

This is a preliminary report of a survey completed by 568 active helicopter EMS pilots in September and October of 2010. The solicitation to pilots to participate in this survey included the following introductory statement:

In an attempt to curb the accident rate in helicopter EMS (HEMS) night operations, the FAA implemented a revision to Operations Specification A021 last year which slightly raised the minimum ceiling and visibility requirements for night HEMS operations. The revision also added a pre-flight requirement to calculate and to observe a minimum en route cruise altitude for all HEMS flights, both day and night.

In a preliminary discussion forum on the website of the National EMS Pilots Association, many industry pilots expressed their opinions regarding the appropriateness and the effectiveness of this approach to mitigating the risks associated with night HEMS operations. Based on that feedback, NEMSPA is now implementing a more formal survey to gather the expert opinions of air medical helicopter pilots regarding the effectiveness of the revised OpSpec A021. The information presented below includes only a brief comment on each response. A more detailed analysis of the data will be available for review and download on the NEMSPA website in November 2010.

Pilots were assured their individual submissions were confidential. In fact, no information was collected that could provide means for identification.

DEMOGRAPHIC INFORMATION

Age

Less than 30 years	2.5%
31-40 years	11.3%
41-50 years	32.9%
51-60 years	34.5%
More than 60 years	18.8%

Total Flight Time

Less than 2,000 hours	0.5%
2,000-4,000 hours	20.2%
4,000-6,000 hours	27.9%
More than 6,000 hours	51.4%

Experience as Air Medical Pilot

Less than 2 years	10.4%
2-4 years	14.8%
4-10 years	38.5%
More than 10 years	38.5%

Pilots who file IFR Flight Plans

Never or hardly ever	78.7%
Sometimes	18.2%
About half of the time	2.5%
Most of the time	0.5%
Nearly always	0.2%

Typical Terrain

Mountainous areas	33.4%
Non mountainous areas	66.6%

Q. Do your operator’s visibility minimums mirror those in A021?

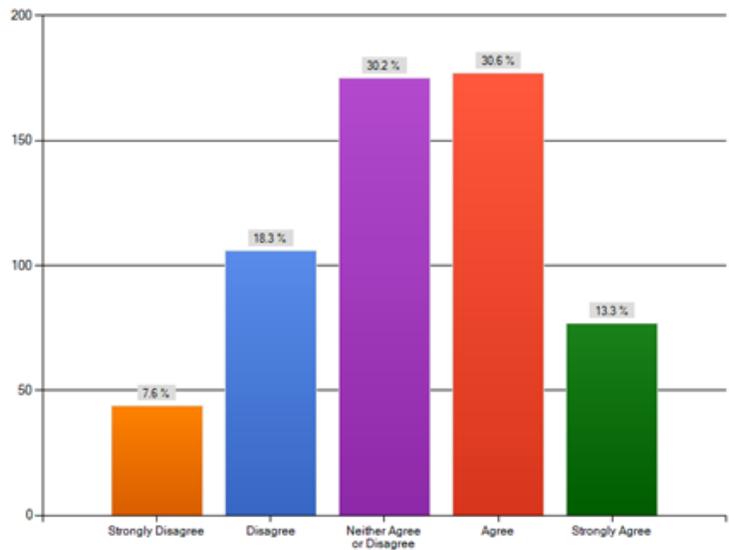
When asked how closely their specific visibility minimums mirrored those required by A021, the pilots answered as follows (“strongly agree” indicates a close correlation):

Strongly Disagree	7.9%
Disagree	4.5%
Neither Agree or Disagree	3.1%
Agree	39.0%
Strongly Agree	45.4%

Nearly 85% indicated their company minimums aligned closely with A021.

