A VISION OF INDIA'S MARITIME POWER IN THE 21ST CENTURY

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INTRODUCTION

Most of you would recall the stir caused when Secretary of State Condoleezza Rice generously offered US help to make India a "major world power," last March. History, and, of course, common sense tells us that no nation has ever achieved greatness by external help or intervention, and that is possibly the reason why her statement gave rise to much scepticism and also raised hackles in India.

Such is our preocupation with internal matters that this statement took most of us by surprise. We are acutely conscious that if India is to attain the status of a major power, we will need to overcome enormous internal challenges. And then, it will not be with help from the USA but only by the contribution of Indians themselves.

The significance of this statement, therefore, must be sought elsewhere; and perhaps it lies in the fact that a great deal of indepth research must have been undertaken by the State Department on India's immediate and long-term prospects in every field before this unprecedented and magnanimous but, one presumes, hard-headed offer was made to us.

I quote this just as an example of the change that has come about in perceptions about India worldwide: India's steady economic growth, her emergence as a nuclear power, our staunch adherence to a secular democratic

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tradition, professional and apolitical armed forces, the intellectual calibre of our people, and the growing availability of a young working population—these are all factors that contribute to a very favourable matrix which influences external perceptions.

While examining this complex matrix, I would venture to suggest that a decisive but perhaps unstated factor which has had a vital influence on the external perceptions of India is our maritime capability. And this capability is a function of many factors, including our geographical location, and our navy, with special reference to its force levels and professional competence.

MARITIME PERSPECTIVES

Geographically speaking, India holds centrestage in the only ocean in the world which is named after a country. Her peninsular configuration juts out 1,500 miles into the sea and places her at the focal point of shipping lanes which are the arteries of world trade. Apart from other vital commodities, millions of tons of hydrocarbons travel from the Persian Gulf and Middle East to feed the hungry industrial and economic engines of China, Japan and many Southeast Asian countries. Whether we like it or not, geography has placed a heavy responsibility on India's shoulders and made her the natural sentinel of these trade routes.

Nature has also given India a long, serrated coastline studded with nearly 200 harbours, big and small, which support coastal as well as overseas trade. Off each coast we not only have extensive island territories, but also vast exclusive economic zones which are like treasure-houses laden with unimaginable and as yet unexploited mineral wealth. Currently, one-third of our hydrocarbons come from offshore fields which lie in the Bombay High and Krishna-Godavari basins. With oil prices moving relentlessly upwards (the recent dip notwithstanding), drilling to depths as much as 10 km under the ocean now appears economically viable. It is, therefore, quite likely that we may find fresh exploitable hydrocarbon reserves off the east coast and in the Andaman Sea.

So much for geography; let us now look at our history.

For a very long time, Indians deluded themselves into believing that India was a continental power guarded by the Himalayas which ruled our destiny. The truth is quite different, because most Indians are blissfully ignorant about the fact that from about the third millennium BC, till the 13th century AD, India was a thriving maritime power.

While our western seaboard undertook extensive commercial activity with the Persian Gulf, Red Sea and the Mediterranean, successive kingdoms in peninsular and eastern India created a powerful maritime vision and tradition. Dynasties like the Mauryas, Sattavahanas, Pallavas and Cholas sent out fleets that were instrumental in spreading India's trade, culture, and religions by sea to Southeast Asia and further. It was the decline of our maritime power and tradition in the 13th century that coincided with the domination by foreigners for the next 600-700 years.

Historically, the fertile Indo-Gangetic plains of north India have been the magnet for incursions for centuries. There was an incessant succession of invaders, who came over the northwestern mountain passes, stayed on and were absorbed into the resilient Indian culture and became Indians. So that today, many of us probably carry in our veins the blood of Aryans, Huns, Bactrians, Greeks, Persians, Turks, Mongols, and Arabs – to name just a few of the invading races who stayed on in India and were assimilated.

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We continued to remain inwardly focussed even when danger loomed large from the seas. From the 15th century onwards, European merchants obtained commissions from their sovereigns and set out on ships to seek the fabled gold and spices of the Orient. The Portuguese came first, followed by the French, the British and the Dutch, They all came by sea, across our shores, ostensibly to carry on peaceful trade. Assimilation with India's culture was the last thing on their minds; they came only to exploit our weaknesses, divided and conquered us, and stayed on to rule India and to plunder her wealth.

