

***Should the FAA notify the flight training industry
before it makes changes to the test question bank?***

**Results of a simple survey conducted by the
Society of Aviation and Flight Educators, Inc. (SAFE)
www.SafePilots.org**



AFS 630 Annual Review Meeting
FAA Airman Testing Standards Branch
Oklahoma City, OK
April 20, 2011

Table of Contents

| | |
|---|----|
| Introduction | 3 |
| Summary of Results | 4 |
| Observations and Recurring Themes | 5 |
| Recommendations | 7 |
| Communiqué Sent to SAFE Members | 8 |
| Online Survey | 9 |
| Member Comments | 10 |

Introduction

The Society of Aviation and Flight Educators (SAFE) was invited to participate in the annual review meeting hosted by the FAA Airman Testing Standards Branch (AFS 630) in Oklahoma City, OK. According to AFS 630, the purpose of the meeting was to “update and receive feedback from aviation industry representatives and education organizations on the current and future initiatives” of AFS 630.

The FAA recently made numerous changes to its test questions; subsequently, the test failure rate has risen significantly. Thus the annual meeting provided an opportune time to raise the issue about the current FAA policy of changing test questions without first notifying the flight training industry. To facilitate feedback from members, SAFE created a simple online survey and sent an email communiqué asking members to participate. In addition to collecting basic metrics, one central question was posed:

Should the FAA notify the flight training industry before it makes changes to the test question bank?

Respondents were able to provide commentary as well. A review of those comments revealed recurring themes that point to other issues related to written tests. In addition to the results of the survey, these issues have been identified herein.

SAFE represents nearly 600 of the industry’s top aviation educators, including the majority of Master Instructors and numerous local and national General Aviation Awards winners in the flight instructor, aviation maintenance, avionics, and FAA Safety Team categories. SAFE is also chairing the GA Pilot Training Reform Symposium in Atlanta, Georgia on May 4-5, 2011.

Summary of Results

Should the FAA notify the flight training industry
before making changes to the test question bank?

ALL Respondents: **YES: 69%**

NO: 31%

Non-DPE Subgroup: **YES: 73%**

NO: 27%

DPE Subgroup: **YES: 41%**

NO: 59%

Total Number of Respondents: **191**

Percentage who are/were Flight or Ground Instructors: **96%**

Percentage who are/were Master Instructors: **37%**

Percentage who are/were Designated Pilot Examiners: **14%**

Cumulative Number of Hours of Instruction Given: **760,000**

Cumulative Number of Check Rides Given: **11,800**

Cumulative Number of Years in Aviation Education: **3,600**

Observations

The pool of SAFE survey respondents had collectively provided more than three-quarters of a million hours of instruction, conducted nearly 12,000 check rides, and been involved in aviation education for a combined 3,600 years.

By more than a 2-to-1 margin, respondents feel the FAA should notify the flight training industry before making changes to the test question bank.

The subgroup of Designated Pilot Examiners (DPEs), however, not only favored not notifying the flight training industry before making changes to test questions, but also selected “No” by more than a 2-to-1 margin over the Non-DPE subgroup.

DPEs routinely witness the end results of our current training system. This group undoubtedly possesses a significant knowledge base about characteristics that distinguish superior pilot applicants from inferior ones. DPEs also know which schools, instructors, and programs consistently produce more knowledgeable and skilled applicants. This begs a question that needs further investigation, namely: how can those who are tasked with training airmen better benefit from the experience of those who are tasked with testing them?

Recurring Themes

One hundred thirty-seven of the 191 survey respondents (72%) provided additional comments. Numerous recurring themes emerged as summarized below:

- Unfortunately, too many in the flight training industry “teach to the test” rather than teaching to knowledge and proficiency.
- Teaching to the correlation and application levels must be the primary objective in flight training over rote memorization to pass written tests.
- Too many test questions are poorly crafted, ambiguous, and have poorly reproduced charts and maps. Moreover, an unacceptable number of the FAA’s “best” answer choices are either wrong or at the very least, debatable. And possible answers for calculated/measured quantities are often too close together, falling within the margin of accuracy that applicants can reasonably ascertain using mechanical E-6Bs and poorly reproduced charts/maps.
- FAA and the flight training industry need to be working as partners toward the same goal. The perception regarding written tests in particular, however, is that the current relationship is unnecessarily adversarial (“us versus them”). Written tests have too many “gotcha” and “trick” questions—specific terms appearing in the commentary—that are incompatible with the objectives of knowledge testing.

- While the FAA should be encouraged and applauded for updating test questions, too many irrelevant, arcane, and impractical questions remain at the expense of new questions about advances in technology that should be incorporated. For example, one respondent reported having to answer a question on celestial navigation during the ATP written. The only reason the respondent was able to answer correctly was due to having been a navigator in the Navy. Others report recurring questions on such topics as “using a timing device while flying between five degree increments on a VOR radial [to] calculate a usable distance to the facility,” NDBs, and ADFs.
- The mutual objective of FAA and industry must be to train pilots who are knowledgeable, skilled, and safe in today’s flight environment. All of the levels of testing need to provide accurate measures of these and other important metrics.
- The integrity and quality of test questions can only be assured through proper vetting.
- If not the specific questions, FAA should at least notify the flight training industry if it has changed the content and/or emphasis of the test question bank so educators can adjust if necessary.
- Given the high cost and time commitments coupled with myriad other difficulties associated with learning to fly, and given the decline in student starts and the abysmal student pilot retention rate, continuing to require written tests that are expensive and perceived to be designed to have an unacceptably high failure rate, rather than to accurately measure knowledge, serves to further discourage applicants and contributes to the problems plaguing the aviation industry.

Recommendations

Based on the results of the survey and the recurring themes found in comments from members, SAFE offers the following recommendations to the FAA:

1. Notify the flight training industry before changing the bank of test questions, especially if those changes result in shifts in content and/or emphasis.
2. Solicit input from, and collaborate with the flight training industry on the form and function of test questions.
3. Develop test questions that are relevant, that have been properly drafted, that are not ambiguous, and that can have only one correct answer.
4. Develop tests whose scores measurably and positively correlate to the practical piloting and decision-making skills of those being tested.
5. Establish a joint steering committee comprised of members from AFS 630 and the flight training industry to collaborate on improving the bank of test questions.
6. Model FAA written tests after proven test methodologies employed by the military, academia, and other organizations.
7. Create Written (or Knowledge) Test Standards similar to Practical Test Standards that define the objectives and standards for the various topic areas. Assuming test questions are then properly formed with unambiguous answers, this would make the actual test questions less relevant while providing a more accurate measure of knowledge.
8. Given the clear disparity of opinion between DPEs and Non-DPEs, investigate methods to facilitate better dialogue between these groups. Consider establishing a voluntary mechanism whereby DPEs can identify trainers who consistently produce inferior applicants and whereby DPEs can provide recommendations for the remedial training of those trainers.

Communiqué Sent to SAFE Members



"Accountability, transparency, fairness, professionalism"

Should the FAA notify the flight training industry before it make changes to the test question bank?

from Doug Stewart, SAFE Chair

On April 20th, AFS 630 (the FAA Airman Testing Standards Branch) will hold its annual review meeting in Oklahoma City. Member Pat Knight and I will represent SAFE at this meeting. The purpose of the review is to "update and receive feedback from aviation industry representatives and education organizations on the current and future initiatives of the FAA Airman Testing Standards Branch."

As many of you are aware, the FAA recently changed the test question bank. As a result, the failure rate quickly exceeded 50%.

Some within the flight training industry feel the FAA should publicly announce whenever it proposes to make changes to the test question bank, thus allowing "training providers and students to adapt learning processes and avoid surprising applicants with unexpected test material".

