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Volume 3 Number 12 – Wednesday, 23 March 2011

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Special Focus: Singapore







Diplomacy and deterrence are the two pillars upon which the defence policy of Singapore is structured. By developing and maintaining good relations with other countries through diplomacy, Singapore is creating a safe environment which de facto diminishes the possibilities of an armed conflict. Nevertheless, Singapore Armed Forces (SAF) should always be alert and ready to intervene whenever this is needed. That is why Singapore continues to maintain a well-integrated force that is trim, balanced and potent. Under this concept Singapore

government decided to further modernize the armed forces of the country. This is clearly illustrated by the fact that during the period 2006-2009 imports of arm equipment reached the amount of 3325US\$ m. expressed at constant (1990) prices whereas for the period 2002-2005 this amount was 1244 US\$ m. at constant (1990) prices, hence increased by more than 167%. Furthermore, Singaporean defence budget has been considerably augmented during the last decade. In 2000 it was 7,423 million Singapore dollars, whereas in 2009 it reached 11,447million.

Imports (expressed in US\$ m. at constant 1990 prices)

	2006	2007	2008	2009	2010	Total
France	8	322	908	720	25	1984
USA	30	8	25	814	719	1596
Germany		19	117	74	89	298
Israel	29	24		70	70	193

Source: SIPRI Publications, Arms Transfers Database

This increase in military spending has funded a raft of major arms acquisitions in recent years, in Singapore. France has a leading role in the Singapore arms imports. For the period 2006-2010 Singapore imported defence equipment amounting 1984 US\$ m. at constant (1990) prices from France. Apart from France, other important countries that exports arms to Singapore are, USA, Germany and Israel. Imports are diversified in their geographical structure. The four (4) first places are occupied by two (2) European counties, a country from Middle East (Israel) and one form North America (USA).

Military expenditure of Singapore

	2005	2006	2007	2008	2009
In Singapore million dollars	9,252	9,268	10,009	10,803	11,447
percentage of gross domestic product	4.5	4.2	3.9	4.1	-

Source: SIPRI Publications (http://milexdata.sipri.org/result.php4)

As it is stated above France is the main exporter of military goods to Singapore. In 2000 Singapore procured (6) F La Fayette Frigates from France the delivery of which concluded in

2009. The total amount of the procurement reached \$750 m. Five of the frigates were produced in Singapore. Additionally in 2001 the country bought 300 Surface-to-Air Anti Missile (SAAM) weapon systems that will be used on the frigates. The deliveries were finished in 2010.

Additionally, in 2010 the delivery from the USA of 6S-70B/SH-60B Seahawk ASW helicopters was completed. Furthermore, in 2010 the delivery of the Leopard-2A (4) Tanks was completed. Some of them were in service with the German army and were modernized before delivery.

Diplomacy and deterrence is the shield of protection for Singapore. Nevertheless, SAF is constantly trying to stay ahead and to continually adapt to changes of its operating environment.

Kyriazis Vasileios, Epicos Newsletter Head Editor

The Singapore Concept of Total Defence





The concept of Total Defence was introduced in Singapore defence culture in 1984 and was adapted from the experiences of countries like Switzerland and Sweden. The main reason behind this political decision was that Singapore as a small nation with conscript armed forces, needed to draw on the different strengths and abilities of its community to augment the national defence capabilities of the country. Currently Total Defence has been enhanced as conflicts between countries are no longer just

military in nature and potential sources of instability can appear in less obvious and non-conventional ways.

Total Defence in Singapore is based on five different aspects - Military Defence, Civil Defence, Economic Defence, Social Defence and Psychological Defence. These five aspects represent the key sectors of society, are complementary and when combined can create a "safe net" for all the facets of the socioeconomic spectrum. Thus, Total Defence can be implemented whether it is a security threat such as global terrorism or a national crisis like SARS and can bring together all relevant government agencies, private sector organisations and the citizens of Singapore in a coordinated effort.

Responsible for the military defence of the country is primarily the Singapore Armed Forces (SAF) which is one of the most advanced in Southeast Asia. Currently, the Singapore government spends almost 5% of its Gross Domestic Product (GDP) on defence and has seriously enhanced the capabilities of SAF to deal with non-conventional threats such as



Source: www.totaldefence.sg

terrorist bombings, hijackings, and chemical, biological and radiological attacks.

The Singapore Civil Defence Force (SCDF) is a national authority that has as a main purpose to recruit and train civil defence volunteers in first aid, rescue and evacuation procedures, and shelter management. Additionally, SCDF also conducts talks and exercises to familiarise the public with basic first aid, the nearest bomb shelters and emergency arrangements like relief supply of critical items such as blood, water and food. Through this procedure citizens are trained and know what to do in a potential terrorist attack and thus implementing the second pillar of Total Defence, Civil Defence.



Economic Defence is the 3rd pillar of Total Defence. Singapore has a rather developed economy. This is highlighted by the fact that for the year 2010 it claimed the title of fastest-growing economy in the world, with GDP growth of 14.5%. The authorities of the country are deliberately trying to keep this positive development and maintain the foundation of the economy strong, so as to be able to continue to function in times of crisis.

