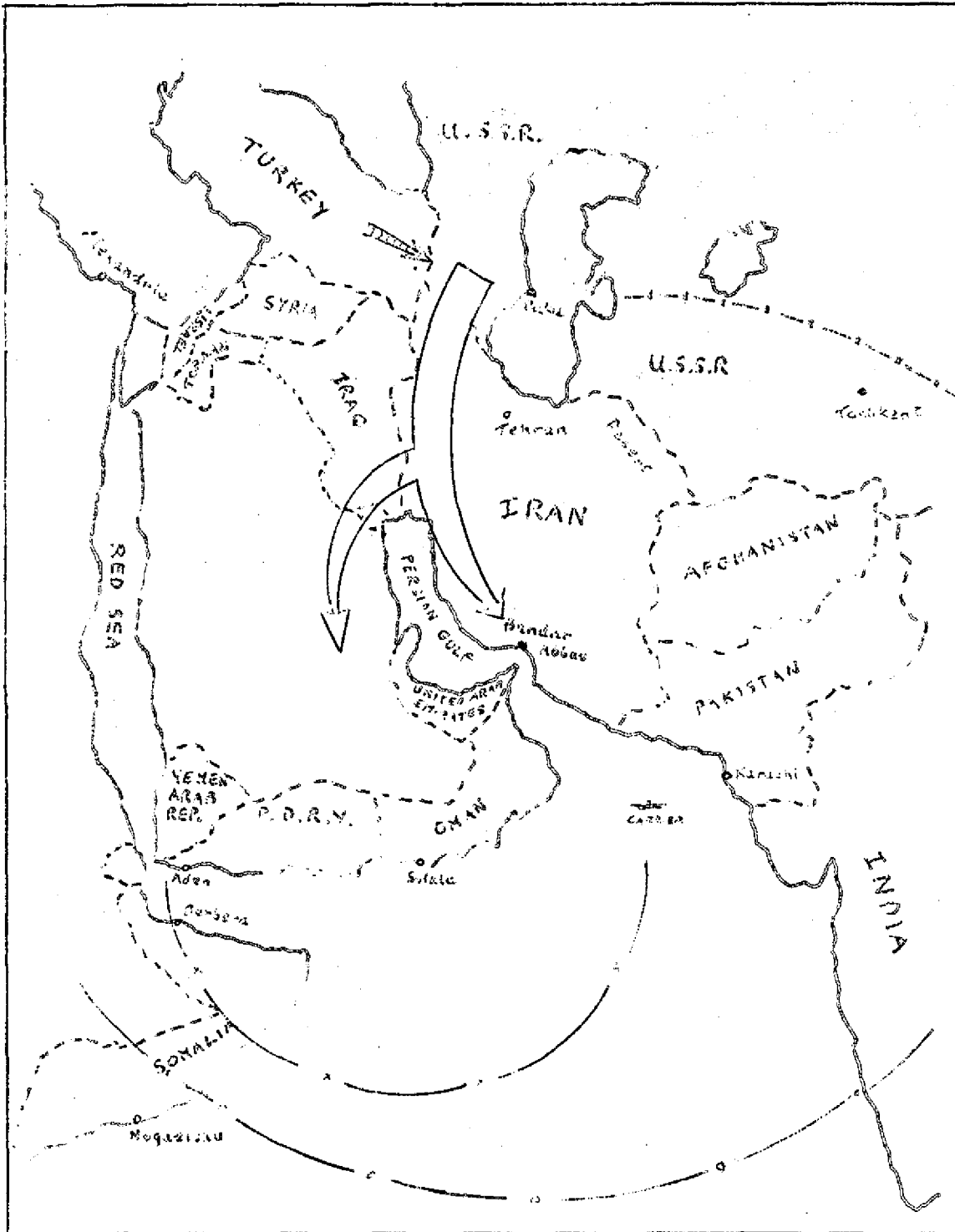
C. *Air Strike*

An air attack on the oil wells would prove difficult for the Soviets, since their *Backfire*<sup>74</sup> strategic bomber is the only Russian aircraft that has the range to fly the mission at low level. Oil wells, unlike refineries, are not very easy to put out of action for a long time, and the multiplicity of targets is unlikely to facilitate matters. Some of the wells in Iran and Saudi Arabia may be defended by low level surface-to-air missiles.<sup>75</sup>