Others in the industry, however, feel the FAA's move is a good one, and that this method of changing test questions will advance pilot learning above the rote and understanding levels to the application and correlation levels.

So that I can accurately represent the SAFE perspective on this important issue, I urge you please to take a very [simple online survey](#) today. Remember: "We're all about our members!" This is yet another opportunity for SAFE members to have a say in the direction our industry is moving. [Take the survey now!](#)

Sincerely,

Doug Stewart

Online Survey

SAFE Survey

Re: Should the FAA notify the flight training industry before it makes changes to the test question bank?

Thank you for weighing in on this important issue!

Name (optional)

First

Last

Are you, or have you ever been a Flight or Ground Instructor? *

- Yes
 No

Are you, or have you ever been a Master Instructor? *

- Yes
 No

Are you, or have you ever been a Designated Pilot Examiner? *

- Yes
 No

If an instructor, about how many hours of instruction have you given (ground + flight + simulator)?

If an examiner, about how many check rides have you conducted?

How many years have you been involved in aviation education?

Should the FAA notify the flight training industry before it makes changes to the test question bank? *

- Yes
 No

Comments (optional)

Member Comments

Survey Respondents provided the following comments (in no particular order).
“START“ and “END” bracket individual comments.

START— If the testing material actually had a knowledge component, I would support random test question changes. HOWEVER, since there are many times that I as a Master Instructor must READ why the correct answer is the most correct answer, I must agree that the FAA must advise sweeping changes to the test question bank. Especially since they already have a percentage of unpublished test questions.

With proper reform of the knowledge testing process, we could provide much more knowledgeable applicants since the whole process would focus on teaching knowledge VERSUS short-term rote for 1/2 of the testing process! **—END**

START— Yes, I believe the FAA should give some notice and some feedback on the testing aspect of the industry. If there is a different emphasis in the testing and evaluation area, we can be advised of what they are emphasizing and why. For example, all of the knowledge areas are listed in the regulations. If the testing and evaluation process emphasizes one area over the others for reasons of safety, this should be noted, as it is in the practical test standards. In this view, we are not asking the FAA to do something they aren't already doing in the practical test phase. This is not giving away the test, it is exercising leadership by providing direction in the area of classroom or ground school training. **—END**

START— This really isn't a yes/no question. If the FAA continues to release the questions, presumably as a FOIA issue, then yes, the Administration should notify the industry before releasing new questions so that all applicants might have the same opportunity to review the questions prior to taking the test. Not doing so puts the applicants testing earlier in a question cycle at a profound disadvantage compared to those later applicants with access to the questions and an opportunity to prepare their responses prior to sitting for the test.

I argue that the questions should not be released, as a matter of public safety, so that the test might better capture and measure applicants' command of the material tested rather than their ability to parrot prepared responses as a result of prior review. In fact I argue that few applicants prepare their own responses. In my experience most applicants prepare by purchasing answers from commercial vendors. Often these vendors warranty their answers with guarantees of passing the FAA Written Exam. If a change in policy were enacted to either not publish questions or to revise so frequently that publication would not benefit applicants trying to game the system then, no, the Administration would have no need to notify the industry before releasing new questions.

Notification is an artifact of publication (of the question bank). No publication would mean no notification. No publication would also mean better testing, better measurement and mostly likely better learning. **—END**

START— The written is not the end game, it's merely a step towards certification. Making this requirement unnecessarily difficult by forcing instructors and publishers to guess what, from the nearly unlimited pool of aeronautical detail, upon which their students will be tested is most certainly unfair. I don't believe doing so would add anything to enhancing pilot learning. The reality is good pilots are made from good flight training, one on one ground instruction and experience, not from turning the written into a trial by fire. **—END**

START— The PTS's are updated and available on line. Why not the same for the Knowledge Test questions? **—END**

START— The sample test questions should accurately reflect the content of the test bank and should be made available to students and instructors several months before any changes are implemented in the actual tests.

It seems to me that this is very counterproductive if we are really interested in encouraging new student pilot starts in an effort to increase the number of pilots in general. **—END**

START— I think it's unreasonable to require the test giver provide the questions to an exam. Adults should be able to learn the material and achieve the state of being able to correlate the information learned throughout the student phase of their aviation experience. **—END**

START— My experience with FAA tests is that there is often a debatable answer and the official FAA answer. Over the years the questions have moved from practical knowledge to academic knowledge, forcing the necessity for rote learning instead of correlation, if one wants to pass. Unless one is inside the head of the question writer and knows the point the question is trying to make, the answer can be, it depends.

It is still a learning process to review the actual test questions, evaluate each possible answer, and understand why one answer is better than the others. My guess is that if you were to have FAA personnel take one of their own tests with only normal study of their books, not many would pass on the first try. It wasn't always like this. **—END**

START— There is no need to notify if the following are done.

1. Provide information to instructors regarding what subject matter is on the test. As a professor, I don't give tests to students without telling them what to study to prepare for the tests. Current tests (except for the FOI) have no guidance as to how to prepare to take the exam.
2. Make the amount of subject matter for the tests reasonable. You can't expect individuals to study thousands of pages for a 100 question (or less) test and expect positive results.
3. Write the questions to elicit an answer other than a rote answer. Many FAA questions focus on rote memory which fails to test understanding and comprehension of the subject matter. These types of questions will not improve safety.
4. Ask questions that are relevant. Many of the current questions focus on information that is less important (gee whiz information) at the beginning stages of the certificate/rating being sought. Identify what is really important and then write questions to test a comprehension of that information.
5. Expand the databank and make the questions public. If it is the FAAs desire to improve safety, then why all the secrecy of the test content. To study questions and answers will result in learning even if the student is only seeking to memorize the question and answer.
6. Form a cooperative relationship with industry professionals and seek input and help with improving the testing process.

I have been an U.S. Air Force examiner in the T-37 and the F-15E. I have given simulator and aircraft check rides for both instrument and combat scenarios to basic students and combat ready fighter pilots. I have administered open and closed books (taken from a master question file released to aircrew) for instrument and combat check rides; they were prerequisites for the check ride. I am not sure of the number of check rides given, but I was an examiner at both the squadron and wing level for over three years. **—END**

START— The FAA has been known to make mistakes or to have questions with more than one reasonable interpretation. Like any business organization developing a product for consumer use, that product needs to be consumer tested in a limited way before it is presented to the general public. The FAA is notorious for poorly conceived software products such as the airman qualification tests. Many questions test the ability to read fine nuances in the question wording and not the general topic. The questions are more suitable for a person with a law degree that is accustomed to the fine nuances of interpretation than a person in the general public.

A further example of poorly conceived pilot communication is the FAA Safety.gov web site for the Wings program. The FAA conversion to an on-line system nearly killed the system and required a complete overhaul within a year or two of being introduced. The FAA needs to be held to the same quality and acceptability standards of any entity dealing with the public. They should not operate as a monopoly without acceptability testing within the flight training industry.

Another example of poor writing is Airworthiness Directives. These are very difficult to read through to find out applicability or to understand the condition being addressed. They are not written with the intended audience (aircraft owners and maintenance technicians) in mind. They seem to be written for some legal or bureaucratic purpose and not for a repair or modification of certain aircraft.

