

By Charlotte Adams

elicopter emergency medical services (HEMS) is a \$2.5-billion business annually in the U.S., but extremely diverse. Some of the top civil operators are privately held, making financial data scarce. And, however similar the aircraft appear to the patients inside them, no two companies are alike.

The only statistic that is usually available is the number of aircraft per provider, although this figure is always debatable. (Some operators have fixed-wing assets, as well, but these are not counted here.) So *Rotor & Wing* focused on the 10 largest nongovernment operators by fleet size. We found that there are 10 civilian operators with more than 10 helicopters, including five with more than 50. The remainder on the civil side is a host of smaller players.

Apart from the recession years, the civilian HEMS fleet has seen torrid growth. The U.S. fleet has grown "a little under 100 percent over the last 10 years" and 35 percent in the last five years, according to Aaron Todd, CEO of Air Methods, the largest operator. But growth from 2008 to 2009 was in the two percent range (see chart page 28).

The total number of U.S. HEMS helicopters is an especially elusive figure. FAA counts 840 air ambulance helicopters, including public use aircraft. Air Methods, using data based on Dr. Ira Blumen's research, pegs the fleet at 861—170 of which are publicuse aircraft. According to HeliCAS (Helicopter Analytical System), the number of U.S. medevac-capable rotorcraft, including government aircraft, is about 960. But as analyst Jon Underdown explained it, that number may include aircraft that are not currently

configured for medevac or that may be stored or parked. Of the HeliCAS number American Eurocopter estimates that 585, or about 61 percent, are their brand. Bell Helicopter, on the other hand, estimates about 850 nongovernment and 150-170 government EMS helos, of which it has a roughly 40 percent share. Demand for air medical services has been soft since the beginning of 2008, with the onset of the recession, Todd conceded. Emergency room admissions for non-ambulatory patients was down about 10 percent in 2008 and about the same level in 2009, he said. It began to stabilize in the summer of 2009, but has "bounced up and down" since then. He attributes this to the downturn, which meant less activity among the population; fewer births; and improved capabilities at community hospitals. The HEMS market is volatile, pointed out Kevin Campbell, vice



president of Avondale Partners. Risks like weather are outside the control of any operator. Piloting these aircraft to crash scenes or other unprepared landing zones day and night, moreover, is challenging and accidents are not as uncommon as one could wish. Increasing government regulations will add to the cost of doing business, said Ray Jaworowski, senior aerospace analyst with Forecast International. HEMS also depends on Medicare reimbursement and government budgets are under increasing pressure.

Growth Opportunities

According to Air Methods' market overview at www.airmethods.com, "hospital and other" players accounted for 48 percent of industry revenues in the year ending June 30, 2010, offering "opportunity for additional consolidation." Todd agreed with this assess-

ment. There have been signs of a trend toward more hospital outsourcing, but it's in the early stages, he advised. Air Evac Lifeteam, which focuses on the community-based model, sees growth opportunities as well (see sidebar page 28). CEO Seth Myers cited a medical journal report stating that 46 million people in the U.S. still don't have access to a Level 1 or 2 trauma center.

Operators see the overall HEMS market as flat or growing slowly. Metro Aviation owner Mike Stanberry perceives individual operators' growth coming largely through consolidation. Metro, a hospital-based operator, also recognizes that there has been growth in the community-based sector and associates that with the trend from twin-engine to single-engine helicopters. American Eurocopter sees a slight movement from hospital- to community-based services, while Bell believes

that the community-based business model has now "stabilized."

PHI Air Medical takes a different view. The lines between the two business models are blurring, said the unit's director, Dave Motzkin. Growth opportunities are in partnerships with hospitals. He refers to an "a la carte" relationship with customers, where each brings its own strengths to the table and hybrid, unique partnerships are formed. So in some cases where PHI owns a program, multiple hospital partners share the financial risk. In others PHI and the hospital partner both provide medical crew members.

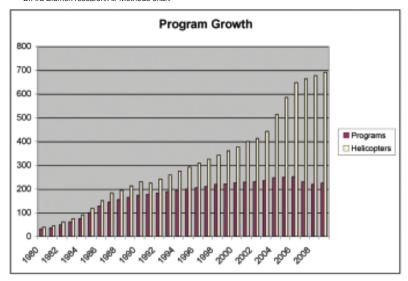
Top Ten

1. Air Methods

At the top in fleet size, revenues and hours flown is **Air Methods.** The operator's fleet includes 306 heli-

Although difficult to peg the number of HEMS aircraft exactly, this chart shows the phenomenal growth in the last ten years.

