

Acquisition Research

Offshore Helicopters in Asia

Uncovering buyout targets in the offshore helicopter services industry in Asia



Charles Kok
John Lim
Gerald Leong

Especially within Southeast Asia - namely **Thailand and Malaysia** – the helicopter industry is very **attractive** and we have identified **four companies** as potential private equity buyout opportunities: (i) **Thai Aviation Service (Thailand)**; (ii) **MHS Aviation (Malaysia)**; (iii) **Awan Inspirasi (Malaysia)**; and (iv) **SFS Aviation (Thailand)**.

We have a **proven capability to generate Alpha** in this space due to our team's existing track record in making similar successful investments. A Partner of Houghton Street Partners was the deal partner at ASC Asian Equity that bought into MHS Aviation in 1999 via an MBO and exited in 2003, achieving 33% IRR and 2.8x MoIC.

- Globally, the helicopter industry is very **attractive**
 - Moderately high margins of 22-24% on EBITDA with non-cyclical revenues
 - Highly consolidated country markets where market share leaders can be found in the mid-cap size segments
- In Asia, **Thailand and Malaysia** are the most promising markets to consider
 - Sustainable growth in demand expected due to large oil & gas companies concerns in vast gas fields offshore from the two countries
 - Respective markets are highly concentrated dominated by only two to three players
- The identified **four potential targets** have strong competitive positions in their respective markets
 - These companies are market share leaders or strong followers
 - Operationally, companies appear solid with strong management in place

We can consider a **copycat** deal in Asia, but we will need to have a clear view of the **exit strategy**. Lack of deals in Asia represents an opportunity for us to lead. On the other hand, we need to carefully evaluate and assess viable exit scenarios. Based on a global analysis of private equity and M&A transactions in the helicopter sector, several themes become apparent.

- Globally, private equity players have been pursuing a **consolidation strategy** especially in Europe
 - For example, KKR made a series of private equity investments into several companies (i.e. Inaer Aviation Group, Bond Air Services etc.) across Europe under holding company Avincis Group as part of buy-and-build strategy
- In Asia, however, this trend has yet to take hold. **Only one deal** has been transacted in the market without an exit yet
 - KKR bought a 30% minority stake in Weststar Aviation Services (Malaysian company) for US\$202m in 2013
- Yet, Houghton Street Partners can lead in this segment due to our team's existing **strong track record** in this segment
- Careful consideration of an **exit strategy** needs to be considered upfront. Preliminary suggestions in order of priority are the following:
 - IPO – KKR is looking to exit Weststar via IPO in 2014 or 2015
 - Secondary Sale to Global PE Funds (KKR, Blackstone) – nice overlap of large-cap entry and mid-cap exit
 - Strategic Sale – Strategic players (HHZ Group, Bristow) could be looking to strengthen position in Southeast Asia

Acquisition Summary

What we like	What we don't like
<ul style="list-style-type: none"> Sustainable growth in demand driven by rise in offshore oil & gas activities, especially in ultra deep-water and deep-water Moderately high profitability (22-24% EBITDA) Non-cyclical industry; contracted and stable revenue stream Contracts with customers are typically long term Resilience of helicopter values due to liquid secondary market and helicopter resale values are widely documented and published No substantial fuel risks, as fuel prices are passed on to customers through cost-plus pricing, which is standard industry practice Attractive valuations through careful deal structuring – leverage Houghton Street Partners' expertise in executing helicopter deals Improve EBITDA by structuring suitable helicopter leasing agreements to reduce operating costs – leverage Houghton Street Partners' financial acumen 	<ul style="list-style-type: none"> Growth of business in steps, not continuous due to contract-based nature of business Few customers drive majority of revenue Low M&A activity globally and in Asia Unproven success of private equity investments in Asia – no successful exit by private equity firm in Asia yet Unable to find exit options/opportunities Lose major contracts with key customers Safety issues and operational risks

I. Overview

Offshore helicopter services appear to be the most attractive within the five broad categories of helicopter services

Helicopter services can be classified into five broad categories:

- **Offshore Energy Support** – provision of energy support services to oil & gas companies, including crew change at offshore platforms and critical aerial works. Majority of helicopter service providers in the world offer services for the oil & gas sector. For top global players (i.e. CHC Helicopter & Bristow Group), bulk of the revenue (>60%) is derived from the provision of oil & gas services, indicating the attractiveness of this sub sector.
- **Safety and Environment** – transportation services for environmental & disaster intervention, and safety & security. Services include fire fighting, aerial surveillance, forestry work, disaster response, law enforcement, maintenance, repair and overhaul.
- **Life and Rescue** – provision of emergency medical services, and search and rescue.
- **Leisure** – transportation services for leisure activities such as sightseeing tours, private chartering for VIPs and filming.
- **Defence** – transportation services for military personnel, equipment and cargo.

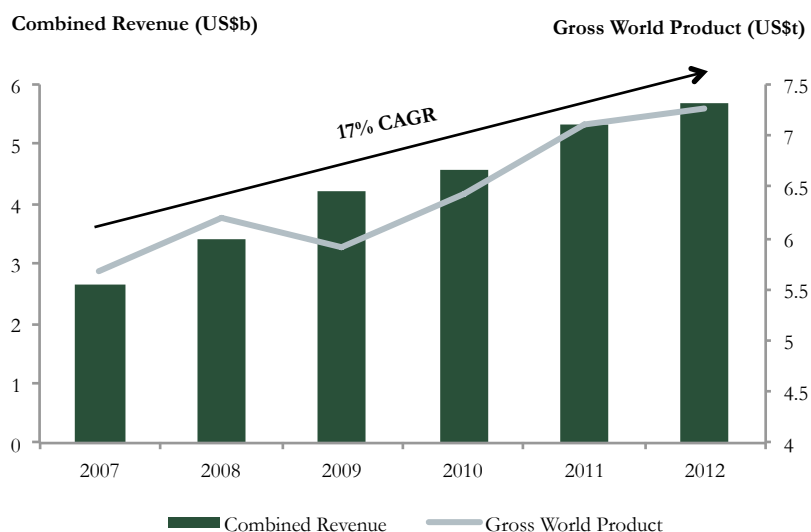
II Market Economics

II.I Market Size, Growth and Drivers

Combined global helicopter services industry is poised to grow significantly over next 5-10 years...

The top eight global players have combined revenues of US\$5.7b in 2012, which grew at 17% CAGR historically (2007-2012)¹, and even demonstrated resilience against the global financial crisis. The global helicopter services industry is poised to grow significantly over the next 5-10 years, on the back of several sectors worldwide including offshore oil & gas exploration and production, emergency medical services, VIP transport, law enforcement and public safety².