Because the FAA has a long-established track record of poor communication products as mentioned above, everything published for the aviation user community needs to be pre-reviewed and modified as required so that it is acceptable. A 50% failure rate is not an acceptable outcome for airmen testing. Testing products need to be tested themselves. The FAA needs to have a quality operating system that assures its products such as airmen tests are acceptable. If the FAA wants to change the emphasis in the subjects for airmen training, then it first needs to communicate these changes to the flight training industry. **—END**

START— I don't think that the FAA should notify the flight training industry before making changes to the question bank, but I do think that they need to modify the questions so they are 1) more a propos to the type of flying that is done and 2) reduces the number of trick questions. If someone has a good grasp of the materials presented in the various ACs, regulations, etc., they should have no fear about passing the exam. Having questions, however, whose answer depends on interpreting an E6B in precisely the same way that the exam creator did, or interpreting a single sentence as meaning that one factor is the *most* important, is pretty much requiring that instructors teach to the test. That is really not what I want, and I don't think that it's a way to improve the accident rates, either. **—END**

START— The FAA does need to clearly state the knowledge level objectives and subobjectives for each level of certificate. Sample questions are fine but to instruct intelligently we need to point the learner to what the Feds believe is important. It is impossible to really teach at the application level unless there are clear objectives.

Personal feeling: I hate hearing someone say they completed the ATP or FOI or any other test in 20 mins -as they just memorized the test questions. This is poor. But the FAA has to do their part also— Like the PTS for knowledge tests. **—END**

START— What other educational facility gives the questions to study prior to the test. This is one of the objections from educators...that the use of standardized tests result in teachers teaching to the test, not giving their students the tools to reason for themselves. **—END**

START— The goal should be to test knowledge, not trick students / candidates. The Commercial and Flight / Ground Instructor tests show a graphic with a bent RMI needle. This is absurd. **—END**

START— yes, definitely but having a good portion of mystery questions is important to keep students on their toes about learning the material instead of having them memorize question **—END**

START— If we already have a problem keeping students involved in flight training, why would the FAA do something to make the problem worse? Honesty and transparency are what's missing in our government. Let's try to change that. I think it's a good idea to change the questions just inform the people that are taking the test. **—END**

START— notify industry with the areas of consideration that are to be changed so that the industry can direct their training and training materials to these new subject areas, all in the name of greater attention to aviation safety. **—END**

START— While I understand the FAA's yearning to change the test material without prior notice, there are two or three major problems with the tactic:

1. Many questions in the databases are not applicable to today's pilot's needs. For example, using a timing device while flying between 5 degree increments on a VOR radial and using that data to calculate a usable distance to the facility is not a valuable usage of training time / effort. If the FAA is going to change the test material without prior notice, they must then change the test content to reflect current usage trends in terms of the material.

2. It cannot be easy (or cheap) for the FAA to develop good test content. I used to work in professional test development, and I understand personally how difficult it is to create good tests. While the cost question should not be a deciding factor, it is unreasonable to assume the FAA can continuously update their question database while maintaining it's quality (the money has to come from somewhere).

3. I believe that while the current system is somewhat dated, that it provides the rote part of learning that pilots must understand. This allows me - as a CFI - to build upon that rote understanding - in both ground school and the cockpit - and develop better pilots.

4. Aviation has a hard enough time recruiting new GA pilots. If we make the testing process more expensive, difficult and labor intensive, there will be fewer people willing to commit. We'll wind up with a lot of sport pilots. **—END**

START— I am not a CFI yet but working on it. Here are my thoughts about why the FAA should continue to provide advance notice of questions:

1. Leave it to the student and instructor to ensure the student reaches the application and correlation levels. Don't use the written to trick pilots, or worse, wanna be pilots!

2.. Learning how to answer 1000 questions in a bank takes time and effort, and much learning happens in that process. Using Gleim or similar prep materials aids learning beyond the rote level; reading the REASONS why an answer is wrong helps the student learn the nuances of a complicated issue, avoid traps, and grasp what is really being asked. Multiple choice tests are not a great way to measure understanding but with the question bank available, at least they're predictable and a student can learn what the FAA wants them to learn.

3. The FAA written is just one tool to ensure pilots are ready for the next certification, and will never replace the CFI or DPE. The DPE is expected to ask oral questions that go beyond the FAA written, and can drill in on wrong answers to understand why the student answered incorrectly, then clarify assumptions and ask follow up questions to determine the actual level of a student's understanding. My daughter recently took the NY bar exam - a day of multiple choice questions, followed by a day of essay. It's the essay that causes people to fail the bar - this is comparable to the FAA oral. Don't try to make a multiple choice test something it's not.

4. The statistics are clear about why pilots have accidents or fly into restricted airspace: judgment and maneuvering skills, not written knowledge. That does not mean the written is unimportant - it undergirds all the other skills. **—END**

START— While I think there may be some benefit to keeping the exact questions from public view, the content to be tested *must* be made available. Example questions would be helpful if the exact questions are not published.

Changing the question topics without providing notice leaves students and instructors guessing at what to cover in depth versus what to touch on. Weight and balance problems, for example, should be covered in depth. But, without knowing the form of the questions - math, tables, or graphs - the students are left seeing a particular chart for the first time while taking the exam.

Memorizing minute variances in the FARs however, is something that should be discouraged, since the information is stale as soon as the student completes the course. FAR questions should be 'open book' at all time, in my opinion.

My overall thoughts on the issue are that *any* one of us can likely dig deep enough to ding even somebody like Rob Machado. If you keep asking enough questions, eventually everybody will come up short. Keeping the question bank private would greatly reduce the occurrence of learn and dump among students. But, asking questions with no background or idea on which of the *thousands* of topic areas to prepare for is also a bad idea. **—END**

START— At this time I would say yes for certain reasons. Mainly, the industry needs time to change the way it publishes knowledge test guides so as to not lead students, particularly those doing home study, into thinking that the guides are all-inclusive lists of questions. I would like to see prep guides formatted with a focus on teaching the material used in the questions rather than the actual questions themselves, leading to more applied knowledge and less memorization. I think it's fine using this kind of format to publish a small sample of test questions for each topic. Also, perhaps the FAA should notify the industry when a particular question bank has changed and describe the subject that was changed, deleted, or added without disclosing specific questions, so that instructors are aware of the potential need to adjust teaching materials. **—END**

START— Yes if new material (not questions) is being added to the test bank. However, I think an entire industry has sprung up which only teaches the questions. This rote learning, and of very little use other than to pass the exam. I personally know a number of pilots who scored in the high 90's and have a difficult time describing basic aviation concepts, but can, still to this day, answer a multiple choice question from the FAA database **—END**

START— Not with the questions themselves but rather with the specific new topic areas that are going to be emphasized. **—END**

START— I do not have a problem with the FAA changing the specific questions without notice. Applicants should be able to read, analyze, and then correctly interpret the questions to arrive at the correct answer. However, it think its is a poor educational practice for them to change the CONTENT and EMPHASIS of the questions in the question bank without proper prior notice to the educators responsible for providing the applicants with correct information. **—END**

START— Absolutely! Changes to tests should always be publically announced before springing them unannounced on pilots. The purpose of testing is to see if a pilot knows what is important and can fly safely. Changes are occuring all the time, and when emphasis is on something new, all pilots need to know about it as soon as the determination is made. Announcing such changes as a surprise in testing questions is NOT the way such emphasis should be given out. The FAA needs to look at the purpose of testing - is it to see if licensed pilots have the knowledge to fly, or is it to prove applicants don't know everything (no one in the FAA knows all the regulations and everyone can always be tripped up, or found lacking in some area they have not prepared for). There is NO justification for surprise questions in testing - that is only an indication of an ego problem the tester has. **—END**

START— I feel that it would be helpful for the FAA to notify us if the test question bank simply because of the inherent nature of a multiple choice test. I have been a professional educator for approximately 25 years, and I can attest to the fact that there are always interpretation issues with this type of test.