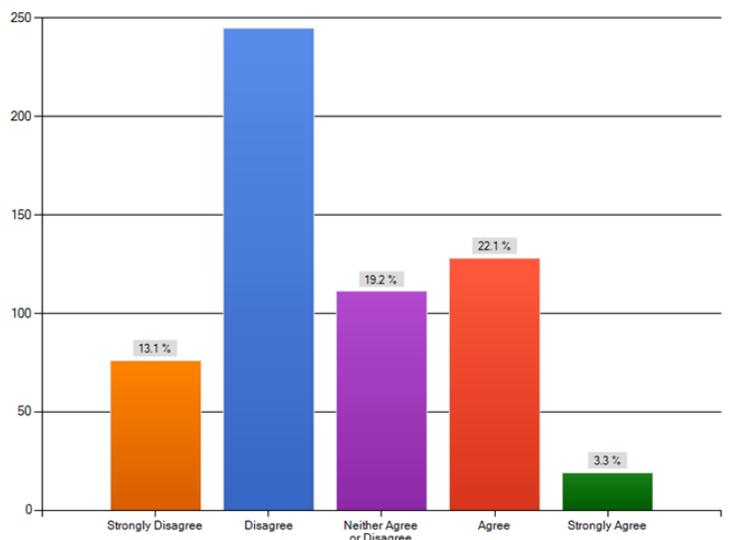
Q. The increased visibility minimums required by A021 have improved the safety of our program.

Approximately 44% believe, or strongly believe that the higher visibility requirements have improved safety. More than 25% believe that safety has not been improved, and the remaining pilots (about 30%) do not have an opinion.



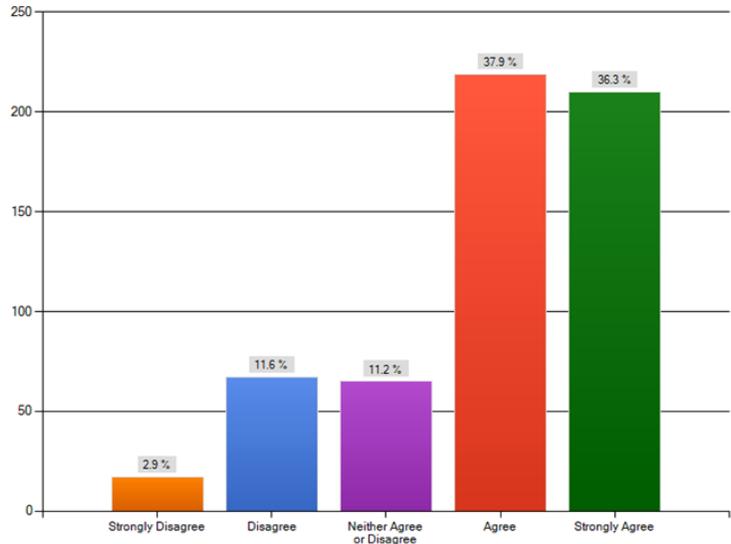
Q. I can easily distinguish between two and three miles of flight visibility.

In this case, only one in four pilots felt somewhat confident in their ability to distinguish between two and three miles of flight visibility. The majority (55%) believed they *could not* tell the difference.



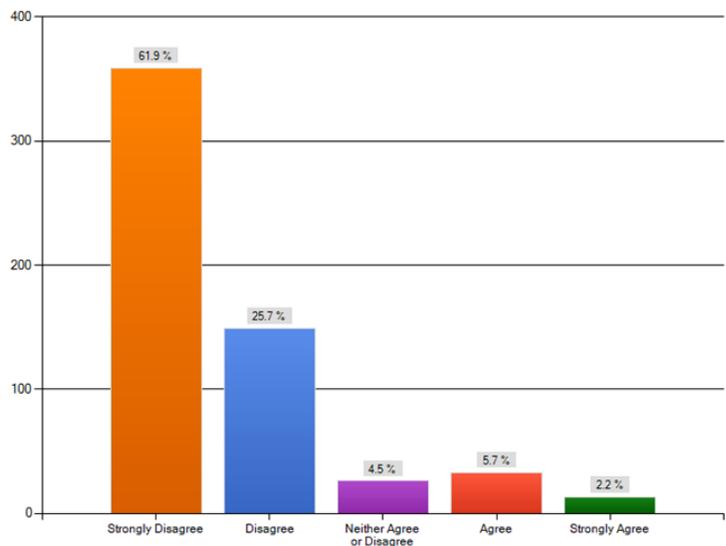
Q. Reducing the visibility minimums lower than given in A021 would compromise safety of flight.

Nearly three out of four air medical pilots believe the current visibility minimums should not be reduced. Less than 15% had a differing opinion.



Q. Managers at my program have used the requirements of A021 to encourage me to accept flights into conditions that are below my own personal minimums.