Figure 1. Historical Combined Revenue Growth of Top Global Players



Source: Bloomberg as at January 2014 & Houghton Street Partners Analysis

... driven significantly by the growth of the offshore oil and gas sector, as helicopters are the most effective and safest

In particular, the global offshore oil & gas sector is a significant driver, with oil and gas companies moving further and deeper into oceans to find new reserves as existing onshore resources become depleted³. Offshore exploration and production expenditure is projected to grow at 9.4% CAGR, reaching US\$279b in 2018, with ultra deep-water

¹ As global market size data is not readily available, we used combined revenues of the top eight global players as indication of the minimum size of the market

² Global Commercial Helicopter Market 2013 – 2023, MarketResearchReports, November 2013

³ Global Commercial Helicopter Market 2013 – 2023, MarketResearchReports, November 2013

means of transportation to offshore installations

The offshore helicopter industry is non-cyclical as revenue streams are primarily contracted

In addition, industry is gradually globalising, as the helicopter operators tend to follow oil & gas companies that are seeking one standard of service around the world

The helicopter services industry is moderately profitable, with top quartile performers achieving EBITDA margins north of 30%

In addition, industry profits are protected through resilience of helicopter values, low fuel price risks and stability of oil & gas contracts

spending expected to grow at 1.5x that for deep-water⁴. Helicopters have become an integral part of the production chain, as transporting individuals by sea is risky (i.e. from vessel to platform) and slower. With rigs moving deeper into the ocean, demand for medium helicopters, in particular, is expected to increase due to the need for longer ranges and increased passenger capacity. In addition, regulatory bodies are increasing their own oversight functions, and crews are being rotated on and off at periodic intervals⁵, translating to higher trip frequencies and more revenue opportunities for helicopter services. Hence, demand for offshore helicopter services is expected to grow with the expected increase in offshore oil & gas activities, especially in ultra deep-water and deep-water, over the next ten years.

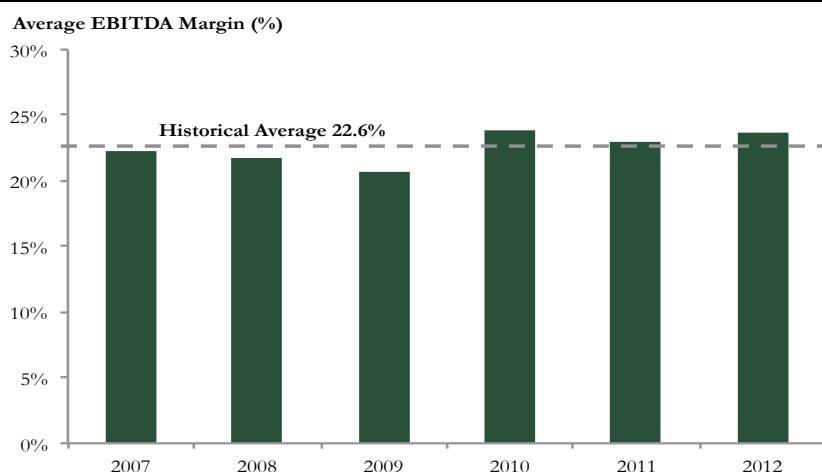
The offshore helicopter services industry is generally non-cyclical in nature, as the revenue streams are primarily contracted, and hence stable.

The industry is gradually globalising, mirroring the growth of a highly globalised oil and gas industry⁶, as the players tend to follow the customers (oil & gas companies) who are seeking helicopter operators that can provide one standard of service in many locations around the world⁷. As a result, top global players such as CHC Helicopters, Bristow Group and Avincis Group have worldwide presences by expanding geographically through the years.

II.II Profitability Analysis

The industry is moderately profitable. Average profitability of top eight global players are 24% EBITDA margin and 8% NPAT margin based on 2012 financials⁸, with top quartile performers achieving EBITDA margins north of 30%.

Figure 2. Historical Average Profitability (EBITDA)⁹ of Top Global Players



Source: Bloomberg as at January 2014 & Houghton Street Partners Analysis

In addition, profitability of the industry is relatively well shielded due to the following:

- **Resilience of Helicopter Values** – Secondary helicopter market is liquid, and the aircraft resale values are widely documented and published by independent firms (Aircraft Bluebooks), hence protecting asset values of the companies.
- **No Substantial Fuel Price Risks** – Fuel prices are passed on to the

⁴ CHC Corporate Presentation Q1 FY2014 & PFC Energy

⁵ CHC Group IPO Prospectus, 16 January 2014

⁶ Flightglobal News 16 June 2013 <<http://www.flightglobal.com/news/articles/paris-helicopter-leasing-goes-global-387121/>>

⁷ CHC Group IPO Prospectus, 16 January 2014

⁸ Bloomberg & Houghton Street Partners Analysis, 2013

customers through cost-plus pricing – companies pay a price marked-up above the operating costs of the business.

High Stability of Oil & Gas Contracts – Customers generally enter into multi-year contracts, typically for periods of four to five years with extension options up to five years. An incumbent operator commonly has a competitive advantage when pursuing future business with its customer because of its relationship with the customer, knowledge of operating site characteristics and demonstrated ability to meet defined service-level requirements. In addition, customers prefer to avoid start-up costs associated with switching to another operator¹⁰.

III Private Equity Deals and Strategic Acquisitions Analysis

Private equity and M&A activity has been moderate, with only 29 transactions since 2005

Private equity and mergers & acquisitions (“M&A”) activity for the industry has been moderate. Since 2005, there have only been 29 M&A transactions, 12 of which are Private Equity (“PE”) or PE-backed deals, while remaining 17 deals are strategic acquisitions (*Appendix – Figure 5*). In particular, Houghton Street Partners has in-house experience and expertise in making similar successful investments; a Partner of Houghton Street Partners was deal partner at ASC Asian Equity that bought into MHS Aviation in 1999 via MBO¹¹ and exited in 2003, achieving 33% IRR and 2.8x MoIC.

III.I Notable Private Equity Deals

Notable private equity deals include buyout of CHC Helicopter Corp (by First Reserve Corp), minority stake in Inaer Aviation Group (by KKR), majority stake in Blueway (by Reiten & Co), and minority stake in Weststar Aviation (by KKR)

In North America, the most significant PE deal was done by First Reserve Corp, which bought CHC Helicopter Corp (Canadian based) for US\$2.3b at 14x EV/EBITDA in 2008, which was and continues to be the largest oilfield services deal. In January 2014, CHC Helicopter went for an IPO, raising US\$310m, but performed below expectations¹².

In Europe, KKR bought a 49% minority stake in Inaer Aviation Group (Spain-based) for US\$462m at 10.5x EV/EBITDA in 2010. Subsequently, in 2011, KKR bought Bond Air Services (UK-based) for US\$439m through World Helicopters (renamed to Avincis Group in 2012), which is the holding company for Inaer Aviation. The series of acquisitions were part of Avincis’ buy and build strategy. Reiten & Co (Norway-based PE firm) has also been active in this sector through a consolidation strategy in Northern Europe. In 2006, Reiten & Co acquired a 60% majority stake in Blueway (Norway-based) for an undisclosed consideration, and Blueway subsequently acquired Lufttransport (Sweden-based) for US\$78m in 2007 and DanCopter (Denmark-based) in 2008 for an undisclosed consideration.

In Asia Pacific, there have been two PE deals since 2005. The first deal was done by Archer Capital, which acquired Australia Helicopters for an undisclosed consideration in 2008, while the second deal was done by KKR, which bought a 30% minority stake in Weststar Aviation Services (Malaysia-based) for US\$202m at rumoured 10.5x EV/EBITDA, leveraging on its experience investing in offshore helicopter services through Avincis Group.