I have found the test prep books by Gleim, etc. to be very helpful in this regard - not to memorize the test, but to see the explanations of HOW the FAA question writers were thinking. Historically many of the questions have been badly written, and knowledgeable candidates have missed questions for that reason alone.

Thanks for seeking our input! **—END**

START— Let me be clear that the FAA's actions to update the test question bank should be applauded. The content on these exams, particularly on instrument rating and CFII tests, has long fallen out of date with current general aviation cockpit technology. For instance, the vast majority of GA airplanes built today utilize partial or all-glass cockpit technology, yet the test banks contain far too much emphasis on NDB and RMI navigation. There is almost nothing related to GPS, RNAV SID and STARS, etc. Many aviation educators, myself included, also feel the test question banks contain only very rudimentary questions relating to weather and aeronautical decision-making. These are major causal factors for GA accidents and far more content on these areas should be incorporated into the knowledge test banks.

Furthermore, with all due respect to various educational providers in the aviation industry who make a living selling books with the test questions in them, the entire notion of the FAA test question bank being publicly available is a joke. For decades, providers have specialized in selling books containing the entire question bank so that pilots can cram for the knowledge test. All the emphasis has been put on memorizing answers and passing the test rather than learning the material. All this does is promote a rote level of learning.

The FAA test question banks should be revised regularly to attempt to keep up with the latest trends in aviation technology as well as to put a greater focus on special emphasis areas (major accident causal factors that the FAA has targeted, such as weather, aeronautical decision making, stall/spin awareness, etc.) The FAA should also notify industry stakeholders when it intends to revise the test in order to solicit the greatest possible industry input (perhaps through an advisory committee.) Simply changing the test questions without telling anyone is a gotcha move. If the FAA is truly interested in the opinions of aviation educators they must make a greater effort to incorporate input before making these kinds of decisions. However, the days of having students simply memorize the answers must end. I hope the FAA will solicit input from instructors on how to make the test less of a memorization exercise and more of an integrated part of the testing process for a certificate or rating. **—END**

START— the majority of my experience is in military flying. I was the supervisor of all B-52 Instructor upgrade training from Jan 2006 through Jun 2009. I have seen many changes in the format of training during my air force career. In the air force we use open book and closed book exams for annual evaluations. The closed book questions are all taken from the CAPS, that is the notes, warnings and cautions of the tech order. The open book questions are taken from the tech order, and many other regulations. While there is value to rote memorization there is also value to practical application. My experience is practical application should be tested in the simulator and in the airplane during a checkride. I think the FAA should definitely notify flight training when it makes changes because I will focus my instruction accordingly so that I can correctly and adequately prepare my student without wasting precious hours of time. thanks

* answered the questions based upon my military instructor experience. Not sure what a master instructor is, but I am the equivalent of a CFII in the USAF. **—END**

START— In an ideal world where the FAA was actually interested in testing applicable knowledge I would say no.

However, the FAA far too often generates questions aimed more at gotcha and involving logic as to why the distractors are incorrect that is so often arcane or picky beyond any rational examination purpose, and in some cases based upon a level of demarkation that is not applicable in the actual world for flying. There is also the additional issue of questions appearing that have no applicability to the rating being tested for such as helicopter related questions routinely showing up on a sport pilot or a private pilot (fixed wing candidate) exam. This is nonsense and diminishes the FAA's credibility in the entire written exam process. Without question some of the accelerated failure rate we now see is the result of poor instruction and we need to be a leading voice in improving the delivery of our product. At the same time, the best instruction in the world cannot fully overcome a flawed test system and the FAA needs to reform its testing mentality by moving away from the unimportant minutia and the wordsmithing games that are found in some of the current questions and focusing instead on wording that allows for a clear distinction between understanding the overall concepts and applications in aviation from the candidate that does not have a working grasp of the material.

Given the current situation I have to side with the advance notification allowing the training industry to assess the questions, dissect what appears to be the FAA's logic for correct answers, and disseminate this logic to students.

At the same time I wonder if we don't need some method to track instructor success rates for students on the written exams just as we currently do on the practical exams? Although there rarely is a penalty beyond economics for an instructor with a high failure rate it is at least easily tracked if we want to; not so with the written exam. Perhaps we need to consider a system which identifies those instructors with unacceptable student failure rates on either test and which requires some kind of remedial training in instructional skills? **—END**

START— Leaning on my military experience, we (the USAF) used a MQF 'Master question File' to make certain that applicants (both initial and annual) were studying questions that were relevant, since the vast amount of material being tested would make it easy to build a test that very few could pass. The point was to get people studying the important stuff not focus on the small stuff. On average, a MQF was about 600 questions for a 50 question test.

I've been involved with GA aviation ed for 3 years, I was involved with military av ed for 20 years. **—END**

START— While I believe anything that can be done to move away from rote memorization is a good idea, as an instructor I want to know how to advise my students on the subject of test preparation. Knowing when the FAA makes changes to their test bank will help me to advise my students better. Since we can't get the actual test bank questions anymore, I don't see how it would hurt anything if we are given advance notice of changes. **—END**

START— I learned nothing from the written test's. I feel that the students have all the answers right in front of them, and if they have to think about it they might actually learn something. **—END**

START— I was an FAA Designated Written Test Examiner for 14 years and owned a flight training business for 18 years. The FAA written exams are tough enough for any student to pass without new material being sprung on them. Contrary to what many non-instructors believe, most professional flight and ground instructors work very hard to teach their students the proper concepts and principles of aeronautical science as opposed to just teaching test questions. However, it is important that instructors know what areas of the written exams have been changed, if they are going to be able to properly prepare their students for the exam. **—END**

START— Of concern is that students in traditional institutions of learning are seeing increased failure rates. I've but little use for the pilot test mills but those institutions who teach knowledge are also, I believe, seeing increased failure rates which points toward a disconnect between the FAA's actions and a valid test.

This could have been handled better by the FAA. **—END**

START— There are good reasons for both notification and non-notification before making changes to the test question bank. I am for notification of coming changes and also for improvement in the questions themselves to cause the instructor and student to have to learn beyond rote and understanding. I personally teach to the application and correlation level and feel that the current test bank in several of the ratings needs improvement with regard to the question content. Also, I would like to see questions on obsolete items such as NDBs removed. **—END**

START— My problem is with the questions themselves. They are terrible. We must have credible, valid questions that test how well we are training the skills that are relevant to excellent, thinking, safety-minded pilots rather than questions that test how well candidates can memorize irrelevant information tucked deep into the folds of a paragraph. **—END**

START— Simply memorizing the questions/answers doesn't help anyone in the long run. **—END**

START— Too many certificate mills. If CFIs are teaching fundamentals, changes to knowledge exam shouldn't matter. Whining about test changes may reflect CFI clients' desires, but does not necessarily reflect a professional take on what is best for education. **—END**

START— We need to move away from rote memorization. **—END**

START— I favor the FAA NOT provideing the actual questions for the various knowledge exams in the interest of better student comprehension and application. HOWEVER, it is my opinion that this change should NOT have ocured without prior notice to the aviation training community, with adequate lead time to prepare students (maybe 6 to 12 months), for the change.