Only 8% of pilots surveyed indicated this to be factor in their specific program. This data strongly suggests that most programs do not apply pressure to pilots to accept flights into weather conditions they are not comfortable with, even if those conditions do meet minimum requirements.

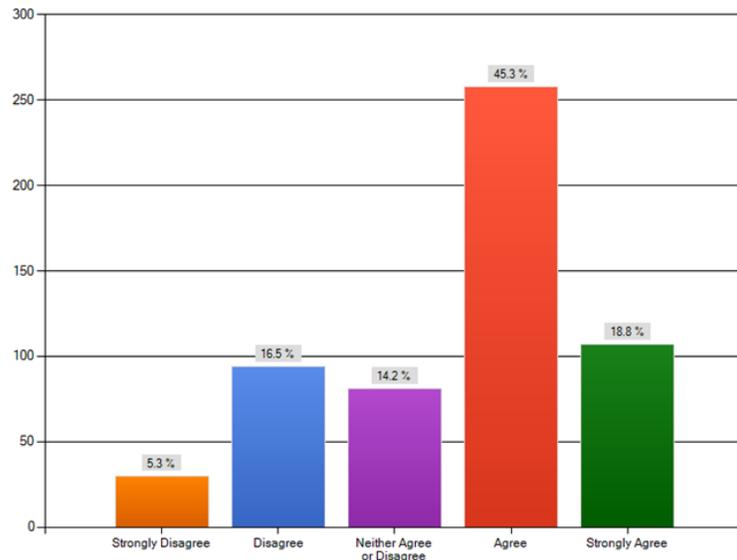


Q. My program or operator has strict written policies in place for determining the minimum safe cruise altitude.

Nearly 78% of pilots indicated this to be the case. Twelve percent showed that it was *not* the case and the remaining 10% were not really sure.

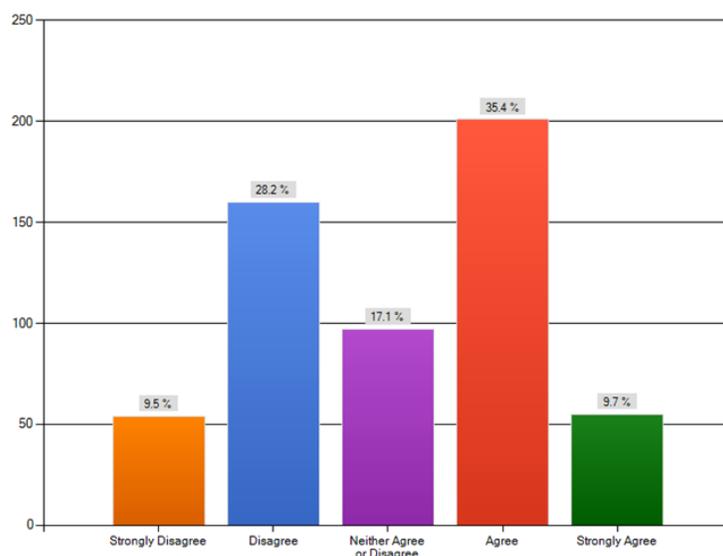
Q. I accurately determine the minimum safe cruise altitude prior to each flight.

Approximately 64% meet the requirement to determine the minimum safe altitude. This may be viewed as somewhat problematic.



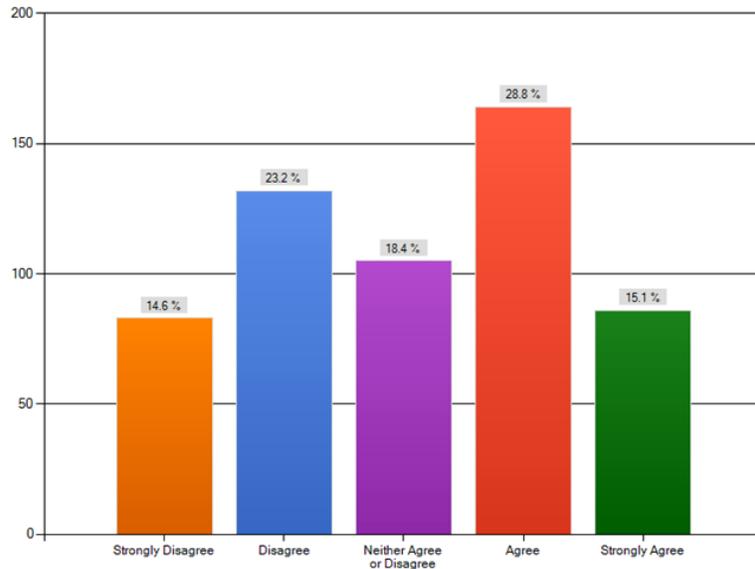
Q. The additional time required to determine the minimum safe cruise altitude does not cause any significant delay.