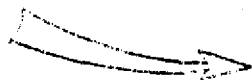
D. *Blockade in the Arabian Sea*

A naval blockade of the Straits of Hormuz is out of the question, in view of the spiralling air power of Iran. This country has more than 200 combat aircraft, and over 300 on order. All of them are of very high quality, and their pilots well trained.<sup>76</sup> Even allowing for the very impressive anti-aircraft capability of the latest Soviet cruisers, there seems little doubt that they would be overwhelmed.

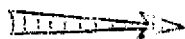
If the Russians were to attempt to interdict the tanker traffic in the Arabian Sea, they would be faced with a number of very serious problems. Firstly, the striking units of the Soviet Indian Ocean squadron would have to keep out of range of the Imperial Iranian Air Force if it wanted to keep its ships afloat. Iran has recently purchased six *Boeing 707/320*<sup>77</sup> tankers, with the result that her *F-4* Phantoms now have a (refueled) Combat Air Patrol range of up to 1 600 miles, and radius of action in attack configuration of approximately 1 100 miles.



KEY:



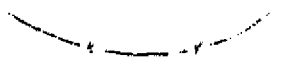
Probable Russian invasion route



Possible Turkish counterthrust



F-4 Combat Air Patrol radius of action with in-flight refueling (operating from Bandar Abbas)



F-4 unrefueled radius of action in attack configuration (operating from Oman)



A-6 radius of action with full external fuel and one external store (operating from carrier in the Arabian Sea)

But the greatest threat to the Soviet squadron would be from the Iranian *P-3C Orions*<sup>78</sup> carrying *Harpoon* anti-ship missiles. *Harpoon* has a maximum range of about 70<sup>79</sup> miles, so the *Orions* could launch their attacks with impunity - outside the range of the Soviet anti-aircraft defences. The *Orion* has a range of over 2 380<sup>80</sup> miles - it could attack targets as far away as the northern Mozambique coast, operating from Sulala in Oman.<sup>81</sup> To cope with this threat, the Soviets would have to carry their own air cover with them. However, Iran has 80 *F-14A Tomcats* on order, and it seems probable that with in-flight refueling, these could escort the *Orions* for about 2 000<sup>82</sup> miles. This ultra-modern aircraft would make short work of anything the Soviet carriers might be able to send up against it. It would also make maritime reconnaissance practically impossible for the Soviets.

Then, the Soviets would find it very difficult to operate from Berbera, since it is just within the range (un-refuelled) of *Phantoms* operating from Sulala in Oman.

Moreover, the Soviets would have to neutralize the Iranian Navy, which will shortly possess a very impressive capability. (See Appendix II). Consequently, the Russian naval force would have to include a substantial number of her most modern surface ships in order to assure success. This would seriously weaken forces available for the other main task for the surface ships in a war situation - amphibious landings on various parts of the European coast.<sup>83</sup> (Northern Norway and the Bosphorus are prime candidates for this treatment.)

Taking all this into account, it is not surprising that there are indications (Angola!) that the Russians are becoming more interested in action further south.

APPENDIX II

THE IRANIAN NAVY, AND THE RUSSIAN UNITS NECESSARY TO  
ENSURE SUCCESS AGAINST IT

Iran (Ships on order)	U.S.S.R.
(6 Spruance Class destroyers with Asroc ASM, Harpoon SSM (possibly), and Sea Sparrow SAM)+	3 - 5 cruisers 10 -15 destroyers
1 GM destroyer with Seacat SAM	1 - 3 ASW helicopter carriers
2 destroyers	
4 GM Fast Frigates with Sea Killer SSM, Seacat SAM	10 Nanuchka class corvettes
4 PF frigates, with Harpoon SSM, Standard SAM	
4 Corvettes	
12 La Combattante II Missile Boats with (probably) Harpoon SAM	
Hovercraft	
? Submarines for delivery 1978	

Note

These tentative estimates are based on the following considerations:

- (1) all Soviet units must have full ocean going capability (this rules out missile armed patrol boats);
- (2) the Soviets must have considerable superiority of force over the Iranian forces, and over any relief force that NATO might be able to send;
- (3) the Soviet squadron would have to have adequate ASW capability;
- (4) ability to maintain the blockade even after losses due to Iranian/NATO counter action.