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It is, therefore, not only fortuitous but most appropriate that the kind of maritime resurgence that is taking place in India should coincide with her rise as an economic power and a nation of substance because there is a deep linkage between the two factors.

PRIMACY OF MARITIME INTERESTS

Today, the maritime environment encompasses a wide array of national interests, some of which I have just mentioned in passing. I will focus briefly on just two, overseas trade and energy security, since our economic prosperity is inextricably linked to them.

Foreign trade contributes about 20 per cent of India's gross domestic product (GDP) but as a share of world trade, it currently hovers at just under one per cent. The government plans to double this figure in the next five years. Considering that 97 per cent of this trade is seaborne, one can imagine the degree of dependence on the seas that the future will bring. We have a large merchant fleet of about 756 ships totalling over 8.6 million gross registered tonnes (GRT). They carry only 16 per cent of our trade, and the rest comes in foreign flagged ships.

Similarly, India is a net importer of hydrocarbons and about 70 per cent of our energy resources come from overseas by sea. Currently, we rank 4th in energy consumption, and by 2050, it is expected that India will be the largest importer of oil in the world. A new development is our acquisition of oil and gas fields stretching across the globe, from Sakhalin in the Russian Far East, to Africa and South America. Apart from the billions of dollars that we have sunk into our own offshore assets, the investment overseas assets too will warrant some thought for their protection in the future.

These invaluable maritime assets can, in times of tension, become liabilities which must be safeguarded at all cost. So what kind of a maritime force do we envisage to protect these maritime interests, and to implement our maritime strategy?

THE CONCEPTUAL UNDERPINNING OF FORCE PLANNING

It is an accepted tenet that in international relations there are neither permanent friends nor permanent enemies; only permanent interests. The maritime force that we seek to create is, therefore, conceived, not so much on the basis of threats to our security, as on safeguarding our long-term interests, taking into consideration the capabilities existing in our neighbourhood and the potential challenges they could pose. The underlying premise is that if a capability is being acquired by a country with which we share interests or boundaries, it could have a bearing on our security in the future.

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After clearly identifying the navy's roles and missions, vis-a-vis our maritime interests, and demarcating its areas of responsibility, the essence of our planning process has been to identify the capabilities considered necessary to discharge them effectively. The saying that "numbers have their own logic" is perhaps valid; but only up to a point. Beyond that, you just cannot ignore the even more compelling logic of technology and economics.

In the 1980s, we acquired guided missile destroyers at Rs. 150 crore apiece. A current generation destroyer will cost around Rs. 1,500 crore and is unaffordable in the same numbers. But we cannot overlook the fact that it also has a capability which is proportionately higher, so that smaller numbers will do. At the same time, for policing roles close to the coast, you do need low-end platforms; and these will have to be in sufficient numbers.

Having consciously decided to focus on the "capabilities" required by us in the future, and followed an iterative process which took into account, amongst others, the all important budgetary factor, we find that we have considerably reduced the numbers we had originally aimed for. We hope that we now have a "right-sized" navy which can fulfill its assigned roles very effectively.

We are clear in our minds that while wars may well be fought at sea, they are finally won only on land. Therefore, it will now be an article of faith with us that all operations by maritime forces at sea will be designed to produce a direct or indirect impact on the land battle in progress.

Amongst the capabilities that we seek at sea are long-range air defence and anti-missile defence, airborne early warning, anti-submarine warfare, anti-ship and land attack missiles, trade warfare, maritime reconnaissance, amphibious assault, special forces, and mine counter-measures. An overarching requirement is that of shipborne logistics and support, which endow the fleet with long range and endurance or a "blue water" capability.

We are fortunate that the vision of our predecessors created a sound warship-building base in the country. Consequently, the platforms that we seek are largely going to be built in Indian shipyards. In an unprecedented naval construction programme, we have on order today, 35 vessels which include patrol boats, landing ships, hydrographic ships, corvettes, offshore patrol vessels (OPVs), destroyers, frigates, submarines, and an aircraft carrier.

In addition, we are acquiring an aircraft carrier, three frigates, a landing platform dock (LPD) and a tanker from abroad.