There were certainly mixed opinions with this important question. About 45% of respondents believed this requirement does not result in a significant delay, while about 38% believed that it does cause a significant delay.



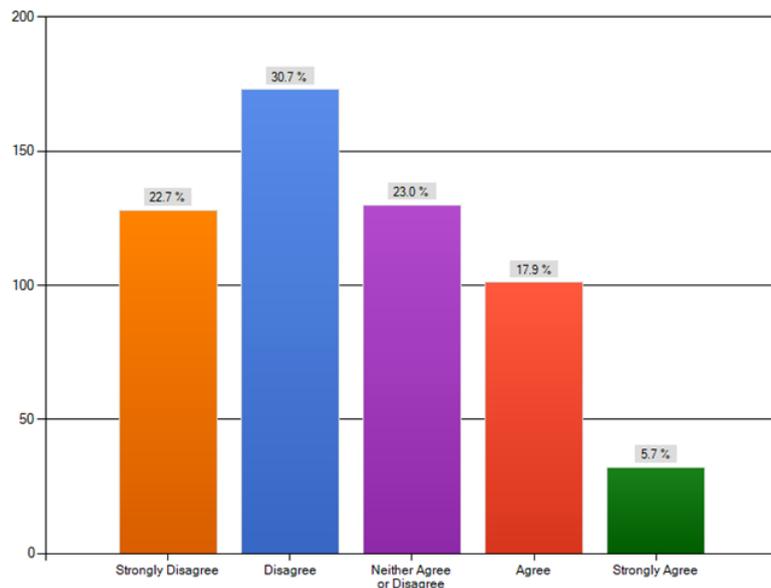
Q. The benefits obtained by determining the minimum safe cruise altitude outweigh any additional time required.

More than 43% of pilots responding believe the benefits outweigh the additional time required.



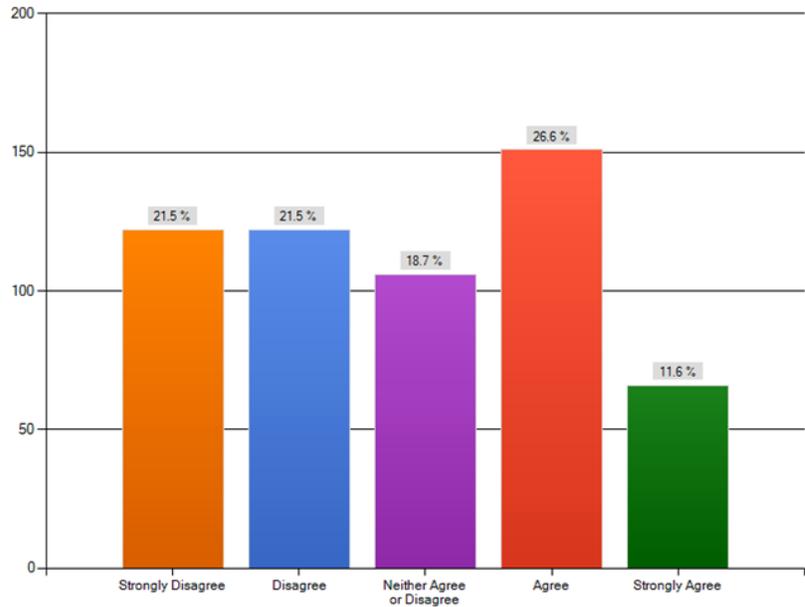
Q. The requirement to determine a minimum safe cruise altitude has increased the safety of my flights.

Less than one in four pilots (23.6%) believe the requirement to provide a minimum safe cruise altitude prior to each flight has increased the safety of those flights. Of that number, only 5.7% had strong convictions in that regard.