Singapore is a multinational and multicultural state. Its population has the sixth-highest percentage of foreigners globally with just over 40%. Therefore, it is relatively easy to destabilize Singapore society by exploiting differences in race, language, religion and culture. Thus, maintaining racial and religious harmony is the main notion of Social Defence and it is critical in ensuring peace and stability in the country.

The final element of Total Defence is a psychological one. The emotional situation in which the population of Singapore is will shape in a large extend the ability to overcome a potential crisis.

This is the main notion of the Singapore policy of Total Defence. The country's authorities recognize the limitation that the size of Singapore creates and therefore are trying to utilize every possible aspect in order to secure society from any potential threat.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Epicos "Industrial Cooperation and Offset Projects"

epicos.com Epicos " Industrial Cooperation and Offset Projects " provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

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Development of a ballistic protection system for re-locatable modular buildings



A company providing innovative solutions and services for temporary and permanent needs for modular buildings, flooring and infrastructure is interested in developing a ballistic protection system for its modular buildings. Applied throughout the world, the company's proven products are fully re-locatable, environmentally friendly, time saving and cost effective. Based on its existing range of products, the company is seeking potential partners for the

development of ballistic protection system which can be used / combined with its existing modular buildings.

For Further Information Contact our ICO Department

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Development of an advanced Dynamic Noise Reduction (DNR) algorithm for hand free communication devices used in mixed noise environments



A leading technology provider, designer and manufacturer of hands-free communication solutions for demanding use, is proposing the development of a universal Dynamic Noise Reduction (DNR) algorithm to be used in several hand free communication devices applied in several military and homeland security applications.

For Further Information Contact our ICO Department

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Epicos- Amazon



Globalisation and Defence in the Asia-Pacific: Arms Across Asia, by Geoffrey Till, Emry. Chew, Joshua Ho



Globalization, once a rather nebulous concept, has become a buzzword and entered into mainstream dialogue and discourse. Globalization as a phenomenon in itself has attracted its fair share of supporters and detractors. This book is examining the impact of the phenomenon on the economies, security policies and military-industrial complexes of the Asia-Pacific region. The work is structured into three main parts. The first explores globalization and its general effects on the policy-making of the nation-state; the second section looks at how globalisation affects a country's threat perception and defence posture within the specific context of the Asia-Pacific region; while the third explores how it impacts on a

state's allocation of resources to defence, and how economic globalization affects the defence industry, with specific reference to the procurement policies and practices of different states across the Asia-Pacific.

The Flexible Developmental State: "The Case of Singapore Electronics Industry", by Jayarethanam Pillai



Singapore economy has been an example of openness, flexibility and development. This book re-examines the conceptual framework of the Developmental State for application to the case of Singapore and especially the national Electronics industry. The study adds to the growing literature on the working of the Singapore public policy system and provides insights into the nature, dynamics and operation of the state and the functions and roles of the policy bureaucracies in particular towards industry development. Original evidence presented provides a distinctive holistic approach to checking results by contrasting research methods. Such approach leads us to a robust validation of the utility of conceptualizing

Singapore as a Flexible Developmental State' as well as providing new specific findings, policy suggestions and conclusions on a range of related industry strategy activities and outcomes for Singapore.

Epicos Newsroom



Russian military to buy 36 ICBMs, 2 missile subs in 2011

MOSCOW, March 18 (RIA Novosti) - The Russian Defense Ministry will buy 36 strategic ballistic missiles, two strategic missile submarines and 20 strategic cruise missiles this year, Minister Anatoly Serdyukov said on Friday. Over 19 trillion rubles (\$665 billion) has been set aside for the state arms procurement program, Serdyukov told a military board meeting attended by Russian President Dmitry Medvedev. The budget will also cover spacecraft (5), warplanes (35), helicopters (109), missile defense systems (21), multirole nuclear powered submarines (3) and a surface warship, he said.

Source: Ria Novosti

Afghanistan announces crucial security handover

The Afghan president will reveal Tuesday the first areas where local security forces will take over from NATO, kick-starting a transition designed to allow foreign troops to leave by the end of 2014.

Hamid Karzai's announcement comes after battle-weary countries contributing to the NATO-led force agreed last year to begin putting the battlefield under his control, moving Western troops to a support role.

But with a major insurgency still raging, doubts remain over how ready the national security forces really are, with military leaders complaining of a lack of resources and some analysts citing corruption and low retention rates.

"As violence has increased, the Afghan National Security Forces have proven a poor match for the Taliban," the International Crisis Group, a respected think-tank, said in a recent report.

"Afghanistan still lacks a cohesive national security strategy and the Afghan military and police remain dangerously fragmented and highly politicised."

Most of the provinces and cities to be placed under Afghan security control in the first phase this July will be well away from the fiercest fighting in the south of the country, according to a draft government report seen by AFP.