NOTES

1. It may be argued that Soviet aid was certainly not peripheral in Vietnam and Angola. However, when Soviet aid became decisive, the situation in both these countries had reached the stage of conventional war.

1a. For examples of this sort of reasoning, see Patrick Wall (ed. 'The Indian Ocean and the Threat to the West' p.61 and 'The Communist Strategy' de Villiers, Metrovich and du Plessis pp. 88-97. A report on a seminar held at the Royal United Services Institution in 1970 emphasizes the importance of the route to the West, but leaves one in the dark as to why South Africa is so important. The Institute for the Study of Conflict study, 'The Security of the Cape Oil Route' concerns itself mainly with the possibility that the Straits of Hormuz might be blocked, and also mentions the possibility of attacks being launched on the tanker traffic from communist orientated states adjacent to the route.

1b. This point is made in Adelphi Paper No 87, Institute for Strategic Studies (IISS) '*The Indian Ocean in Soviet Naval Policy*' by Geoffrey Jukes p. 7

2. This route, however, would involve practically circumnavigating the globe. Since this would make it very difficult to provide naval escorts, the tankers would be at the mercy of the Russian units operating in the Indian Ocean or the Pacific.

3. See '*The Peacetime Strategy of the Soviet Union*', Institute of the Study of Conflict, pp. 14-16. West Germany, Moscow's leading trading partner, forecasts a turnover of R6 900 million by the end of the decade. Star 22/4/76.

3a. France, of course, is not a full member of NATO, but could reasonably be expected to identify itself with that alliance in a conflict of this nature.

3b. In this regard, the testimony of ex-Defence Secretary James Schlesinger is particularly noteworthy: '*There are circumstances and there are places in the world where the US Navy cannot go today with a high confidence of success*'. (July 1974).

4. The three aircraft are the BAC Nimrod, the Lockheed P-3C Orion, and the Dassault-Breguet Atlantic. The ASM's in question are Harpoon, Exocet, and Otomat.

5. International Defence Review (IDR) October 1975 p. 678.

5a. Further examination of South African naval strength requires the Minister's permission in terms of the Defence Act.

6. SAAF *Buccanneers* can refuel from each other in flight. The *Mirages* have no in-flight refueling capability. South Africa possesses no tanker aircraft.

7. Chairman of the Israeli strategic 'think tank'. Star 6/4/76.

8. An apparently revolutionary weapon. Basically an encapsulated torpedo moored at the bottom of the ocean, which homes acoustically on passing submarines.

9. What possibility there was of a Russian base in Portugal seems to be receding fast.

10. Figures from '*The Military Balance 1975-6*', (IISS) and Pentagon intelligence estimates. Sunday Times 8/2/76.

11. See Roger Kanet (ed.) '*The Soviet Union and the Developing Nations*' p. 55.

12. A. Hutchinson '*China's African Revolution*' pp. 208-209.

13. See note 9.

14. See *'NATO's 15 Nations'* Oct-Nov 1974 p.68. The facilities in question were at Vishakhapatam or on the Andaman Islands.
15. It should be noted that Brazil is fast emerging as the major power in this region and might be able to exert significant pressure to get rid of the Russian presence.
16. See Peter Sager *'The Technological Gap Between the Superpowers'* Swiss Eastern Institute 1972.
17. The Cuban missile crisis being the first, unsuccessful, demonstration.
18. See IDR Feb 1976 p.19 for a more detailed list.
19. IDR April 1976 p.226.
20. Star 29/3/76.
21. Star 18/3/76.
22. IDR April 1976. President Ford's budget was increased by \$700 million to 33 400 million dollars. Senate action reported in the Star 17/5/76.
23. Star 24/6/76.
24. See for example the remarks made by M.P.'s in the Budget debate on the Mines vote 14/5/76.
  - 24a. Copper is also vital for all electrical equipment.
  - 24b. The exception being antimony.
  - 24c. Source: U.S. Bureau of Mines and South African Yearbook.
25. For example, see the remarks of Eldon Griffiths, former Conservative cabinet minister. Star 11/3/76.
26. U.S. is the Free World's largest producer, but imports the mineral.
  - 26a. Iran has a common border with the Soviet Union, and was partially occupied by Soviet troops during World War II.
  - 26b. Iraq, one of the most radical of the Arab states, still trades extensively with the United States. For example, Star 6/8/76.
27. The case for Chinese altruism is strongly argued by Hutchinson in *'China's African Revolution'*.
28. Star.
29. Star 9/2/76.