Changing the rules without adequate notice seems like just another GOTYA ! **—END**

START— Rote memorization of test answers does not equal learning. If the test questions are relevant (who at the PP level uses ADF anymore?) then update. I'd even support challenge testing where the more the pilot knows, the harder the test. **—END**

START— FAA tests questions should to be updated and reviewed more regularly, or even re-engineered completely to incorporate newest technologies and knowledge requirements. However, it is not in either the students or the educators best interests to create surprises on knowledge area subject matter tests. If the FAA has proof that their testing methods are not adequately evaluating pilots in training then they should get help from industry to evaluate and change the testing method. **—END**

START— I believe that if students are taught correctly and understand the basics, then they should be able to pass the written test. That assumes that the FAA asks questions that are pertinent and test the applicant's basic knowledge rather than asking questions about details that are unimportant to flying and safety. **—END**

START— Industry groups and the FAA should share input on emphasis areas, however, specific question need not be shared. **—END**

START— It is very difficult to prepare a student for the requirements of a rating when the standards for that rating change. We have followed the Practical Test Standards for years and they are our guidelines for training. The feedback that I am receiving from recent Knowledge Tests were questions that were a complete surprise, over subjects that were not included in the training, and in some cases didn't seem to apply to the rating. Most recently I trained an instrument candidate in a Cirrus SR-22. He was a brilliant guy who built a very complex email company and sold it to a national interest. He consistently made in the high 90's on practice exams. More important he could apply his knowledge in the air in actual practice. I expected a possible 100 from this guy and instead he scored 83. He was devastated. More important he said there were questions over material we did not cover, they were subjects he had never seen, and it was clearly a major deviation from the conventional Instrument Airplane Knowledge Test. If the standards are going to change we need some guidance to change our training curriculum. **—END**

START— Unfortunately I have not put alot of weight on the tests...and have told my students(over 600) to just pass the damn thing....ie monkey see monkey do approach. THE examiners(at least the ones in my area) don't put any weight on the test scores. I always tell my students to get it over with and then the real learning begins. I do believe in the direction they are headed with the test, but to blind side us with it is unfair to say the least. **—END**

START— Too much training is done using rote methods and training to the test. Well trained students should be able to handle any reasonable testing. **—END**

START— It's unfortunate the FAA isn't more of a GA advocate instead of a bureaucratic cop that seems hellbent on making their lives more secure and ours hell. I am not anti-authority, I believe in the law. I am anti-bureaucracy though especially when it has negative effects on an industry due to ill conceived regulations. **—END**

START— We are supposed be teaching concepts, not teaching to the test. **—END**

START— The FAA test question have tended to use obscure verbiage/wording that is not in the published flight training material. If the question are strait forward and over the training publications then I see no problem making changes without notice. **—END**

START— Notification only to the extent of tested subject areas change or shift in focus of subject areas. Good to publish a sample question bank. I don't think publishing the entire test bank is appropriate. **—END**

START— The FAA provides applicants with a list of references from which test questions will be derived. It is the applicant's responsibility to become familiar with the contents of these references and be ready to answer related questions. When I took my private pilot written exam in 1962 I had no list of questions to study and the answers to some questions relied on a correct response to other questions. We have made studying for the written into a joke. **—END**

START— Current study methods are centered around knowing the test banks but when the test bank is changed without notice the study methods stay the same and the applicants fail. Not letting the industry know means that instructors and applicants dont have a chance to change their study methods. **—END**

START— Just like any learning environment, college course, PSAT, SAT etc., instruction is provided to the student and then the student is tested based upon the instructional content. If the instructor (teacher) doesn't know what the end result is to be of the lesson (test) how can the learning experience be properly structured? The teacher knows what knowledge the test will attempt to draw out and teaches to provide that knowledge. By the FAA arbitrarily changing test content, how does the instructor prepare appropriate lesson plans and reference material for the student? **—END**

START— The FAA should go back to releasing sample test questions in the various levels of flight training, as they used to do. **—END**

START— My philosophy is that we should never teach to pass a test. We should teach to assure a knowledge transfer takes place that allows a student to pass a test regardless of questions because he has the knowledge baseline. Maybe we should teach students to pass the Oral exam that would do the same thing. **—END**

START— Having been a classroom teacher for many years, I would always allow the students to have some insight on what is being tested, I believe this should apply to aviation testing as well. **—END**

START— I think they should change every 2 or 3 months so the students will not be able to study for the test, but will have to learn all the material... **—END**

START— If the industry is teaching to competence, the specific questions should not be an issue. **—END**

START— They need to make the questions more aligned with the real flying world and common English. Too many answers too close for an E6B. **—END**

START— As a professional educator for 40 years (although new to flight/ground instruction), I don't feel that it is fair to the students to test them on things they might not have studied. However, I do feel that the test format should be changed to include more answer choices (4 rather than 3). All multiple choice tests (ie, SAT, ACT, TOEFL, state tests including graduation tests, etc. have 4 answer choices. I believe the 3-choice format makes it much too easy. **—END**

START— We could learn a little from the Europeans here. They don't publish ANY questions at all, have many more questions in their test bank than we do, and have 4 multiple choice answers instead of our 3. Too many students don't really know the material and just memorize the answers so in this case, I believe the FAA is on the right track **—END**

START— With continually increasing regulation, requirements, and improvements in technology, thorough flight training is becoming more time consuming, complex, and expensive. For the FAA to expect instructors to prepare pilots without a thorough understanding of all expectations seems unreasonable. Pilot training should be a full partnership between the FAA, the instructor, and the student, with all parties working together to achieve the same goals. Keeping the training community in the dark about changes in expectations is unacceptable and counterproductive. **—END**

START— Although many knowledge test applicants merely memorize the test question and it's correct answer, I feel the test questions are very helpful in the industry. They give applicants and instructors a basis in which to develop courseware and publications and other material to help prepare for the knowledge exam. Another approach rather than not releasing the questions to the industry and as well as updates, is to create a test bank with literally thousands of questions for each test (example, IRA) that would make rote memory extremely difficult. This would put more emphasis on studying theory and the material itself rather than studying just test questions that are published by aviation vendors. As an instructor of flight and particularly ground, I have well over 8,000 ground school graduates. Over the past 25 years, I have continued to have students show more interest on knowing the test questions and it's correct answer, rather than focus on the material itself. would be glad to provide further assistance and discussions. **—END**

START— The tests have become ever more difficult to the point of nonsense in some cases. The tests need a sanity check. There was a question on celestial navigation on my ATP written. Luckily, as a Navy navigator I got it right. **—END**

START— I feel that the FAA should not include questions that the beginning IFR pilot may never be exposed to. Questions should be asked to make the student think - as to what conditions need to exist in order to get tail plane icing. Instructors need to know in advance what the FAA is testing over so we can help our students learn the importance of the subject matter. **—END**

START— The test question bank has traditionally suffered from a high level of ambiguity and sloppy draftsmanship. Arguably the prior static and public nature of the test question bank (with its comparative higher successful test results) tended to compensate for the poor draftsmanship — at least from the perspective of fairness.

If the FAA is to revise the test question bank and make the test more challenging, it must first *dramatically* and demonstrably improve the quality of its test question bank. **—END**

START— If we do our jobs correctly, our students will pass the test. Why do we spend so much time talking about how teaching to test is a problem if we need to know all the questions ahead of the test? **—END**

START— I just took the ATP written (2 days ago). I spent a lot of time preparing using the King course, as well as reviewing the FARs, instrument procedures and weather publications. I was struck by the # of times John or Martha said the FAA will ask you—.

I believe there has been too much teaching to the test rather than actually covering all the material that needs covering. Certainly at the ATP level, a pilot should have enough knowledge and experience to be able to understand a concept and figure out an unfamiliar question. I believe the increased failure rate does not reflect an unfair change on the FAA's part, rather a deficiency of knowledge or preparation on the part of the applicant. Rote regurgitation of answers to previously-seen questions is not the same as genuine understanding.

Having said that, I recognize that there is a significant portion of our industry that is devoted to specific test-prep activities who may have to revamp their approach. I sympathize with this, but I am pretty confident that they will figure it out. I will admit that I went into the exam with a certain sense of anxiety not knowing what the changes would be, and whether I would pass.