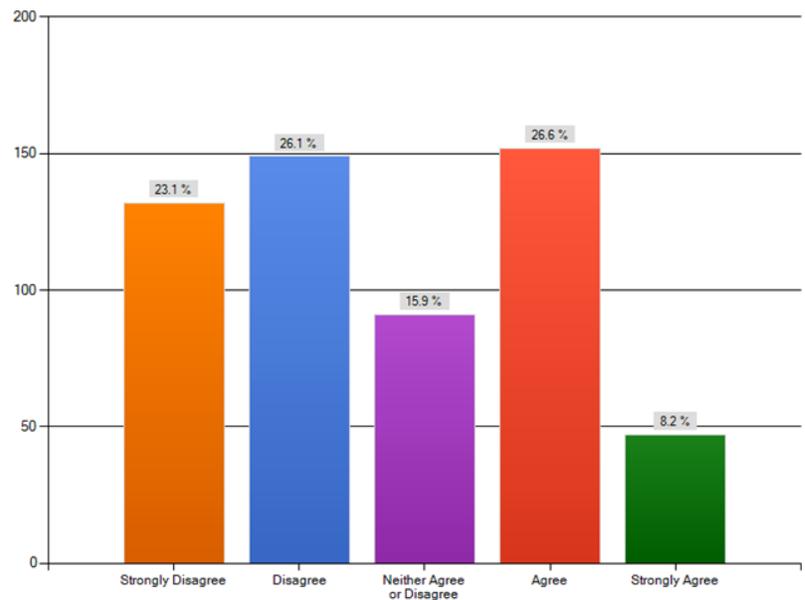
Q. The minimum safe cruise altitude planning requirement should remain in A021.

The overall response rating for this question suggests that pilot opinion is divided on whether or not A021 should remain as a requirement, with 43% opposed to the preflight task and nearly 39% in favor of it remaining. Note that the number of pilots who strongly oppose the requirement are nearly double those who are strongly in favor.



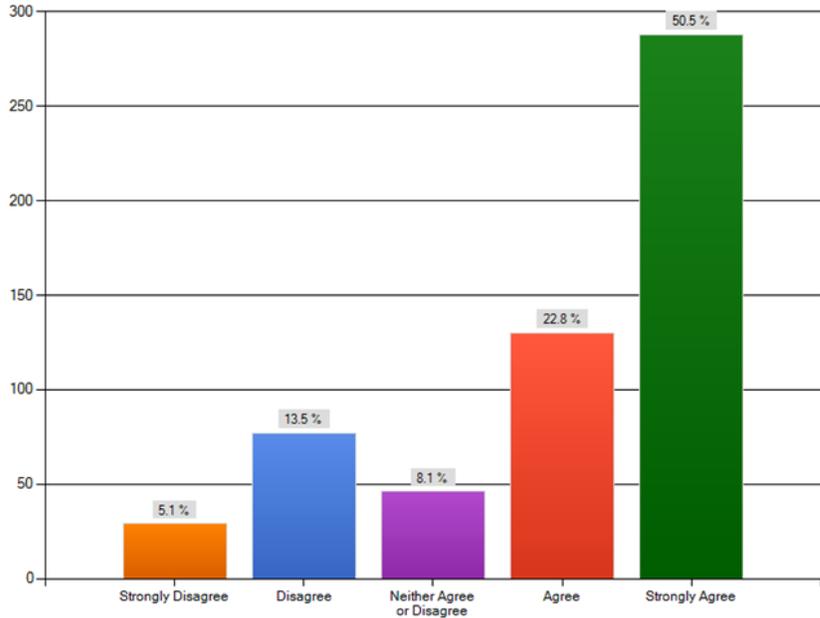
Q. The requirement to document the required highest obstacle for each flight is reasonable.

Nearly half of the pilots surveyed believe the requirement to document the highest obstacle is unreasonable, with almost one in four having strong feelings in this regard. About 35% thought the requirement to be reasonable.