copters, down slightly from the 314 listed Dec. 31, 2009. One of the few publicly held companies in the industry, the operator employs 957 line pilots-fixed- and rotary-wing-493 mechanics and 765 flight nurses and paramedics. The company flew a total of 129,143 flight hours in 2009, 82,582 through August 2010. It typically transports about 100,000 patients a vear. Gross revenues in 2009 totaled \$511 million with net income of \$29 million. Air Methods combines community-based and hospital-based services in its CBS and HBS divisions, with 31 of the former and 56 of the latter, defined by traditional hospital contracts. It currently has 113 community bases and 125 hospital bases, with one aircraft at each base. The remaining 68 helicopters include spares as well as new aircraft not yet deployed in the field, training aircraft and aircraft for sale. About 15 percent of the fleet is owned by hospital customers. The two divisions operate collectively in about 45 states. Besides its field mechanics at the base level, Air Methods has five depot-level facilities and a completion center in Denver that also serves military and commercial customers. Of the company's 306 helicopters, 195 are NVG-equipped, 130 are HTAWS-equipped, 156 have XM satellite weather, 289 have GPS naviga-



tion, 279 have satellite tracking and 189 have wire-cutting apparatus. Air Medical Group Holdings (AMGH), a holding company which has just announced a major recapitalization program, has three HEMS subsidiaries operating some 165 helicopters. Air Methods, in a recently updated presentation, shows AMGH as second in revenues, with an estimated \$350 million for the year ending June 30, 2010. AMGH, however, is not an operator. Each AMGH subsidiary has its own president, FAA operating certificate and operations team.

2. Air Evac Lifeteam

As a separate entity, AMGH subsidiary, Air Evac Lifeteam (Air Evac), fields a fleet of 110 Bell helicopters, making it No. 2 in fleet size. *Forbes* in

2009 attributed the operator a 9 percent market share, which would work out to revenues of about \$225 million. Air Evac (www.lifeteam.net) estimates it will fly about 58,000 flight hours in 2010. The company operates 93 bases in 14 states, with one aircraft at each base. The 17 remaining helicopters are used in training, for backup or are undergoing refurbishment. Air Evac employs 367 pilots, 215 mechanics, 358 nurses and 345 paramedics. It expects to have completely refurbished and standardized all of its helicopters by the end of this calendar year, a five-year project. Air Evac is also a Part 145 repair station, Bell factory service center and FAA completion center. Air Evac is 100 percent community-based, CEO Myers said, and is considered to be one program in terms of EMS licensure and management. "Our company was formed to place aircraft in rural areas to give rural people access to healthcare," he said. Air Evac also is the largest operator that is already 100 percent NVG-equipped and operational. The fleet is 100 percent satellite-tracked and every ship is equipped with weather radar. Air Evac's membership program has more than 800,000 participants, according to its website. The program allows individuals, for \$50 a year, and entire households, for \$60 a year, to know that if they are flown by Air Evac during that period, the operator will accept whatever the patient's insurer or

Business Models

There are basically three HEMS business models: operator-owned, known as community-based; hospital-owned, aka traditional or hospital-based; and government-operated, or public use. Increasingly, though, there are hybrids of the first two models, as hospitals share more of the financial risk and lease or purchase aircraft. The basic difference between hospital- and community-based is who owns the service, said Dawn Mancuso, CEO of the Association of Air Medical Services (AAMS). In a pure hospital-based service, the hospital owns it. The hospital provides medical direction, nurses and paramedics, and billing. As Metro explains it, the hospital pays the operator a fixed monthly fee plus a per-flight-hour fee. The operator receives some revenues whether or not it flies. Under a pure community-based model the air medical service typically is owned by the aviation operator, who hires or contracts out medical direction, paramedics and flight nurses, provides the aircraft, pilots and mechanics, and patient billing. Revenues depend to a large degree on flight volume.

Medicare provides as payment in full, without asking patients to pay anything that an insurance company may deny.

3. Omniflight

The third-largest operator, Omniflight (www.omniflight.com), fields 90 helicopters, including 14 customerowned or -leased aircraft. The largest component averages less than 10 years old, said CEO Tom Leverton. He highlighted a new membership program, OmniAdvantage. For a payment of \$49 a year per household, members can be sure that if they need Omniflight air medical transport, the company will not ask them "to pay any part of the bill." More than 200 people signed up on the OmniAdvantage website before the program was launched. The company operates in 19 states with 72 bases-44 community-based and 28 hospital-based. The operator employs about 290 helicopter pilots. At the beginning of 2010 Omniflight began to outsource heavy maintenance to Heli-One. Omniflight has regional communications centers and a centralized command center at its headquarters. Among other differentiators, Omniflight cites customization of its aircraft offering to the needs of local environments. "That means we move our fleet around so we can provide the best possible aircraft for the exact location," Leverton said.

4. PHI Air Medical

PHI Air Medical (phiairmedi**cal.com**) is a business unit of publicly held PHI Inc. Although not an independent operator, PHI Air Medical's 82 air ambulance helicopters make it No. 4 on our list. Of these, three are customer-owned and the balance are PHI-owned, said director Motzkin. About 75 percent of the helicopters are 2003 or newer models. Average aircraft uptime is 98 percent but average base-in-service is better than 98 percent, he said. There are about nine backup aircraft. The unit expects to transport about 30,000 patients this year. The unit has 290 pilots, 101

mechanics and 550 medical crew members serving 70 bases. It operates in 18 states. The air medical helicopters are all NVG-equipped and satellite tracked. Motzkin stressed that in addition to the once-yearly check ride, PHI requires pilots of VFR aircraft to attend additional flight training at six-month intervals and

that the second round of training—in the aircraft or a simulator—focuses on the management of inadvertent IMC. Simulation training is extensive, but PHI also requires pilots of single-engine aircraft to conduct autorotations to the ground in the actual aircraft. (The six-month IIMC interval training is not a documented



FAA "check ride," so it is officially considered additional training.)