There were certainly a significant number of new questions. The supplied materials were the same, i.e. performance charts, weather reports, and instrument procedures. There were different questions asked on the same materials, as well as new questions on aerodynamics, regulations, and procedures. None of these were anything I would consider unfair, they were simply different. An applicant who was prepared to actually deal with the required material rather than simply recognize the answer and spit it back should have no problem.

There was also a feature I have not seen previously, the FAA gave an opportunity to actually view the missed questions with the correct answers after finishing the exam, rather than simply giving missed question codes as previously. I found that helpful. The questions I missed were ones I had basically had to decide between 2 answers and took my best guess.

I am happy to report that there were only 3 of the above, giving a score of 96%. Only 1 of the missed questions was new, the other 2 were in fact in the test bank, so I could have memorized the bank answers and come up with a 99%!! I think this whole issue has been overblown, if we prepare our applicants with what they need to know rather than just what we know the FAA is going to ask, they should do fine. If the failure rate is suddenly over 50%, the problem lies in the preparation method, not the actual exam.

Thanks for the opportunity to opine! **—END**

START— This single choice is poorly worded. Yes, FAA should advise industry the question bank is changing. It should not, however, have to wait until questions have been published for some period of time before they become active on exams. Far too many pilots have serious gaps in their understanding of aerodynamics, weather and regulations because they use quick review guides to memorize specific answers to specific questions, instead of developing true understanding of the subject matter. **—END**

START— Rote learning is probably best when a student is introduced to aviation. Large amounts of new information should be memorized. The correlation and application of that information happens during actual flight training. One of the best examples is wake turbulence. In the classroom we explain why it happens and how to avoid wake turbulence. In the air WHEN THE OPPORTUNITY PRESENTS ITSELF, we demonstrate how to avoid it.

Distance from clouds is another example of the many rules and regulations that must be memorized(rote). **—END**

START— Raise the bar....The written tests presently do not measure knowledge but rather emphasize memorization skills. **—END**

START— I think there is a need to update the question bank, IE testing on weather services based on weather charts that were designed in the 1950's that most pilots will never lay their eyes on rather than testing on weather charts that are now available from online weather services. That being said I equally believe, the FAA needs to keep us informed about what material they expect us to train pilot applicants for. After all a 50% failure rate makes everyone look bad. **—END**

START— I think notification should accompany changes to any test question bank. Not necessarily publication of the actual questions, but a summary of the changes and possibly some appropriate samples of the new/changed questions. There are questions which are outdated in many of the question banks and some new topics which are completely missing from the same banks. In order for the knowledge tests to be more relevant, they should evolve with the evolution of current equipment and technology. As an industry, we also have to evolve beyond some of our most popular current rote preparation methods. If student preparation is good and goes beyond rote memorization, unfamiliar questions should not result in failure. **—END**

START— If the subject matter emphasis changes, yes - so that the new or additional subject area can be studied. If it is a question change that covers the same material, no. If you know the material at the proper level of understanding, then the way the question is worded should have no effect. **—END**

START— If the students are failing they ARE NOT learning the material. The focus needs to be on understanding, not on rote memorization. **—END**

START— Training providers and providers of training aids should be notified. Not as a means to teach to the test but as a means of professionalism. Our clients expect and pay us to prepare them for the exams. If the failure rate is too high it is perceived that we are not knowledgeable in our field. Also if the test is too difficult and the failure rate too high the student dropout rate will increase above the unacceptable rate it already is at.

The tests do need revision, such as the questions about the ADF on Private Pilot exams. The space on the test could be used for more relevant questions about modern avionics or GPS navigation techniques.

One other argument about Government test content, it is public property and therefore owned by us. If we want to obtain the content then they should not have the right to withhold what is owned by the public. The student must still pass the practical test and therefore prove that they are capable and

safe. They have to answer essay style oral questions that prove that they have obtained the proper knowledge level for the certificate sought.

Other than getting rid of a few outdated questions or correcting typos, if the written testing system is not broke let's not let them break it. —END

START— While I don't believe the FAA should give advanced notice of changes, I do believe that in the interest of fairness they should give concurrent notification via something akin to a FAASTEAM Blast email. Thus, those that felt they knew the material could proceed knowing some questions had changed and those that had just studied the questions could save their money and go back to the books. —END

START— Changes to Test, even the FAA written test should have the consensus of the majority of all involved in Aviation Education prior to initiating changes. The test should include real world scenarios allowing Aviation Educators to Teach the Test. I advocate that much can be gained by Teaching the Test. Unless Aviation Educators have adequate prior knowledge of the content of these exams, the Aviation Educators will again be blamed for a drop in the test scores. This action will also extend training periods in some cases, therefore increasing the cost of such training. More importantly, what will the result of this (not giving adequate prior knowledge of changes) do to Aviation Safety? —END

START— The revised question bank should be accessible via the internet with a 30 day notice prior to implementation, thus, the test applicant can be given an opportunity to understand the question. —END

START— The information presented in testing is open book. No questions or issue or materials are hidden. There should be no consideration driven by the need to up the failure rate. Allow the students to study the material deemed appropriate and demand passing to continue. The FAA has chosen to hide the reasoning and the significant material. Test questions are a means of directing emphasis to material. If truly knowing, the testing is completely open. Hide only to show others what superior teachers fail to teach. Demonstrate the real value and test to determine if the teacher knows what to teach. —END

START— The caveat I would place on my answer would be that this assumes that there is no change in the underlying material that the FAA is testing. Questions are simply questions if the applicant understands the material that the questions are based upon. While this will certainly be met with a great deal of resistance it would take a step in the direction of no longer just memorizing the answers with little or no understanding of the substance material —END

START— I think a notice of the change in testing should be provided. The source material should also be provided. I don't think all actual questions need to be provided from each subject category but one representative question maybe should be. —END

START— Know the subject matter and you will pass the test. The scores will not be as high as memorizing the test questions but you will be a better pilot. —END

START— Being able to teach to the test encourages rote learning and not understanding. —END

START— Just a general notice should be sufficient, so those who 'teach to the test' can be made aware that their approach will not work anymore. One thing that is important to know, however, is that there's so much material to learn, so what and where will their emphasis be? Perhaps they could release 'areas of emphasis' so time can be better utilized.

I also feel that some of the new questions should be released to show how the FAA is approaching the material. It's important that they keep the questions fair and above-board with no tricks wording involved and that everyone can agree on the answers.

I've seen some instructors who write up their own tests who make them so tricky that it's impossible to agree with the selected answer. I'm assuming the FAA uses experts to write the questions who can avoid this, but this is the aspect that worries me the most. **—END**

START— Conditional on the test questions measuring knowledge, not minor technicalities (trick questions) **—END**

START— My comment has turned into a two hour rant on what's wrong with Flight Instruction in general. So I erased it.

My opinion is that the FAA should notify the flight training industry before it makes changes to the test question bank. I'd like to think there was an experiment going on to see if people memorized test questions but those people came up in the same system I did. They know that answer already. More than likely somebody just messed up.

If by some miracle that change was a real attempt to find something out and the FAA wants to change things - for real - my opinion would be to stop playing games with the written and change the practical test and the firic in a controlled, well documented, professional way - over time. Maybe that's what they'll do. **—END**

START— The FAA should be able to create different questions based on CONCEPTS taught throughout each stage of training that will be able to gauge learning levels and training effectiveness, independent of a students' ability to memorize a bank of questions and answers. When the first time passing rate was consistently above the 90% or 95% passing mark, I'm sure the FAA felt that the purpose of the tests had been compromised. The current passing rates are a confirmation that the students had been studying the test rather than learning the material.