III.II Identified Acquisition Themes

The following acquisition themes have been identified:

- **Lack of private equity and M&A activity globally and in Asia**
 - **Global private equity players are adopting a buy-and-build strategy**
 - **Unproven success of private equity investments**
1. **Lack of Private Equity and M&A Activity Globally and in Asia.** Generally, private equity and M&A activity in this sector has been low, averaging three transactions per year since 2005. Majority of these transactions have taken place in the West with only 7% of the deals executed in Asia.
 2. **Global Private Equity Players are Adopting a Buy-and-Build Strategy.** Private equity players (KKR and Reiten & Co) that are active in this space have been adopting a consolidation strategy in Europe through acquisition of helicopter companies in various European countries. KKR’s first foray into helicopter services in Asia was through Weststar Aviation Services. However, KKR has not yet successfully exited from its investments yet.
 3. **Unproven Success of Private Equity Investments in Asia.** In Asia, the exit

¹⁰ CHC Group IPO Prospectus, 16 Jan 2014

¹¹ ASC Asian Equity backed the management buy-out of MHS Aviation in 1999, with Mr. John Lim (Senior Partner, Houghton Street Partners) as the deal partner

¹² Yahoo Finance, 29 Jan 2014 <<http://finance.yahoo.com/news/chc-group-falls-ipo-prices-153103325.html>>

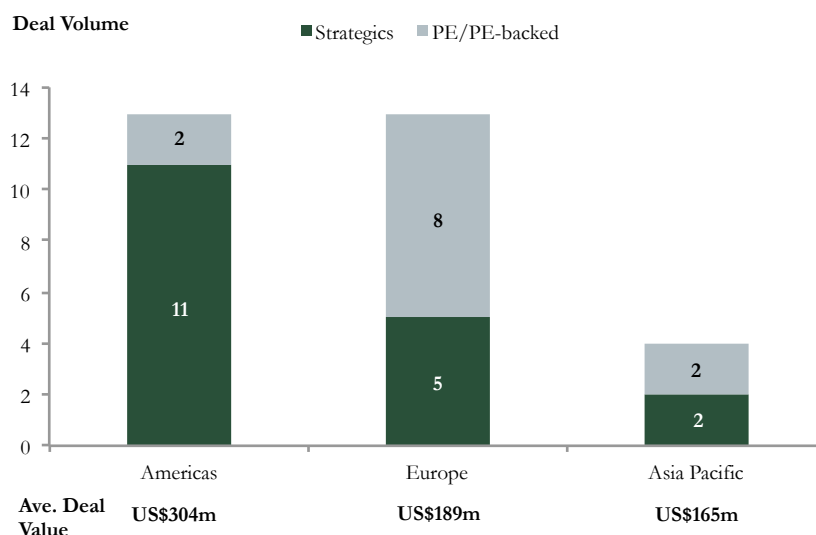
in Asia

- **Trade sale to strategic buyers in Asia will be challenging**

thesis by private equity players remains unproven, as there has been no successful exit since 2005. The West, on the contrary, has seen relatively more successful exits. One notable exit was made by Investindustrial (Italian private equity firm), which bought 75% stake in Inaer in 2005, and subsequently sold 49.9% stake to KKR in 2010, generating **2.8x return**. Another notable exit was Mobeus Equity Partners (UK private equity firm), which backed a management buyout of British International Helicopters in 2006, investing US\$5m for a minority stake, and subsequently sold to Patriot Aerospace Group in a trade sale for US\$10m in 2013, generating **2x return**.

4. **Trade Sale to Strategic Buyers in Asia will be Challenging.** There have only been two strategic acquisitions in Asia Pacific since 2005, indicating low strategic interest in this space. The most recent strategic acquisition in Asia Pacific was by Canadian Helicopters, which bought Helicopters (N.Z.) for US\$128m at 5.9x EV/EBITDA in 2011, which also has operations in Southeast Asia. Trade sale to strategic buyers such as Canadian Helicopters looking to penetrate Asian markets may be a possible exit option.

Figure 3. Total Deal Volume and Deal Value by Region since 2005



Source: Mergersmarket as at December 2013 & Houghton Street Partners Analysis

Average valuations appear less attractive compared to transportation sector, but there appears to be strong multiple arbitrage opportunity for PE

Average valuations of publicly listed helicopter service providers at 7.8x EV/EBITDA, 1.2x P/B and 12.6x P/E¹³ appear less attractive compared to the average valuations¹⁴ of the global transportation industry at 8.4x EV/EBITDA, 2.0x P/B and 14.0x P/E, although there appears to be a significant step up in P/E valuations above EV US\$900m, indicating strong entry-exit multiple arbitrage opportunity for private equity (*Appendix – Figure 6*).

V Core Country Offshore Helicopter Industry Analysis

Malaysia is a moderately attractive market for buyouts, as sector is expected to grow significantly, fuelled by government plans to grow the oil & gas sector

Malaysia – second largest oil & gas producer in Southeast Asia and second largest exporter of liquefied natural gas globally, with future growth bolstered by new tax and investment incentives. The newly elected government (*Barisan Nasional*) that has track record of promoting hydrocarbons investments will further boost oil & gas production, hence ensuring the future sustainability and growth of demand for oil & gas helicopter services. The helicopter services market is highly concentrated, dominated by three players, with high barriers to entry due to high capital expenditure in procuring helicopters, and long standing relationships forged between existing players and oil and gas companies make it challenging for new entrants to enter the market.

¹³ Era Group, with an outlying P/E ratio has been excluded from the calculation

¹⁴ Bloomberg January 2014 & Houghton Street Partners Analysis

=>Buyout Attractiveness: **MODERATELY ATTRACTIVE**

Thailand is a moderately attractive market for buyouts, as profitability is high due to a highly concentrated market

Thailand – limited domestic oil production and reserves (imports make up a significant portion of Thailand's oil consumption). Oil production is expected to decline over the long term, and gas production to remain stagnant. Oil & gas helicopter service provision market is highly concentrated dominated by only two players (SFS Aviation and Thai Aviation Service), possibly due to the long standing relationships forged between the players and the oil & gas companies that make it difficult for new entrants to penetrate the market. However, an oil spill in late July 2013 from a PTT-owned offshore pipeline near the island of Koh Samet may impact the industry negatively as it creates large risks of opposition to offshore exploration by a population already concerned by the environment risks it generates for the tourism industry.

=> Buyout Attractiveness: **MODERATELY ATTRACTIVE**

Indonesia is mildly attractive – although country is rich in oil & gas, it struggles to attract sufficient investment to meet growing domestic demand, hence limiting growth of the oil & gas sector

Indonesia – formerly a net oil exporter, but now the country struggles to attract sufficient investment to meet growing domestic energy consumption because of inadequate infrastructure and complex regulatory environment. Combination of growing domestic oil consumption, natural maturing of oil fields and limited investment into reserve replacement has caused it to become a net importer of oil & gas. The market is fairly concentrated with four main players (PT Travira Air, Pelita Air, Indonesian Air Transport and Gatari Air Service) dominating the entire market, but it is unclear how sustainable the profits will be given limited growth of the oil & gas sector in the future.

=>Buyout Attractiveness: **MILDLY ATTRACTIVE**

Singapore and South Korea are not attractive as both countries are net importers of oil & gas with zero or limited domestic resources

Singapore and South Korea – both are net importers of oil & gas. Singapore has no indigenous hydrocarbon resources, while South Korea has a lack of domestic energy resources as South Korean oil & gas companies aggressively seek overseas exploration and production opportunities instead. The South Korean government plans to dramatically increase nuclear share, shifting away from reliance on oil. There has been low PE interest and M&A activity over the past years. Until positive developments occur, limited opportunities exist in both countries.

