Off-Shore Helicopter Operations
Matthew Jensen, Bryan Cox, Michael Suldo
Department of Aeronautical Science, Embry-Riddle Aeronautical University, Prescott, AZ

Introduction
This case study research project is based on a foreign oil company desiring to set up and provide helicopter transportation to and from oil rigs in the gulf. The research resulted in three potential options:
1. Purchase a carrier with a current operating certificate
2. Start a new company
3. Contract an existing operator to perform the operations.

Approach
First step was to determine requirements for running such an operation in the U.S. Second was to figure out how to meet such requirements. Third was to determine the cost of each option.

Methods
• Phone interviews with experts in the field
• Use of online sources
• Use of data programs such as Conklin & De Decker
• Real world contract quote from Bristow

Results
The evidence suggested two possibilities with one clearly being the best. Starting a new company or contracting with an existing operator were both determined to be feasible. Starting up a new Part 135 operation requires a large capital investment and time. In contrast, contracting requires very little time and a much smaller capital investment. Operations solely under Part 91 are impossible due to the companies foreign status.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Fixed Cost</th>
<th>Variable Cost</th>
<th>2 Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heli Lease Plus</td>
<td>195,000/month</td>
<td>1,651/hr/yr</td>
<td>$33,446,600.00</td>
</tr>
<tr>
<td>Expense</td>
<td>220,717/year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>228,717/year</td>
<td></td>
<td>$228,717.00</td>
</tr>
<tr>
<td>Crew Pay and Benefits/yr</td>
<td>2,630,302</td>
<td></td>
<td>$2,630,302.00</td>
</tr>
<tr>
<td>Hangar Lease</td>
<td>17,500/month</td>
<td></td>
<td>$468,000.00</td>
</tr>
<tr>
<td>Electricity</td>
<td>66,000/yr</td>
<td></td>
<td>$66,000.00</td>
</tr>
<tr>
<td>Phone/internet</td>
<td>80/month</td>
<td></td>
<td>$1,920.00</td>
</tr>
<tr>
<td>Radio/Skyconnect</td>
<td>63/month</td>
<td></td>
<td>$8,760.00</td>
</tr>
<tr>
<td>Skyconnect set up</td>
<td>12,460</td>
<td></td>
<td>$12,460.00</td>
</tr>
<tr>
<td>Flight Crew Training</td>
<td>560,000 1st year</td>
<td>224,000 2nd year</td>
<td>$704,000.00</td>
</tr>
<tr>
<td>Maintenance Equip.</td>
<td>100,000</td>
<td></td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Parking Cost</td>
<td>220/day</td>
<td></td>
<td>$160,000.00</td>
</tr>
<tr>
<td>Bottom Line Cost</td>
<td></td>
<td></td>
<td>$38,038,959.00</td>
</tr>
</tbody>
</table>

Operating Costs 1

Pricing Facts – Sikorsky S76C++
- Monthly Charge $450,000
- Flight hour charge $2,600
- Fuel surcharge = 48 fuel will be submitted for reimbursement
- FBO Charges will be reimbursed
- Approximate Monthly Flight Hours = 190
- Estimated monthly invoice = $745,500

Table 2

Conclusions
• FAR Part 135 requires operating certificate signed by FAA
• This certificate is costly and time consuming
• All other aspects of starting a new FAR Part 135 operation are just as strenuous as obtaining certification; total cost: $38,038,959.
• Using a contracted operator is far more efficient and less costly; total cost: $17,894,400

Summary
The evidence clearly suggests that best solution is to use a contract through Bristow Group. Table one and two highlight the capital required to accomplish the objectives.

Acknowledgements
Michael Suldo - Bell Helicopters
Vernon Albert - Albert and Associates
Kade Monzelson - Bristow Group
Ampy Catayud - Flight Safety International
Caitlyn Jones - Sutton-James
Neil Getter - Willis Global Aviation
Bryan Cox - Embry Riddle