The FAA should be able to tailor the test year, if required, to perhaps focus on different areas based recent accidents or based on input from the training community. **—END**

START— No other major country in the world publishes the questions/ answers to key aviation exams. It creates an unsafe environment by allowing the student to minimize his study effort, and in the process cheats the student out of a fair understanding of the level of knowledge required to fly safely. It also primes the new pilot with a lack of seriousness towards the FAA. **—END**

START— While I don't need to know the actual questions, I do need to know what topics are encompassed by new test items. For example: While I certainly teach the use of GPS, it's not a subject I drill on extensively for the knowledge test. If GPS-related questions were to appear, I would make sure my students were ready.

I'd like to suggest that any new questions be vetted by a group of active instructors to make sure they are relevant, that the correct answer has been identified and that they are not trick questions. Even in the current test bank, there are questions with two correct answers (where students are expected to select the best answer) and some for which the FAA has designated the wrong answer. **—END**

START— By giving the flight training industry notification, and delivering the changes to the industry, we are able to define to our students what the FAA believes are important areas of discipline that need to be addressed. **—END**

START— i think in all academics when changes are made, all concerned should be notified, if for no other reason than just to inform all participants that changes have, or will have been made to some part of the curriculum. it will help to prepare the student, and the programs that prepare students, to expect something different. ie.. questions.
—END

START— Although I'm a fairly recent CFII, I have taught at the college level for 30 years, and flown for 22 years, which influences my perspective on instruction & testing.

The FAA has made good progress in revising instructional materials (e.g. primary & advanced handbooks, aviation weather services). New testing material should follow new instructional material, and they should be developed together. Private suppliers should expect this & make it part of their revisions. If the FAA, as an organization, wants to accomplish the twin goals of educating and assessing knowledge, it will consult with organizations like SAFE, as well as leading educators individually and private suppliers, in developing both the instructional material and tests. This should precede release of new materials, and include evaluation & revision of those materials after they are in use. **—END**

START— There are two key parts to this answer.

The first is that IF the material involved is being taught properly, the student should have the knowledge necessary to answer the questions about the material. Too often, in recent years, the push has been to teach to the test or, more specifically, to teach to the questions - which does not teach material, only answers.

The second part is that those that write the questions must know and understand the material themselves. It is, admittedly, a very tough task to write good questions and especially good potential wrong answers because the writer must understand how the person being tested might arrive at those answers. If the writer does not know and fully understand the material themselves, however, then it becomes a situation in which the non-knowing person simply tries to pick fine detail out of material which may not have relevance to the actual point of the material.

If material is properly taught, and questions are properly written by people who understand the material, there should not be a need to advise when changes occur - as long as it is based on existing material OR notice is given that the source material has been revised or updated and time is allowed to incorporate that into the teaching process. **—END**

START— The knowledge test system is broken. Until the FAA test questions reflect relevant information, test questions should be published in advance. **—END**

START— THE NAVAL SEA CADET CORPS AND ITS PREDECESSORS HAVE SPONSORED AVIATION GROUND SCHOOLS SINCE 1969. WE HAVE HAD OVER 14,00 STUDENTS IN THE PROGRAM.

ORIGINALLY THE TEST QUESTIONS WERE NOT IN THE PUBLIC DOMAIN. THE ACME SCHOOL DID PUBLISH SOME OF THE QUESTIONS WHICH THEY HAD ACQUIRED.

WE ARE NOT INTERESTED IN THE EXACT VERBIAGE OF THE QUESTIONS, BUT ARE INTERESTED IN THE FAA EMPHASIS.

WE OFFER RESIDENTIAL COURSES, PRIMARILY FOR TEENAGERS AND TEACHERS. WE DESIGN THE SUBJECT HOURS AND TRAINING SCHEDULE BASED ON THE QUESTIONS. THE MANAGER OF AFS 630 WAS A PILOT FOR THE DC POLICE DEPT. IF HE HAS NOT RETIRED SAY HELLO FOR ME RTSC **—END**

START— The FAA should give notification if the type or way of questioning changes. Notification is not required when simply adding or deleting questions. Many training courses use criterion objectives. Instructional Systems Design (ISD) methodology requires the test questions to be written prior to the lesson plans. The test therefore measures the objective. The FAA uses the same approach to objectives. The flight training community needs to write lesson plans based on the same criterion

objectives also; not simply on subject matter. This method would not require specific knowledge of the test question; rather knowledge of the objectives. —END

START— The relationship between the FAA and GA should be one of cooperation and coordination. Flight training for both the student and instructor is difficult enough. To inject an element of unknown quantity - and quality! - into a key component of one's flight training is akin to training in a high wing Cessna and arriving at your checkride only to have your DPE say, Let's do this check ride in my low wing Piper. Exams by ambush usually results in massacres. Neither we as CFIs or the FAA should attempt to educate by trickery. Without delving into the history of FAA writtens, for many years the FAA has made the test question bank available and the entire teaching community has incorporated that fact into its teaching paradigm.

I do not oppose the FAA, with the input and cooperation of the industry, seeking new directions in flight training. In fact I applaud and wholeheartedly support it but the FAA should be setting clear expectations and those expectations will be much higher if we know where they're going AND MORE IMPORTANTLY, where they want us to go. —END

START— While it is not good to teach to the rote level, it would be a good idea to inform industry and training providers that test questions have been changed, to insure that students are aware of what to expect on a written (knowledge) test. —END

START— I don't think the FAA should specifically say that it has changed the test questions, but can advise that something is changing, only to give the first test candidates on the new system an opportunity to be prepared to go in with the KNOWLEDGE and not just the capability of answering known questions. —END

START— Whether it is right or wrong, many students and their instructors believe that the only way for the student to pass the exam is by practice tests from the test question bank. The scope of material the questions are drawn from is very broad. By taking practice tests, the students can find areas where their knowledge is weak and can study those areas. —END

START— The problem with the FAA changing questions in a vacuum is that they cannot write good questions. I agree that we shouldn't need to teach to the test and drill students on the questions and answers, but at the very least the FAA should publish the questions (perhaps without the possible answers) so that they can receive feedback on whether the question is effective. —END

START— Emphatically, yes. Given the status and manner of testing today, the flight training industry must at least be made aware of changes. That's not to say we shouldn't consider revamping the manner and content of knowledge tests. In the long run it would be desired to move away from memorizing completely known test banks to a process that better tests understanding. —END

START— If the FAA changes the test bank it's impossible for instructors to then teach what is be testing on. —END

START— Perhaps the FAA should go a step further and like the FCC, vet the questions with the industry. This isn't to determine which questions are easier, but to validate the question, wording and answers. These are then placed into the question pool for random selection during the test session. I believe this would maintain the integrity of the test pool while insuring the questions are pertinent, comprehensive and valid. —END

START— Under the present policy with the FAA publishing the question bank and all that it implies in terms of study materials and methods, failing to notify the industry is simply gaming the system.

The present system makes those who seek knowledge reverse engineer the questions to derive the syllabus. Those who simply want to pass the test memorize

A better approach, in terms of education, would be for the FAA to publish and keep current a detailed syllabus rather than the question bank, and maintain, as far as possible, a secret question pool.

That was the approach until the early 70s, and it worked. The FAA's initial belief, that a large question pool would prevent memorization has simply proven untrue.

—END

START— No I do not believe the FAA should release all the questions in the test bank. The idea of simply studying, using a Test Prep, for the written test is not good for the industry. Having the FAA provide a sample of the questions is a good idea, that way the style and form can be provided to the student. This may help the students comfort level when taking the written test.