=>Buyout Attractiveness: **NOT ATTRACTIVE**

Offshore helicopter markets in Malaysia and Thailand are expected to grow, but industry as a whole may become less attractive in future due to possibility of new entrants

The offshore helicopter services markets in both countries are concentrated with a few players dominating the respective markets. Continual oil & gas exploration activities are expected to fuel demand for helicopter services, ensuring sustainable revenues and profits into the future. However, five forces analysis of individual countries indicate that the industry may become less attractive in future with possible entry of new players into the market. (*Appendix – Figures 7, 8 and 9*).

VII Acquisition Leads

We identified four companies in Malaysia and Thailand that we believe are potential acquisition targets:

Figure 4. Potential Acquisition Targets

Priority	Company	Country	No. of Helos	Year Est.	Deal Rationale	Revenue (US\$m)			NPAT (US\$m)		
						2012	2011	2010	2012	2011	2010
High	Thai Aviation Service	Thailand	9	1987	<ul style="list-style-type: none"> Market leader with 67% market share Sustainable future revenue stream due to long standing relationship with Chevron (largest foreign oil and gas company in Thailand) 	68.3	60.2	59.5	19.5	15.8	9.6
Medium	MHS Aviation	Malaysia	n.a.	1983	<ul style="list-style-type: none"> Market leader with 60% market share Demonstrated future growth potential through penetration of foreign markets (Mauritania and Timor Leste) 	117.4	99.8	114.2	1.7	-54.7	-4.2
Medium	Awan Inspirasi	Malaysia	7	2006	<ul style="list-style-type: none"> Significant 30% market share occupying 2nd market position Exit opportunity through trade sale to CHC Helicopter (a strategic partner to the company) is high 	64.4	58.6	56.4	1.1	-1.5	3.3
Medium	SFS Aviation	Thailand	9	1990	<ul style="list-style-type: none"> Significant 33% market share Huge growth potential through penetration into new markets (i.e. Myanmar) where main client (PTTEP) is looking to expand into 	33.3	24.3	23.7	7.8	-3.3	2.7

Source: Company Annual Reports, News Articles & Houghton Street Partners Analysis

VIII.I Acquisition Target Profile – Thai Aviation Service (TAS)

Summary

Founded:

1987

Country of Origin:

Indonesia

Current Shareholding:

CHC Helicopter	29.9%
Pimra Intharawithayanant	23.3%
Polawat Intharawithayanant	23.2%
Phithak Intharawithayanant	21.7%
Anek Srisanit	0.2%

Helicopter Fleet:

Type	No. of Aircraft	Service
Sikorsky S76	8	Offshore
Sikorsky S92	2	Offshore

Management Team:

Captain Craig Havas – Deputy Managing Director & Director of Flight Ops

Financials:

US\$m	2008	2009	2010	2011	2012
Revenue	43.6	60.6	59.5	60.1	68.3
EBIT	4.7 (11%)	1.3 (2%)	2.3 (4%)	5.5 (9%)	9.4 (14%)
NPAT	3.2 (7%)	0.8 (1%)	1.2 (2%)	3.3 (6%)	6.9 (10%)

Employees:

70 pilots – 40 Thai nationals & 30 expats on contract through CHC

Corporate Overview

Founded in 1987, TAS is the pioneer in aviation offshore support operations in Thailand.

TAS provides offshore helicopter services to oil & gas companies in Thailand. Its main clients are Texaco, Chevron, BP, PGS Geophysical, GFI Oil & Gas, INC, Pearl Oil, PGS Asia Pacific, PTT Exploration and Production and Total. The company operates from the U-Tapao International Airport and Nakhon Si Thammarat Airport in support of production and exploration activities in the Gulf of Thailand, including along the territorial waters of Thailand's neighbouring countries, such as Cambodia and Malaysia. TAS also runs an ab initio pilot training programme that brings Thai nationals on board as helicopter pilots.

Throughout 2014, Thai Aviation Services will continue a fleet renewal programme that will result in the import and utilisation of S92 Sikorsky and AgustaWestland AW139 aircraft.

TAS Services:

1. Offshore Oil & Gas Support
2. Medical Evacuation
3. Search & Rescue
4. Hoist Operation
5. Sling Operation
6. Aerial Photography
7. VIP Commuter

Investment Rationale

1. **Strong Sustainable Growth of Oil & Gas Industry in Thailand.** PTTEP and various foreign companies are aggressively exploring for oil reserves through Thailand. The 21st upstream licensing round for 22 blocks is expected to be conducted in 2014, comprising a combination of onshore and offshore projects. Continual gas exploration is expected to occur in the Pattani Trough, which holds the majority of Thailand's gas production, and also in the Malaysia-Thailand Joint Development Area (JDA).
2. **Sustainable Future Revenue Stream Supported by Strong Long Standing Customer Relationships.** Over the years, TAS has built a strong relationship with its main client, Chevron (Thailand's largest foreign oil & gas company). In 2013, the company signed a five-year extension to its existing contract with Chevron, hence securing future revenue stream.
3. **Market Leader for Offshore Helicopter Services in Thailand.** TAS is the market leader with 67% market share for offshore helicopter services in Thailand – almost twice as much market share compared to its competitor, SFS Aviation.
4. **Ability to Leverage CHC's Global Branding and Expertise in Helicopter Operations.** TAS is able to leverage CHC Group's strong global branding, wide geographical reach, deep relationships with oil & gas companies and operational expertise to grow the business.

Contact Details

Address:	Key Persons to Contact:
121/51 RS Tower Building, 12th Floor Ratchadapisek Road, Dindeang Dindeang, Bangkok 10900 Thailand T: +66 2 641 2888 F: +66 2 641 2871 Email: info@tasl.co.th	Suwanwat Khowworakul Kongsiri Buranawet

VIII.II Acquisition Target Profile – MHS Aviation

Summary

Founded:

1983

Country of Origin:

Malaysia

Current Shareholding

DRIR Equities Sdn Bhd	49%
Boustead Holdings Bhd	51%

Helicopter Fleet:

Type	No. of Aircraft
Rotary Wing ¹⁵	21
Fixed Wing ¹⁶	6

Management Team:

Tan Sri Dato' Lodin Wok Kamaruddin (Chairman)
Ma'som Bin Mahadi (CEO)

Financials:

US\$m	2008	2009	2010	2011	2012
Revenue	144	117	114	99	117
EBIT	0.1 (0.1%)	0.4 (0.3%)	0.4 (0.4%)	-49	14 (12%)
NPAT	-0.03	0.1	-4.2	-54	1.7 (2%)

Employees:

n.a.

Corporate Overview

Founded in 1983, MHS Aviation Berhad (MHS) originally started out as Malaysian Helicopter Services. The company pioneered the helicopter services industry in Malaysia, and is currently the largest and most experienced provider of helicopter transport services as well as emergency medical services and search and rescue for the Malaysian oil & gas industry. MHS Aviation also provides aircraft charter for both helicopters and aeroplanes as well as flight training, engineering and technical services.

MHS Aviation's main clients are Petronas, Shell, and ExxonMobil amongst others. Other than Malaysia, it also operates overseas such as Mauritania and Timor Leste. It is a subsidiary of the Boustead Group – a Malaysian listed company that has operations and activities spanning across a diverse range of business areas.