30. Soviet aid has been given to the following Guerilla movements:  
*Frelimo, Paigc, MPLA, ANC, ZAPU, ZANU, Swapo.* See M.Morris '*Armed Conflict in Southern Africa*' p.313.

31. See I.D.Levine '*Eyewitness to History: Memoirs and Reflections of a Foreign Correspondent for Half a Century*' p.161.

32. 'Kiev' has been completed, and has entered the Mediterranean. 'Minsk' has been launched. Two other carriers are under construction, tending to confirm predictions that up to 6 of the class may be built.

33. For instance, compare the armament of the 9 100 ton Kara class cruiser '*Nikolayev*', with that of the 10 150 ton '*California*'.

*Nikolayev*

*California*

2 Quadruple SS-N-10 launchers	2 Standard SAM missile launchers
2 twin SA-N-3 launchers	1 8 cell Asroc ASW missile launcher
2 raised silos for SA-N-4 launchers	2 5in. guns
2 twin 76 mm. gun mounts	6 torpedo tubes
4 twin 30 mm. gun mounts	1 helicopter (pad only)
Variable depth sonar	
Hull mounted sonar	
1 Hormone A helicopter	
2 x 16 barrelled rocket launchers (ASW)	
2 x 6 barrelled rocket launchers (ASW)	
2 quintuple sets of torpedo tubes	

34. '*Military Balance*' p.8.

34a. Statement by Admiral Moorer, USN, ex-Chairman, Joint Chiefs of Staff March 28, 1973.

34b. Only major imports are tin and bauxite.

35. See the introduction to '*Jane's Fighting Ships 1976*' John Moore.

36. '*Survival*' International Institute for Strategic Studies Mar/Apr.1975. Originally serialized in *Morskoi Sbornik*, beginning in 1972.

37. Account taken mainly from John Moore's introduction to '*Jane's Fighting Ships 1976*'.

38. Star 26/4/74.

39. Some doubt was originally expressed by the IISS.

40. '*Russia Report Rocks NATO*' Star, Dec.1975.

41. Star 26/5/74, and 9/1/76. '*Styx*' missiles were reported to be stored at Berbera, and an airfield constructed there. IDR Feb 1976 p.23.

42. 40 000 t.

43. 18 000 t.



44. 18 000 t.

45. See Map 1.

45a One of the foremost experts on the Soviet Navy, Michael McGwire, believes that this is the main reason for the Soviet naval build-up.

46. Report, Sunday Times 1974.

47. Star 26/5/74 and 9/1/76.

48. Combat radius of the A-6 with one external store and 4 x 250 imperial gallon external tanks, 1 520 miles. (Observer's *Book of Aircraft* 1971).

49. Range is usually roughly halved when the aircraft flies at low altitude.

50. The Soviets have the largest interceptor force in the world - 2 550 aircraft, according to the "*Military Balance*" p. 8.

51. Pentagon intelligence estimates, Sunday Times 8/2/76.

53. According to John Moore, South Africa will be building 6 missile armed frigates, and according to "*Flight*" 13/3/76, South Africa has ordered 2 French A 69 *Avisos*, which are probably missile armed.

54. Tonnage of the Soviet *Kuril* class carriers is greater than that of the American *Hancock* class, which carry F-4 *Phantoms*, inter alia. The *Kiev*, however, appears to carry only helicopters and V/STOL aircraft (25-36) which almost certainly have inferior performance vis-à-vis the *Mirage III/F1* and *Buccaneer*. Modification of *Kuril* class carriers would involve removal of the anti-ship and anti-aircraft armaments on the foredeck.