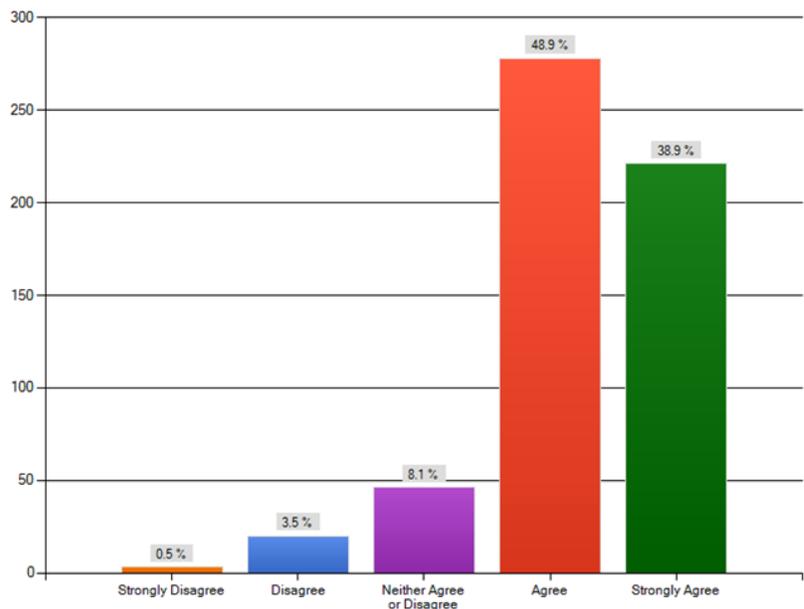
Q. The availability of night vision imaging systems (eg, night vision goggles) should be required for all night VFR HEMS operations.

The responses to this question showed one of the more obvious consensus of pilot opinion, with slightly more than 73% of pilots indicating they believed NVG equipment should be available to them for all night VFR operations, and half of the pilots expressing strong feelings in this regard. On the flip side, nearly one in five pilots (18.6%) did not see the need to require NVG equipment.



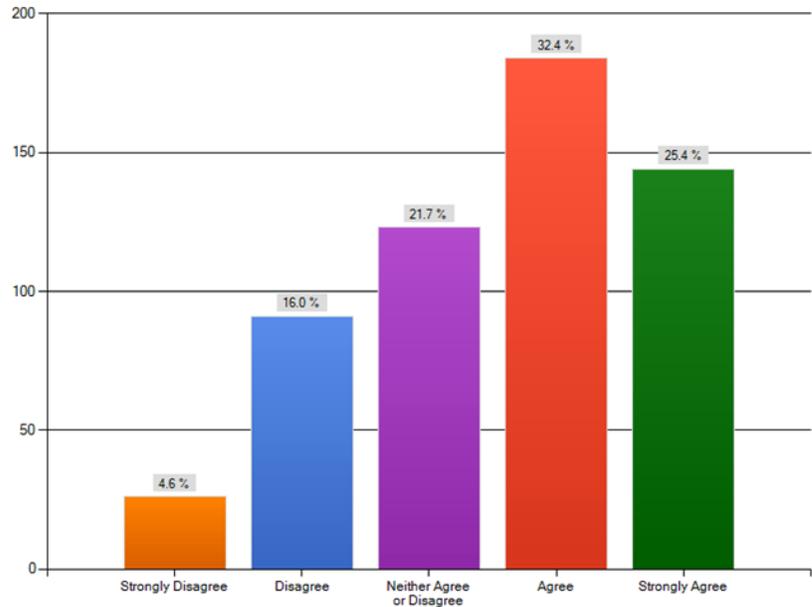
Q. The establishment of a minimum required HEMS specific pilot training curriculum is an important part of improving the safety of HEMS operations.

The pilots were quite unified in their response to this question (more so than any other), with almost a full 88% believing HEMS specific pilot training to be important to improving HEMS safety. Only 4% displayed a counter position on this issue.



Q. The use of flight simulators should be a required element of HEMS specific pilot training.

Again, the use of flight simulators would be generally favored by HEMS pilots, with 58% believing their use should be required and only about 21% not supportive of this endeavor.



Q. Rank the following in order of importance to flight safety in a typical VFR HEMS environment.

No surprising, NVGs are considered the first choice for safety to flight, followed by an autopilot. HTAWS and TCAS/TAS were nearly tied for third place, with HTAWS coming out slightly ahead. Also not surprising, the use of a second pilot came in at a distant fifth place.