MHS Aviation Services:

1. Offshore support
2. Ad Hoc Charter
3. Air Transportation
4. Engineering and Technical
5. Technical Training
6. Emergency Medical
7. Flight Support
8. Aircraft Management

Investment Rationale

1. **Market Leader in Offshore Helicopter Services in Malaysia.** MHS Aviation is a clear market leader with 60% market share, with closest competitor (Awan Inspirasi) taking 30% market share.
2. **Strong Future Growth of Malaysia's Oil & Gas Industry.** In 2010, the Malaysian government implemented new tax and investment incentives to boost oil & gas exploration and production in the country, as part of the country's Economic Transformation Programme to be one of Asia's top energy players by 2020. Several major projects are under development in the deep-water areas to develop the oil & gas fields off Sabah and Sarawak.
3. **Demonstrated Capability to Expand Geographically to Grow Revenues.** The company has successfully penetrated new markets overseas (Mauritania and Timor Leste), and we can leverage on this capability to further expand the company geographically to grow revenues.

Contact Details

Address:	Key Persons to Contact:
No 18, Block H Jalan PJU 1A/3 Taipan Damansara 2, Ara Damansara 47301 Petaling Jaya, Malaysia. T: +603 7842 8500 F: +603 7842 8700	Tan Sri Dato' Lodin Wok Kamaruddin Ma'som Bin Mahadi

¹⁵ Types of helicopters include Eurocopters and Sikorsky S76C.

¹⁶ Types of fixed wing aircraft include Socata TB20 and Hawker Beechcraft

VIII.III Acquisition Target Profile – Awan Inspirasi

Summary

Founded:
2006

Country of Origin:
Malaysia

Current Shareholding:
5 shareholders with unknown percentages

Helicopter Fleet:

Type	No. of Aircraft	Service
Eurocopter EC225 LP	3	Offshore
Sikorsky S76C	1	Offshore
AgustaWestland AW139	3	Offshore

Management Team:

Lt. Gen Datuk Md. Hanif Hj Darimi (Retired) – CEO
Tan Chuan Wei – CFO
Captain Brian Currie – COO

Financials:

US\$m	2008	2009	2010	2011	2012
Revenue	15.1	58.2	56.3	58.6	64.4
EBIT	-1.7	-0.9	3.5 (6%)	-1.4	1.6 (3%)
NPAT	-1.8	-1.0	3.3 (6%)	-1.5	1.1 (2%)

Employees:
150 personnel

Corporate Overview

Established in 2006, Awan Inspirasi provides offshore helicopter services for transportation of personnel to offshore exploration and development rigs for oil & gas companies in Malaysia. The company's clients include Petronas, Shell, BHP Billiton, Total, ExxonMobil and BP. In terms of operational and safety standards, the company has met the requirements of the Department of Civil Aviation (DCA) Malaysia and passed all operational audits by Shell Aviation International (SAI) and CHC Helicopter Services (CHC).

Investment Rationale

- Strong Follower in Offshore Helicopter Services Market in Malaysia.** Awan Inspirasi is a strong follower with 30% market share – closest competitor to market leader MHS Aviation.
- Strong Future Growth of Malaysia's Oil & Gas Industry.** In 2010, the Malaysian government implemented new tax and investment incentives to boost oil & gas exploration and production in the country, as part of the country's Economic Transformation Programme to be one of Asia's top energy players by 2020. Several major projects are under development in the deep-water areas to develop the oil & gas fields off Sabah and Sarawak.
- Ability to Leverage Alliance with CHC Helicopter.** Awan Inspirasi has a strategic alliance with CHC Helicopter – a highly experienced helicopter operator that provides transportation services to both onshore and offshore petroleum markets around the world – and is well poised to take advantage of CHC's operating expertise, geographical reach and global networks to enter new markets and expand geographically.

Contact Details

Address:	Key Persons to Contact:
11th Floor, Menara Perak, 24, Jalan Perak, 50450 Kuala Lumpur, Malaysia T: +603 2264 5555 F: +603 2164 3630 Email: info.awan@spkb.net	Lt Gen Datuk Md. Hanif Bin Hj Darimi Tan Chuan Wei Captain Brian Currie

VIII.IV Acquisition Target Profile – Si-Chang Flying Services (SFS) Aviation

Summary

Founded:

1990

Country of Origin:

Thailand

Current Shareholding:

Thisanu Ratanarat	56.6%
Chira Ratanarat	41.2%
Jariya Brokkelman	1.16%
Boon Vanasin	0.55%
Phatthanachai Thanasiri	0.14%
Khunying Thongtip Ratanarat	0.11%
Renu Sibunruang	0.08%
Phongrit Wattanapahu	0.06%
Phuangphayom Kecoool	0.01%
Ruangsak Chaowarat	0.01%
Wanthanee Kharoek	0.009%

Helicopter Fleet:

Type	No. of Aircraft	Service
Kawasaki BK117	2	Onshore
Sikorsky S76C+	3	Offshore
AgustaWestland AW139	4	Offshore
Eurocopter AS350	3 (leased ¹⁷)	Offshore

Management Team:

Chira Ratanarat – Founder & Chairman

Thisanu Ratanarat – CEO

Financials:

US\$m	2008	2009	2010	2011	2012
Revenue	23.0	23.4	23.6	24.2	33.3
EBIT	3.2 (14%)	4.5 (19%)	4.6 (19%)	-2.6	9.3 (28%)
NPAT	1.1 (5%)	2.5 (11%)	2.7 (12%)	-3.3	7.8 (23%)

Employees:

150 personnel – 48 pilots (8 instructor pilots), 52 maintenance crew, 50 support function staff

Corporate Overview

In 1990, SFS Aviation was established as the first civilian helicopter operator in Thailand providing onshore helicopter services. In 2005, the company launched its offshore helicopter services to PTT Exploration and Production Public Company Limited (PTTEP) – national petroleum exploration and production company – and became the first Thai offshore helicopter operator in the country.

SFS Aviation offers offshore helicopter services to oil & gas companies. Its customers include PTTEP, PTT, Total, Carigali-PTTEPI (CPOC), BG, Mitsui, Chevron, Mubadala, Nu Coastal and other E&P subcontractors.

The company also provides onshore helicopter services such as TV, filming, survey and construction support. In addition, it offers helicopter dry leasing services with target markets: Indonesia, Myanmar, Philippines, Malaysia and Thailand.

On-going developments include:

1. AB-INITIO pilot school in Phuket
2. AgustaWestland Service Centre (to support Thai army)
3. Honeywell agency for Thailand

Significant achievements include:

1. Zero accident record
2. First Thai offshore helicopter instructor pilot
3. First in-house CRM instructors for Thailand
4. Regular 95% monthly service availability (above industrial average of 85-90%)
5. First to operate AgustaWestland AW139 in SEA
6. Appointed by AgustaWestland as authorised service centre

Investment Rationale

1. **Strong Sustainable Growth of Oil & Gas Industry in Thailand.** PTTEP and various foreign companies are aggressively exploring for oil reserves through Thailand. The 21st upstream licensing round for 22 blocks is expected to be conducted in 2014, comprising a combination of onshore and offshore projects. Continual gas exploration is expected to occur in the Pattani Trough, which holds the majority of Thailand's gas production, and also in the Malaysia-Thailand Joint Development Area (JDA).
2. **Strong Follower with Significant 33% Market Share.** SFS Aviation occupies 2nd market position in Thailand, and is one of two offshore helicopter operators in the country.
3. **Zero Accident Safety Track Record.** The company has achieved zero accident operating history till date, and is recognised as a leader in Safety Management System.