55. See note 43.

56. Only *Backfire* has the range to reach South African bases from the Malagasy Republic or Angola.

57. There are a number of other possibilities which are considered too remote for consideration here. These include troops from Eastern Europe (which would have much the same political impact as Russian Troops) or Vietnamese, Cambodians or North Koreans. In regard to the latter, it must be noted that the Russians have far less influence over these countries than they have over Cuba.

58. South African GNP is over three times that of Israel. This advantage is counterbalanced by a notably smaller military industrial complex, as well as a greater dependence on indigenously produced arms.

59.	Population	GNP (billion USD)
South Africa	23,2 million	32,5 (1974)
Rhodesia	5,7 million	3,1 (1974)
Angola	5,8 million	1,6 (1970)
Mozambique	8,5 million	1,8 (1970)
Zambia	4,4 million	2,5 (1974)

Even more revealing is the composition of GNP in Mozambique and Angola:

Sector	Mozambique	Angola
Agricultural	40%	34,9%
Manufacturing	15%	46,1%
Services	45%	19 %

Population and GNP estimates from the '*Military Balance*', except for the GNP figures for Angola and Mozambique, which are from the U.N. Statistical Yearbook. Sectoral analysis from *Survival*, IIAA Sept/Oct 1974.p.217

60. '*The Military Balance 1974-5*' p.82. A fuller examination of the capabilities of the SADF would require the Minister's permission in terms of the Defence Act.

61. '*The Military Balance 1975-6*' p.6. The exact figure is 205.

62. This proposition is fairly obvious. The Soviet Union and Western Europe together comprise the greatest industrial complex in the world. Possession of Western Europe also frees the Soviets from any real threat of conventional invasion (a Chinese conventional attack could not reach any areas vital to the Soviets) which in turn means that they could now devote their now superior resources to attaining strategic superiority, as well as mastery of the oceans. Mastery of the oceans means world domination, in view of the dependence of North America on raw materials imported from abroad.

63. The *SS-N-3 Shaddock*, Flight International 8/5/75. This missile needs mid-course guidance for over the horizon ranges.

64. See '*Flight International*' 7/2/76. p.275.

65. NATO has yet to find a way to protect convoys from the cruise missile submarine - the chief problem being the relatively short range of sonar.

66. Figures from IDR December, 1973.

67. According to '*The Military Balance*' Iran has 238 combat aircraft at present. However, she has on order 108 *F-4E*, 141 *F-5E* and 80 *F-14A*, some of which have been delivered. (Flight International 15/8/74 p.176).

68. Includes initial batch of Chieftains. Iran is currently negotiating for a further 1 200, with heavy modifications.

69. No proportion is stated here because such a figure would become meaningless and misleading once the Soviet Union mobilized.
70. There are important economic ties between the two countries. The implications of the Russian move would be obvious to the Turks.
71. Figures from '*The Military Balance 1975-6*' pp.96, 99, 100.
72. See note
73. For example, the *Chieftain* tank is superior to the U.S. *M-60*, and the *F-4E Phantom* is superior to the *F-104 Starfighter*.
74. *Backfire* range is 2 500 km. ((10-10-10)).
75. Iran has ordered the *BAC 'Rapier'* SAM, and Saudi Arabia has ordered '*Shahine*', a version of '*Crotale*' (*Matra - Thomson - CSF*).
76. Iranian pilots fly more hours than those of Israel (*International Defense Review*) (IDR) December, 1973.
77. IDR, December 1973 p.728.
78. Iran has ordered 4 *P3C Orions*.
79. See '*Flight International*' 8/5/75 p.770
80. See '*Flight International*' 6/3/76 p.576-7
81. Iran has lent troops and aircraft to Oman to fight insurgents. There is an Omani airbase at Sulala.
82. Though figures for the range of the *F-14A* are unobtainable, the aircraft carries more internal fuel than the *F-4*, and almost certainly has significantly greater range.
83. The amphibious landings in Exercise OKEAN II seem to indicate the likelihood of this.