5. Metro Aviation

Metro Aviation (www.metroaviation.com) is No. 5 in HEMS fleet size with 62 helicopters, 55 of which are twins. Unlike its competitors, Metro is a sole proprietorship. Of its 62 ships, 60 percent are hospital-owned and 40 percent Metro-owned or -leased. Fifteen of the 62 are dedicated backup helicopters-four IFR and 11 VFR. Metro averages 32,000 to 33,000 flight hours a year and about 35,000 to 36,000 operations a year, he said. It expects to transport about 27,000 patients in 2010. It has 49 bases in 15 states plus the District of Columbia. Stanberry cites an approximately 98.6 percent aircraft availability number, attributing that to the depth of Metro's spare parts inventory and number of backup aircraft. Metro carries about \$200,000-worth of inventory per operational helicopter, which Stanberry said is high for the industry.

That's because when a hospital signs a contract with Metro, "they're not signing a contract with Eurocopter," he said. The ratio of operational to backup helicopters is 3.7-to-1. Metro is the only top-five operator that is 100 percent hospital-based, second only in fleet size to Air Methods in the hospital-based sector. It also has a predominantly Eurocopter fleet. Metro's fleet is 100 percent-equipped with NVGs, including backup aircraft, and 100 percent satellite-tracked. The operator employs about 242 fixed- and rotary-wing pilots, 94 field mechanics and 85 to 90 additional mechanics at its Shreveport maintenance and completion facility.

The 160,000-square-foot facility is the largest most comprehensive completion shop in the industry, "probably in the world," both in size and volume, Stanberry said, with customers including almost all HEMS operators. Stanberry also emphasized that all pilots go

Top 10 HEMS Providers by Fleet Size	
Air Methods	306
Air Evac Lifeteam	110
Omniflight	90
PHI Air Medical	82*
Metro Aviation	62
Med-Trans	43
EraMED	29
STAT MedEvac	21
Reach	16**
EagleMed	12
*A unit of PHI whose aircraft are dedicated to HEMS.	
**Based on HAI's 2010 Helicopter Annual.	

through simulator training. In a joint venture with FlightSafety, Metro will be using the first full-motion, Level D, EC135 simulator, which the company expects to be certified by the end of 2010 or early next year. Metro prides itself on accessibility of its top management. Stanberry said. "Our customers have cell phone numbers for me and all our management team," he said.

6. Med-Trans

Med-Trans, No. 6 in fleet size, has 43 helicopters, averaging about four years



old, and no fixed-wing aircraft. (Two of these aircraft are in completion and two are for sale.) The operator employs hybrid versions of both the hospitalbased and community-based business models. Med-Trans employs about 160 pilots. It has established 35 bases in about 16 states and expects to transport more than 15.000 patients in 2010. The company prides itself on its safety equipment. It was the first HEMS operator to reach 100 percent NVG equipage, CEO Fred Buttrell said. About 70 percent of the fleet is equipped with HTAWS and all aircraft are satellite-tracked. Med-Trans also provides quarterly training to all of its pilots—"the highest frequency of any of the major operators."

7. EraMED

EraMED, No.7 in fleet size, is owned by publicly traded Seacor Holdings. It has a fleet of about 29 helicopters and is entirely hospital-based. EraMED is merging with its sister company, Era

Helicopters, and will be a focused line of business. The merger is expected to finish by the end of the year, said Terry Umfleet, EraMED general manager. The company has 15 HEMS bases and operates air medical services in six states. It employs more than 70 HEMS pilots, 28 mechanics and no medical personnel. It services six programs and anticipates more than 12,000 HEMS flight hours in 2010.

8. STAT MedEvac

STAT MedEvac (www.statmedevac.com), No. 8 in fleet size, is a service of the Center for Emergency Medicine of Western Pennsylvania, an independent, non-profit entity directed by a consortium of University of Pittsburgh Medical Center hospitals. STAT MedEvac operates 21 twin-engine helicopters, said Dan Nakles, the operator's manager of business relations and development. Seven helicopters are owned by STAT

MedEvac and the rest are leased. Its uptime rate is 98 percent. It also employs 12 flight followers at its Pittsburgh communications center. The Center for Emergency Medicine, which holds the operator's Part 135 certificate, provides STAT MedEvac's 75 pilots, 31 mechanics, 110 nurses and 90 paramedics. STAT MedEvac flew 9,666 patient flights and a total of 12,536 flight hours in 2009.

9. Reach

Reach (www.reachair.com), No. 9 in fleet size, is based in Santa Rosa, Calif. Company reps did not return *R&Ws* requests for fleet information.

10. EagleMed

EagleMed (www.flyeaglemed.com), also an AMGH subsidiary, with its 12 AStars, is No. 10 in fleet size. It is 100 percent community-based, employs about 100 pilots and operates from 15 bases. 憲