¹⁷ On lease as part of JV with Helipartner

4. **Huge Growth Potential through Penetration into New Markets.** The company's main client (PTTEP) is looking to expand oil and gas exploration and production into Myanmar, presenting a strong opportunity for company to follow main client penetrating into the new market.

Contact Details

Address:	Key Persons to Contact:
26/40 12th Floor Orakarn Building, Chidlom Road, Lumpini, Patumwan, Bangkok 10330 Thailand T: +66 (0) 2254 3210 F: +66 (0) 2253 2911 Email: kl.info@sfs.co.th	Thisanu Ratanrarat Chira Ratanarat

IX Appendix

Figure 5 shows the list of private equity and other M&A transactions that have taken place since 2005. Landmark private equity deals with relatively more extensive news coverage are shaded green.

Figure 5. Private Equity and other M&A Transactions since 2005

Date	Target	Target Description	Country	Buyer	EV (US\$m)	Deal Value (US\$m)	EV/ EBITDA	Deal Rationale	Deal Type
9/10/13	Weststar Aviation Services (30% Stake)	Provider of offshore helicopter transportation services to the oil & gas industry, with a stable of blue chip oil & gas companies as customers	Malaysia	Kohlberg Kravis Roberts & Co	673	202	10.5 ¹⁸	Geographical expansion	PE
13/5/13	British International Helicopters Limited	Provides offshore helicopter operations and provides support to the defence and military sectors	UK	Patriot Aerospace Group	n.a.	n.a.	n.a.	Consolidation and extend service offering	Strategic
2/5/13	Evergreen Helicopters, Inc.	Provision of air transportation services through a fleet of heavy and medium lift helicopters, light helicopters, and fixed-wing aircraft	USA	Erickson Air-Crane	250	250	4.4	Extend service offering	Strategic
31/12/12	Sundance Helicopters, Inc	Helicopter tour operator. One of the most experienced Grand Canyon helicopter tour operators in Las Vegas	USA	Air Methods Corporation	44	44	n.a.	Extend service offering	Strategic
4/10/12	Cougar Helicopters Inc. (40% Stake)	Provides helicopter transportation services to offshore oil & gas fields off the coast of Newfoundland and Nova Scotia	Canada	Bristow Group Inc	625	250	n.a.	Geographical expansion	Strategic
1/11/11	Nordlandsflyg AB	Swedish helicopter operator which provides search and rescue ("SAR") services	Sweden	Sjofartsverket AB	48	48	n.a.	New business expansion	Strategic
15/9/11	Rotorcraft Leasing Company	Operation and leasing of helicopters to the oil & gas industry	USA	Sankaty Advisors	n.a.	250	n.a.	Re-financing and re-branding	PE
1/8/11	Omniflight Helicopters, Inc.	Provision of air medical services, aircraft maintenance and inspection	USA	Air Methods Corporation	200	200	n.a.	Strengthen existing market position	Strategic
2/5/11	Bond Aviation Group Limited	Provision of onshore and offshore helicopter services to the emergency services, police and oil & gas operators. A subsidiary of the Avincis Group	UK	Avincis Group	439	439	86.5	Geographical expansion and buy-and-build	PE backed
11/7/11	Helicopters (N.Z.) Limited	New Zealand's largest helicopter owner and operator, offering onshore and offshore oil & gas, mineral exploration, military support, hydro and utilities, forest management, construction, air ambulance and SAR	New Zealand	Canadian Helicopters Limited	128	128	5.9	Geographical expansion	Strategic
29/4/10	Inaer (49.9% Stake)	Provision of aerial emergency services and aircraft maintenance for mission critical operations such as medical emergency, civil protection, sea and mountain SAR, coast and fishing surveillance and fire fighting	Spain	Kohlberg Kravis Roberts & Co	1,098	462	10.5	Geographical expansion and buy-and-build	PE
14/8/09	Helisur Helicopteros del Sur S.A. (75% Stake)	Largest helicopter operator in Peru, providing services to oil & gas industry, mining and construction	Peru	UTair Aviacompany OAO	133	100	n.a.	Geographical expansion	Strategic
26/5/09	Lider Aviacao Holding SA (42.5% Stake)	Operates the largest helicopter fleet in Brazil, serving the oil & gas industry	Brazil	BL Participacoes	480	174	n.a.	Geographical expansion and new market penetration	Strategic
31/10/08	Norsk Helikopter AS (51% Stake)	Norwegian helicopter company that offers transportation services to oil installations in the North Sea	Norway	Bristow Helicopters Limited	n.a.	n.a.	n.a.	Geographical expansion	Strategic
1/11/08	Australian Helicopters	Provides mission-critical helicopter support for a range of services including emergency medical, SAR, surveillance operations, law enforcement, aerial work and marine pilot transfer	Australia	Archer Capital Fund 1	n.a.	n.a.	n.a.	Portfolio diversification	PE
9/7/08	DanCopter A/S	Provides helicopter transport of personnel and material from base to offshore installation in the North Sea, Norwegian Sea and Barents Sea	Denmark	Blueway AS	n.a.	n.a.	n.a.	Geographical expansion	PE backed
30/8/08	Helisur Helicopteros del Sur S.A.; Aviation SA	Peru-based provider of helicopter transportation services; Peruvian aviation company	Spain	Website Capital Limited	22	22	n.a.	Leverage operational expertise and experience	PE
16/9/08	CHC Helicopter Corporation (Largest-Ever Oilfield Services Buyout)	One of the world's largest helicopter services companies, providing heavy and medium helicopter services to the global offshore oil & gas industry	Canada	First Reserve Corporation	2,370	2,370	14.3	Leverage operational expertise in energy sector	PE
5/9/07	Copterline Oy (66% Stake)	Finland based company engaged in the civilian transportation services across the Gulf of Finland	Finland	Ilmarinen Suomi-Rahasto I Ky	n.a.	n.a.	n.a.	Portfolio diversification	PE
1/4/07	DanCopter A/S	Provides helicopter transport of personnel and material from base to offshore installation in the North Sea, Norwegian Sea and Barents Sea	Denmark	HeliNor AS	n.a.	n.a.	n.a.	Geographical expansion	Strategic
0/1/00	VIH Aviation Group Ltd.	Provides offshore personnel transport, SAR, aerial construction, forestry, air ambulance, fire fighting, mining exploration and tourism	Canada	Discovery Air Inc	123	123	5.5	Consolidation and extend service offering	Strategic
19/1/07	Luftransport AS; Luftransport AB	Norwegian provider of safe transport and rescue services; Swedish provider of air transport services	Sweden	Blueway AS	78	78	n.a.	Consolidation	PE backed