CAPABILITIES, FORCES AND PHILOSOPHY

We have hoisted in the lessons of history, and are clear in our minds that while wars may well be fought at sea, they are finally won only on land. Therefore, it will now be an article of faith with us that all operations by maritime forces at sea will be designed to produce a direct or indirect impact on the land battle in progress. All our planning will be undertaken jointly, and we hope that it will result in an irresistible all-arms synergy.

We aim to exercise selective sea control in the waters of the Indian Ocean by deploying task forces built around the core of aircraft carriers with fighters, and airborne early warning (AEW) as well as anti-submarine warfare (ASW) helicopters on board. While protecting our own trade, sea denial operations will

be undertaken by our submarine force, working in close cooperation with missile armed maritime reconnaissance aircraft.

Closer home, our coastal forces will undertake mine counter-measures and the defence of offshore and onshore assets against attacks from the sea.

It is the navy's business in war-time to seek out and destroy the enemy's fleet units wherever they may be, using all the means at its disposal. However, in order to make a palpable impact on the land battle, there are only two options available to it. Firstly, by engaging in trade warfare or "commodity denial" operations which will over time bring the enemy's industry and war machine to a grinding halt. And, secondly, by making a direct approach to the enemy's littoral through what is called "maritime manoeuvre from the sea."

This manoeuvre aims to unbalance the enemy and to shatter his morale and cohesion, by bringing to bear concentrated force from the sea at a selected point on his littoral at a time of our own choosing. This concentrated force can consist of a combination of special forces, land-attack missiles, amphibious assault and naval aviation, all of which we possess.

Our operational philosophy now places the highest importance on littoral warfare, which is notionally divided into a number of phases. Having attained "sea control" and/or "sea denial" as required, we will then aim for "information dominance" which encompasses the electronic warfare as well as information warfare domains. This will be followed by certain "support operations" which may be required to precede manoeuvre from the sea in all or some of its manifestations against the littoral. In the support operations, we will be placing heavy reliance on the availability of Indian Air Force (IAF) support at a time and place that we would indicate.

THE FOUR PILLARS OF OUR STRATEGY

Our evolving maritime strategy rests on four main pillars, and I shall dwell briefly on them in turn. The first of these is self-reliance.

Self-Reliance

Having made a very early start in the field of indigenous ship-building, we have

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discovered two things. First, that having reached a level of about 70-80 per cent indigenisation, we have plateaued over time, and are unable to go beyond, because we lack the capability to produce weapons and sensors. Second, we find that no matter which foreign supplier we go to, by importing systems, we place ourselves at the mercy of that country; product support is universally unreliable, suppliers can raise prices at will or even choke off supply whenever they feel like it.

We are now firmly of the view that there is no alternative but to develop systems at home; and the sooner we get serious about it, the better. Traditionally, we have maintained a very close relationship with the Defence Research and Development Organisation (DRDO) labs, three of which are exclusively dedicated to the navy. Our engineers and users remain closely associated with all our research and development (R&D) projects, and we often commit funds to the DRDO. As a manifestation of our support, we have sometimes even accepted the DRDO products which have fallen short of qualitative requirements (QRs), on the understanding that they will more than make up the shortfall in the Mark II product. We have received torpedoes, sonars, radars, early warning (EW) and communication systems and many other products from the DRDO and look forward to the light combat aircraft (LCA) (navy) in the future.

Another pioneering navy initiative in this context has been a three-cornered tie-up among the DRDO, navy and a foreign company for joint development and collaborative manufacture of an advanced weapon and sensor system. We hope to replicate this model wherever necessary.

We have created a full fledged Directorate of Indigenisation which is in dialogue with our private sector to involve their participation in our major projects like the submarine and aircraft carrier building programmes.

Networked Operations

Today, we find that our platforms have weapons of formidable range, but their sensor capabilities do not match up. Nor are widely separated units able to know what each other is seeing or hearing.

Therefore, in order to exploit the full potential of our surface, submarine and airborne platforms, it is essential that they are networked with each other and with shore operations centres. We will then have a composite picture of what every one of our platforms can detect by radar, sonar and EW devices, conveyed through the medium of a geo-stationary communications satellite dedicated to naval use. This would then establish what is known as "sensor to shooter" connectivity over long distances, and act as a tremendous force multiplier.

We have adopted an incremental approach, and a basic networking system, developed in-house, is already in place on most of our ships and aircraft. The main network-centric operations project is a complex task and will take some time to evolve and implement. We aim to have compatibility among the systems of the three Services.