They include Bamiyan province in the centre, Panjshir province in the northeast and parts of the eastern provinces of Kabul and Laghman, as well as the cities of Mazar-i-Sharif in the north and Herat in the west.

But the report also recommends that Lashkar Gah, the capital of the volatile southern province of Helmand, should be among the first cities to be handed over in the summer.

Security in Helmand has improved substantially since the United States deployed an extra 30,000 troops in Afghanistan last year, mostly in the south, but experts say it remains fragile.

US President Barack Obama has said he wants American troops to begin leaving Afghanistan in July, amid waning domestic support for the war.

Last year was the deadliest by far for international troops since the conflict began in 2001, with more than 700 fatalities reported.

As the start of the transition looms, Afghanistan's security forces, which comprise 118,000 police officers and a 159,500-strong military, are also coming under increasing attack.

Earlier this month, 36 people died in a suicide blast at an army recruitment centre in Kunduz province, the second attack on the centre in three months.

Alliance officials have stressed that the transition will be gradual and dependent on conditions on the ground, and only a small number of American soldiers are expected to leave Afghanistan this summer.

NATO Secretary General Anders Fogh Rasmussen said this month that while the gradual "thinning out" of international forces in particular provinces would accelerate, "redeployment and reinvestment... remains a NATO responsibility".

Karzai will make his announcement at the National Military Academy in Kabul in front of an audience of several hundred army and police officers.

Source: 2009 AFP, Agence France-Presse (AFP)

Boeing, Korean Air Announce Order for Two 747-8 Freighters

SEATTLE, March 18, 2011 /PRNewswire/ -- Boeing (NYSE: BA) and Korean Air today announced an order for two new 747-8 Freighters. The order value is \$639 million at Boeing list prices.

"Korean Air continues to strengthen its reputation as one of the world's leading global cargo carriers," said Marlin Dailey, vice president of Sales & Marketing, Boeing Commercial Airplanes. "Boeing is very fortunate to have Korean Air not only as a customer of the 747-8 Freighter, but also the 747-8 Intercontinental and also as a key partner on the 747-8 program."

"The 747-8 Freighter will provide tremendous economics and reliability to Korean Air's global operations," Dailey said.

In December 2009, Korean Air became the first airline to order both the passenger and freighter versions of the 747-8. With this order, Korean Air has five 747-8 Intercontinentals and seven 747-8 Freighters on order. The 747-8 Freighter offers a range of 4,390 nautical miles (8,130 km) and a maximum structural payload capacity of 154 tons (140 tonnes). It also offers an additional 4,221 cubic feet (120 m3) and 16 percent more revenue cargo volume than the 747-400 Freighter.

The airline currently operates a total 27 Boeing freighter airplanes and will become one of two airlines to operate both the 747-8 Freighter and the 777 Freighter.

Korean Air was the number one cargo airline in the world for the sixth consecutive year in 2009, according to World Air Transport Statistics compiled by the International Air Transport Association (IATA).

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Photo and caption are available here: http://boeing.mediaroom.com

Source: Epicos, Boeing

Italy's Finmeccanica says wins Honolulu metro contract

Italian aerospace and defence industry group Finmeccanica said Tuesday its subsidiaries had won a contract worth \$574 million to build a new automated metro line in the US city of Honolulu.

The contract will earn Finmeccanica's Ansaldo STS unit \$367 million and Ansaldo Breda \$207 million for the design and construction of the high-capacity driverless metro line in the capital of the US state of Hawaii.

Finmeccanica said the contract was further testament to the excellence it has developed in building automated public transport systems.

The company has won similar contracts for Taipei, Copenhagen and Riyadh.

Source: 2009 AFP, Agence France-Presse (AFP)

Singapore Airlines to suspend half of Tokyo flights

Singapore's state carrier said Tuesday it will suspend half of its daily flights between the city-state and Tokyo as demand weakened following a nuclear scare in ravaged Japan.

Singapore Airlines (SIA) will halt two of its four flights between Changi Airport and Tokyo's Haneda Airport from this Sunday, the airline said on its website.

"Flights SQ635 and SQ636 which operate between Singapore and Haneda will be suspended from 27 March 2011," a post on SIA's main website read.

An SIA spokesman told AFP the suspension was due to a slump in customers going to Japan after a massive 9.0 earthquake and subsequent tsunami hit the country's northeast.

The twin disasters triggered a crisis at a tsunami-hit nuclear power plant some 250 kilometres (155 miles) from Tokyo, where workers have been struggling to bring overheating reactors under control.

"We are seeing weakening demand in and out of Tokyo due to the situation in Japan," he said.

Kyodo News on Tuesday reported that smoke and steam were again rising from damaged reactors at the troubled Fukushima plant.

White steam-like vapour was seen rising from the number two reactor and what looked like white hazy smoke from the number three reactor, Kyodo said, adding that efforts to spray water and restore electricity had temporarily stalled.

Abnormal levels of radiation were also detected in shipments of certain vegetables and milk from four prefectures near the plant, fuelling public anxiety about contamination from a radiation leak.

Source: 2009 AFP, Agence France-Presse (AFP)