¹⁸ Rumour based on discussions with industry experts

7/11/06	Kawasaki Helicopter System Ltd. (85% Stake)	Japan based helicopter services provider	Japan	Aero Asahi Corporation	n.a.	n.a.	n.a.	Consolidation	Strategic
1/11/06	Blueway AS (60% Stake)	Nordic helicopter group offering specialised helicopter services within the offshore and onshore market	Norway	Reiten & Co Capital Partners VI L.P.	n.a.	n.a.	n.a.	Portfolio diversification	PE
18/1/07	Keystone Helicopter Corporation (flight services division)	Keystone air medical operations of Keystone Helicopter Corporation.	USA	SEACOR Holdings Inc	12	12	n.a.	Strengthen existing market position	Strategic
21/6/06	Great Slave Helicopters Ltd	Canadian helicopter company serving the oil & gas exploration, diamond mining, forestry, fire fighting and construction industries	Canada	Discovery Air Inc	105	105	n.a.	Consolidation and extend service offering	Strategic
29/12/05	Inaer (75% Stake)	Provides aerial emergency services and aircraft maintenance for mission critical operations such as medical emergency, civil protection, SAR, surveillance, fire fighting, training and aircraft maintenance	Spain	Helicapital Inversiones Aereas SL	324	243	n.a.	Strengthen existing market position	PE
29/7/05	OMNI Energy Services Corp. (Aviation Unit)	US-based aviation unit of OMNI Energy Services Corp	USA	RLC	11	11	n.a.	Strengthen existing market position	Strategic
8/3/05	Lufthansa AS; Lufthansa AB	Norwegian provider of safe transport and rescue services; Swedish provider of air transport services	Norway	Norsk Helikopter AS	32	32	n.a.	Strengthen existing market position and penetrate new markets	Strategic
8/3/05	Lufthansa AS; Lufthansa AB	Norwegian provider of safe transport and rescue services; Swedish provider of air transport services	Norway	Norsk Helikopter AS	32	32	n.a.	Strengthen existing market position and penetrate new markets	Strategic

Source: Mergermarket as at December 2013 & Houghton Street Partners Analysis

Note: Private equity deals that we consider as landmark are shaded green

Figure 6. Valuations of Public Listed Comparables

Company Name	Capitalisation (US\$m)		Key Financials T12M (US\$m)				Margins T12M (%)			Valuations T12M (x)				
	Mkt Cap	EV	Sales	EBITDA	EBIT	NPAT	EBITDA	EBIT	NPAT	EV/Sales	EV/EBITDA	EV/EBIT	P/E	P/B
Bristow Group	2,887	3,413	1,596	302	204	214	19%	13%	13%	2.1x	11.3x	16.7x	17.5x	1.5x
Citic Offshore Helicopter	799	980	184	n.a.	36	26	n.a.	20%	14%	5.3x	n.a.	27.3x	27.6x	1.8x
PHI Inc	632	941	752	143	96	46	19%	13%	6%	1.3x	6.6x	9.8x	16.4x	1.0x
Era Group	688	908	294	74	28	21	25%	10%	7%	3.1x	12.2x	32.0x	80.0x	1.2x
Abu Dhabi Aviation	341	488	447	n.a.	42	62	n.a.	9%	14%	1.1x	n.a.	11.6x	5.5x	0.7x
HNZ Group	264	313	250	76	60	20	31%	24%	8%	1.3x	4.1x	5.2x	6.6x	1.2x
Global Vectra Helicorp	2	32	46	7	1	1	15%	2%	3%	0.7x	4.8x	28.7x	2.0x	n.a.

Source: Bloomberg as at December 2013 & Houghton Street Partners Analysis

Figure 7. Overall Comparison between Malaysia and Thailand Offshore Helicopter Industries

Malaysia		Thailand
Market Dynamics and Competitive Landscape		
Market Size & Growth	US\$202m (2012) ¹⁹ Grew at 12.7% CAGR from 2007 to 2012	US\$102m (2012) ²⁰ Grew at 11.1% CAGR from 2007 to 2012
Market Concentration	Fairly concentrated - 3 major players dominate the market	Highly concentrated - 2 major players dominant the market
Players & Market Share	1. MHS Aviation (60% mkt share) 2. Weststar Aviation (10% mkt share) 3. Awan Inspirasi (30% mkt share)	1. SFS Aviation (33% mkt share) 2. Thai Aviation Service (67% mkt share)
Current and Future Demand Analysis		
Oil & Gas Companies	Petronas (national oil company), Lundin, BHP Billiton, ConocoPhillips, ExxonMobil, Hess, KUFPEC, MDC O&G, Murphy Oil, Newfield, Nippon, Petrofac, Roc Oil, Shell, Talisman Energy	PTTEP (national oil company), BG Group, Chevron, Shell
Oil & Gas Reserves & Lifespan ²¹	Oil Proven Reserves: 4.0 billion barrels Gas Proven Reserves: 83 trillion cubic feet Lifespan (combined): Beyond 2027 ²²	Oil Proven Reserves: 0.4 billion barrels Gas Proven Reserves: 11 trillion cubic feet Lifespan (combined): Beyond 2022 ²³
Future Oil & Gas Development	New tax and investment incentives (started in 2010) are part of the country's economic transformation programme to be one of Asia's top energy players by 2020. 1. Oil. Several major projects are under development in the deep-water areas offshore Sabah state, which would bolster country's oil production. In addition, Petronas recently announced discovery of country's first onshore oil and gas field in Sarawak.	Thailand is a net importer of oil and natural gas, but the country is a growing producer of natural gas. 1. Oil. PTTEP and various foreign companies are aggressively exploring oil reserves throughout Thailand. The 21 st upstream licensing round for 22 blocks is expected to be conducted in 2014, comprising a combination of onshore and offshore projects. 2. Gas. Continual exploration expected to occur in the Pattani Trough, which holds the

¹⁹ Company annual reports & Houghton Street Partners analysis

²⁰ Company annual reports & Houghton Street Partners analysis

²¹ U.S. Energy Information Administration, February 2013

²² Oil and gas trends and implications in Malaysia, February 2012 <http://www.academia.edu/2373502/Oil_and_gas_trends_and_implications_in_Malaysia>

²³ Thailand Oil & Gas Report, Business Monitor, October 2013

2. **Gas.** Majority of Malaysia's gas production is offshore Sarawak. Several projects are ongoing to develop the gas fields i.e. Sarawak Gas Project. Also, consortium comprising Petronas, ConocoPhillips and Shell are developing three gas fields off Sabah.

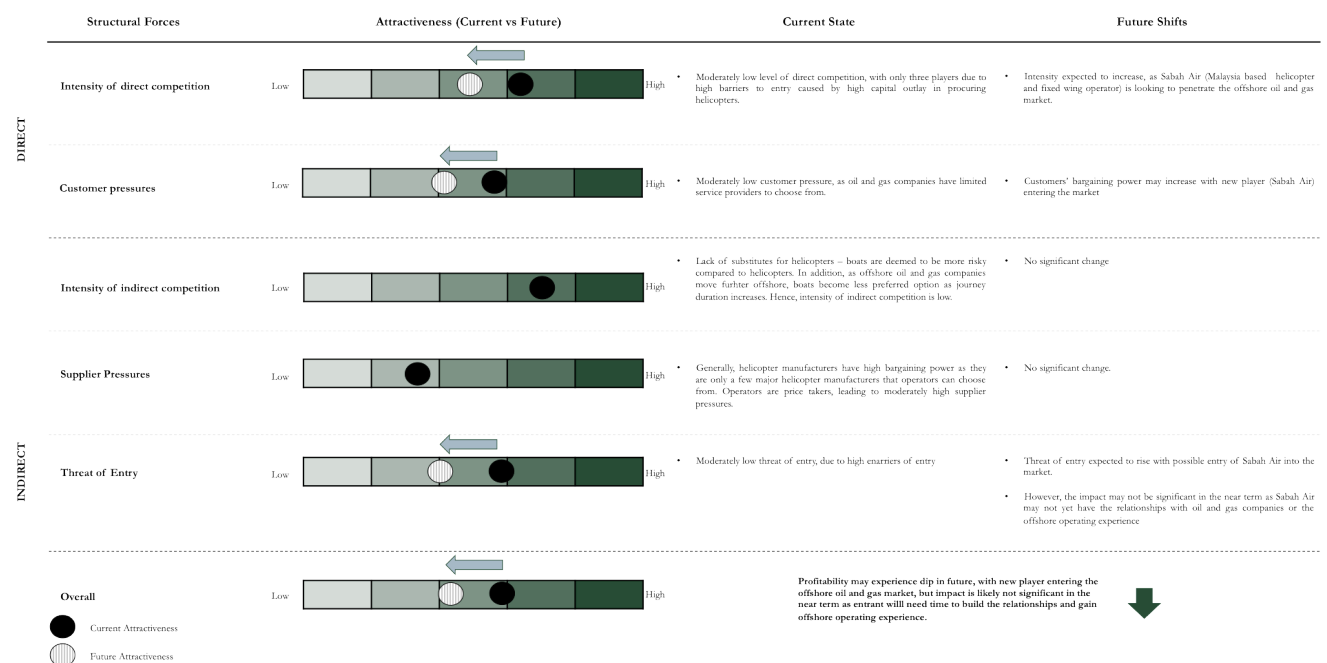
majority of Thailand's gas production, and also in the Malaysia-Thailand Joint Development Area (JDA).