Foreign Cooperation

It is because we already had a level of mutual comfort with navies in the area that we could undertake humanitarian operations successfully during the tsunami, and more recently during the Lebanon crisis. The lesson that emerges is that in order to ensure the success of our operations at sea, it is essential to shape the maritime environment carefully in peace. It is, therefore, obvious that foreign cooperation is going to be a major preoccupation of the navy in peace-time.

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The Minstry of External Affairs (MEA) is now cognisant that the navy is an important instrument of state policy and it must be used as such, whenever necessary. In this

context, working closely with them, we have drawn up a Foreign Cooperation Roamap which is being systematically implemented by a dedicated organisation within the Naval Headquarters (NHQ).

We are focussing on countries in our maritime neighbourhood and evolving programmes which envisage assistance and/or cooperation in the fields of training, hydrographic survey, technical expertise or hardware transfer. Exercises and joint patrolling are other features of our foreign cooperation initiative.

This brings me to the fourth and last pillar, which is the evolution of doctrines and concepts.

Doctrine and Concepts

While countries will eagerly sell us platforms and systems, no amount of money will make them part with doctrines or tactical and operational concepts. In any case, we need to develop these to suit our own peculiar conditions and environment.

Since we import much of our hardware, for good reasons, our system of doctrine evolution has always lagged behind the introduction of systems into service. In order to streamline this process, we have, in the recent past, set up a number of institutions which will provide the intellectual underpinning for our long-term policies and plans, and synergise maritime doctrine and strategy with force planning and acquisitions. To this end, we have put in place the National Maritime Foundation, an autonomous think-tank, a Directorate of Strategy Concepts and Transformation in NHQ, and very recently, Flag Officer Doctrines and Concepts in the field.

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Our *Maritime Doctrine* was promulgated in 2004, and last year we produced a *Maritime Capabilities Perspective Plan*. During the forthcoming Commanders' Conference, we will release a companion document on *Maritime Strategy*.

Apart from induction of high technology, we foresee many other

changes being ushered into the navy in the next few years. A major one will be the enhancement of educational qualifications, including a BTech degree for all officers in the new Naval Academy. We are a conservative Service, and "management of change" will by itself pose a considerable challenge. In order to confront it, we have evolved what we are calling a *"Transformation Roadmap"*, which we hope will ensure smooth sailing in this somewhat difficult period.

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ROLE OF AVIATION

Let me now briefly touch, in general terms, upon the significance of aviation in maritime strategy.

The Indian Navy has been a staunch advocate of air power at sea, and our 53-year-old Fleet Air Arm is today the size of small air force. Every ship over 1,000 tons can carry one or more helicopters. Such is the primacy and importance of air support at sea that maritime operations without it are inconceivable today.

For our surface fleet, the missile threat, both from armed maritime reconnaissance aircraft and submarines is all pervasive. Again, in the context of the littoral, maritime operations would have to be undertaken in the face of shore-based air opposition. The detection and neutralisation of such threats is often best achieved by airborne platforms. Air operations at sea include air-defence, anti-missile defence, AEW, anti-shipping and shore strike, ASW, air-submarine cooperation, and maritime reconnaissance. Our future acquisition plans cater for accretion and upgradation of these capabilities.

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We are quite clear in our minds that the IAF is the fountainhead of aviation knowledge and expertise in the country, since this is their core competence. The navy has been the beneficiary of IAF support and assistance in many spheres in the recent past; our Sea Harrier pilots regularly hone their air combat skills with the Tactics and Combat Development Establishment (TACDE). They have recently been taught the art of in-flight refuelling by IAF instructors. We received invaluable advice and guidance from Air HQ during negotiations for the MiG-29K, and we plan that this carrierborne squadron will always have 2-3 IAF pilots on exchange posting.

Let me, however, add that just as we believe that maritime power by itself cannot win wars, we are sceptical about the pronouncements of Guilo Douhet and Billy Mitchell. We are quite clear that we will not be seduced by the siren song of air power. It can shock, it can awe, it can be decisive in battle, but it cannot win wars by itself. This is the lesson of history from World War II, Vietnam, Iraq, Afghanistan and now Lebanon. So, for the navy, air power will remain one of the arrows in its quiver – albeit a very potent one.