Buyout Attractiveness		
Implications & Opportunities	Demand for helicopter services expected to grow, coupled with a highly concentrated market with high barriers to entry, we believe that the market is attractive for buyouts	Highly concentrated market dominated by two players results in sustainable future profits – we believe that the market is attractive for buyouts
Buyout Attractiveness	MODERATE	MODERATE

Source: U.S. Energy Information Administration, Business Monitor, Company Annual Reports & Houghton Street Partners Analysis

Note: Data extracted in December 2013

Figure 8. Malaysia – Industry Attractiveness Analysis (Current vs Future)



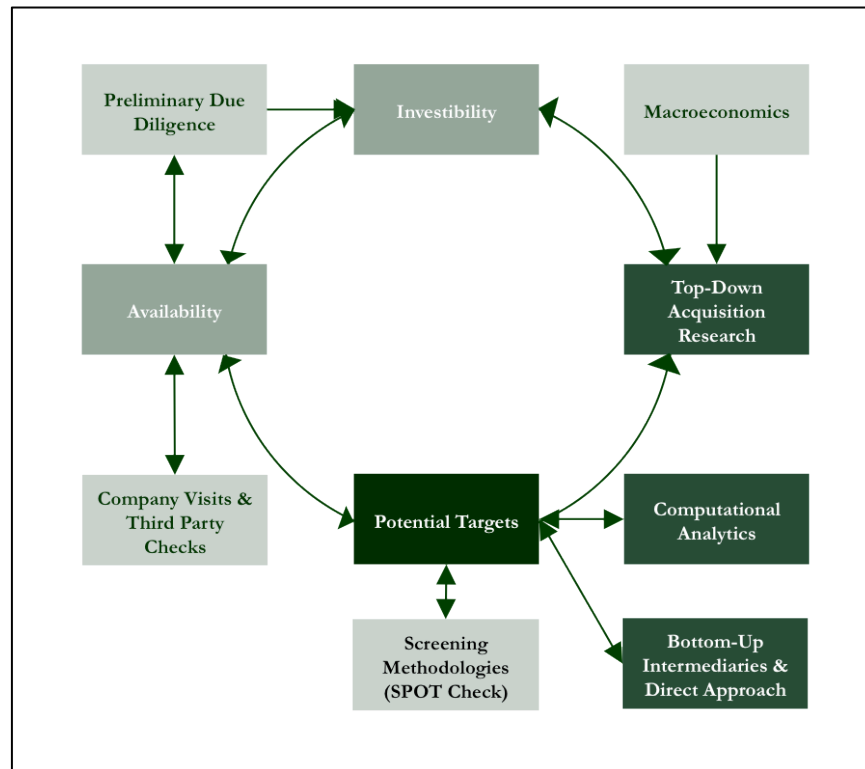
Source: Industry Expert Discussions, Houghton Street Partners Analysis

Figure 9. Thailand – Industry Attractiveness Analysis (Current vs Future)



Source: Industry Expert Discussions, Houghton Street Partners Analysis

Proprietary SPOT Framework for origination



Houghton Street Partners' Acquisition Research is part of the company's proprietary Strategic Portfolio & Original Thinking Framework and is used to generate a list of potential targets. The targets have not been verified for "Availability" and "Investibility", and will form part of our company visits, third-party reference checks and further preliminary due diligence.

This page is intentionally left blank

This page is intentionally left blank

This page is intentionally left blank

Warning: By accepting this document, the recipient agrees to keep this document confidential and secure and is not permitted to disclose, distribute, copy or reproduce original information, extracts, derivative forms of such information, in whole or in part, to any other party without the prior written consent of Houghton Street Partners Private Limited (“Houghton Street Partners”). Should the recipient disagree to the above conditions, the recipient undertakes to immediately return this document and destroy all such related materials and provide a written certificate of destruction to Houghton Street Partners. By accepting this document, the recipient agrees that Houghton Street Partners shall be entitled to seek the remedies of injunction, specific performance or other equitable relief for any failure by the recipient to maintain the confidentiality of this document, provided that this sentence shall not prejudice any other remedies that Houghton Street Partners may have.

Disclosure: The content of this document should only be used for informational purposes and is intended solely for the person to whom it is delivered, and may not be reproduced or redistributed in any format without the prior written approval of Houghton Street Partners. In addition, you are not permitted to alter, obscure or remove any copyright, trademark or any other notices that are provided in connection with this document. This document is not, nor should be relied on in any manner as, tax, investment, legal, accounting or other advice, and does not constitute an offer to sell or a solicitation of an offer to buy any interest in Queen’s Gate Asia Fund L.P. (“The Fund”) or the securities mentioned in the document. This research is not an offer to sell or the solicitation of an offer to invest in any security or fund in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual readers. While care has been taken in preparing this material, Houghton Street Partners does not warrant or represent that the information, recommendations, opinions or conclusions contained in this document are accurate, reliable, complete or current. In all cases, anyone proposing to rely on or use the Information should independently verify and check the accuracy, completeness, reliability and suitability of the Information and should obtain independent and specific advice from appropriate professionals or experts. To the extent permissible by law, Houghton Street Partners shall not be liable for any errors, omissions, defects or misrepresentations in the Information or for any loss or damage suffered by persons who use or rely on such Information (including by reasons of negligence, negligent misstatement or otherwise). If you are not the intended recipient of this document, please return and destroy all information relating to this document immediately and provide us with a written response that this has been promptly executed. You agree that Houghton Street Partners will be able to rely on legal measures such as injunctions and equitable remedies to protect its rights with respect to this Important Notice. Houghton Street Partners reserves the right, at any time and from time to time, in the interests of its own editorial discretion and business judgment to add, modify, or remove any of the information. Should the recipient disagree to the above conditions, the recipient undertakes to immediately return this document and destroy all such related materials and provide a written certificate of destruction to Houghton Street Partners.

© 2014 Houghton Street Partners Private Limited. No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior written consent of Houghton Street Partners.