I have served as a Chief Flight Instructor and Director of Flight Standards for many years at large Part 141 schools and I can assure you that most of the students took the easy way and used Test Prep products to prepare for the written test. They were forced into formal Ground Schools, but relied on the Test Prep to get help them pass the test. **—END**

START— I suggest notification because it would be the first step toward cooperative study on the quality of testing. I think SAFE should work toward such cooperation with the expressed intent of improving this important learning tool. **—END**

START— When I became aware of the FAA's practice of publishing test questions en masse I was frankly surprised at the methodology. Our students should be able to figure out the answer to legitimate questions covering the material without having an advanced look at them. This will amount to a major revision of test preparation, but I think that is overdue. **—END**

START— The FAA should publish the areas of knowledge that a student will be tested on, not the actual questions and answers. The scores might be lower, but the student would have to study the material. All we are doing now is testing their ability to memorize the questions and answers. It is apparent when you give them a final oral exam for the practical test that they do not have the comprehension they should have concerning the aeronautical knowledge portion of the practical test. **—END**

START— I say yes because we need to know WHEN any changes are made in anything that relates to the Practical Test Standards and training materials. That doesn't mean that the FAA should tell us WHAT changes. **—END**

START— I believe that the tests are public property and any changes made to that property should be made public. **—END**

START— I do not believe the question is black and white. There are other changes that can accompany the changes in the question bank that are more important. For example, more comprehensive statements indicating the breadth and depth of questions to be asked relative to electronic instrumentation relative to analog instrumentation. Overall standards statements identifying the knowledge expected by a candidate not stated in the number of questions correctly answered but explaining what a person passing the exam should be expected to know relative to being a safe and proficient pilot — no matter what aviation path they might follow.

My aviation experience began long before there were Practical Test Standards. They were a very welcome addition. Those standards have, for the most part, matured well and identify both specific and general standards to meet.

The same approach could likewise be created for the knowledge tests; there is essentially nothing of the sort now. To say that the standard is answering 70% of the questions correctly has absolutely nothing to do with the content material being examined ... it only has to do with the manufacturing of the test. A Knowledge Test Standards document would clearly define the standards for topic areas

(e.g., weather, ADM, navigation, etc., etc.). Then the exact questions would be less of an issue, and the changing of the questions even less of an issue. —END

START— The FAA has made the testing process too easy by providing the test bank. Many students have gone through by only memorizing the test questions. They consequently know little else outside the mainstream questions and have little motivation to spend time studying depth like us older guys did. —END

START— If the FAA under the direction of AFS 630 would compose questions direct to the point and not try to confuse or distract from the real subject in the way they ask a question, I would say NO do not notify the CFI community. However, the present/current way that questions are presented are not always fair to the applicant as he/she does know what the answer is just not exactly the verbage that the FAA uses and until that changes I would say then that the FAA needs to continue to notify us of the questions. —END

START— I think the FAA should be COMPELLED to add a percentage of NEW questions (e.g. 15%) each year. In addition to requiring a more realistic understanding of the knowledge base for students, it would also result in more current questions being introduced (e.g. GPS understanding) and replacing some of the more outdated questions (e.g. ADF). —END

START— Unlike the PTS, which clearly identifies what the applicant must prepare for, there is no such guidance for written exams. The result is frustrating and discouraging for aviation students. Not going to help with the impending pilot shortage at all... —END

START— Students should understand the material; not just memorize the answers. For the FAA's part, they need to make the questions and answer choices straightforward, not purposely obtuse. —END

START— Aviation is so vast that knowing everything is not practical. Having a knowledge and understanding in key areas should be required and tested accordingly. The test questions could stand improvement as many are not clear or no longer relevant. Questions properly presented should not test just an applicants rote understanding though either. Simply, walking into take an unknown exam will lead to passing by luck not knowledge. Knowing the specific questions doesn't evaluate effectively either. Again, questions need improvement. As an example, instead of asking the MEA on two or three airways where an applicant could have memorized, increase the possibilities. The study material can still provide training on this type of question but the exam will offer other possibilities. This could be easily done by computer but may be difficult as the figures are still presented (poor quality) on paper. Entirely by computer the questions and figures could be varied at random, but still question known material.

On another note, the cost of an exam has significantly increased over the years along with other flight training costs. With exams that force a high failure rate, we can also expect fewer candidates to complete flight training.

I have many more thoughts on this than can be presented here. —END

START— Many training programs base their curriculum on the FAA exam; i.e. if the test includes 10% of questions on Weather Services, then 10% of the ground training is spent teaching this. If the FAA changes the test to emphasize subjects differently then the training community needs to know so they can train applicants accordingly.

Training and testing needs to work as a collaboration. The FAA is responsible for issuing the test, but instructors are responsible for reviewing missed subjects and providing endorsements for retests and to take the practical. Instructors need to be in the know to be able to do their job.

The FAA Knowledge Exam is a prerequisite exam; it is not a certification test (like nursing, engineering, etc.). Having all the questions public is not necessary; but having a parallel public database is required for applicants to prepare. Otherwise, the test is just a hoop to jump through.

Rote memorization was a concern when the pool of questions included 250 total. Now each database is well over 1,000... if a student memorized all 1,000 they learned something along the way -- this is now the same era as the 1950s when memorizing the true false questions was a concern. Also, rearranging the answer stems is an effective way to test knowledge over rote memorization skills.

The February test cycle introduced a number of "bad" questions -- instances where the question was vague, there were multiple correct answers, or where none of the answer stems were truly correct and applicants now have to pick the "most" correct. It appears quality control was compromised for the sake of keeping questions out of the public. Now the test may be valid based on limited question exposure, but it's invalid because the content is bad.

The most efficient and effective way to get a valid test is to have good questions. **—END**

START— I believe that too many instructors have trained their pilots to pass an exam instead of teaching them the fundamentals required for the knowledge exam. **—END**

START— If they are major changes, yes. If they ask the same questions different ways, then no. **—END**

START— I don't think they need to notify ahead of time but it would be nice to know that changes have been made and what type of changes.

We use the most current test prep books to get our questions and answers from and we check them each time a new one comes out, so we know if our questions are up to date. **—END**

START— I am not opposed to changes, and think that updates and new questions are entirely appropriate, however, it would be nice to know when you may need to teach something additional in order to help your students out. In all honesty, the oral exam is a much better test of the student's knowledge, anyway. The knowledge test is more a test of their test-taking skills. **—END**

START— I use the test questions as a guide to learning. Going over the questions and explaining worked and works very well. No rote learning. **—END**

START— If the provider (FAA) is going to make the questions public then it would seem logical to keep the public advised and current of the questions which will be used. No reason to prepare a student for a test with outdated information. **—END**

START— I think there is much value to the aviation "teaching/learning/examining" community for the FAA (in this case, the exam-writers), and the CFI/ground instructor community to work toward "us" rather than "us vs them."

I don't know that FAA owes instructors and students the specific questions and the answers of intended test changes in advance. Maybe so; that merits discussion.

I do feel strongly that FAA would contribute to the success of overall learning, and create more sense of unity ("us" vs "us vs them") if they would make students/instructors aware that changes are being made to exams, and identify the intended changes at least by subject areas. **—END**

START— The overall purpose of the testing procedure is SAFETY, and not necessarily percentages of pass rates, test scores, etc. If an applicant can learn by reviewing the questions first and understanding the answers then SAFETY is being achieved.

We all know that the FAA questions can be confusing and occasionally wrong in the presentation. By notifying the general aviation community of any changes then the overall purpose is attained. **—END**

START— I think the database needs to be updated, but the FAA should notify pilots of the changes. One of my written exams had a question on a DF Steer, but ATC doesn't have the equipment to do a DF Steer anymore. I think questions like this should be eliminated from the exams. **—END**

START— A whole industry has developed to "teach the test questions." ~ Just maybe it's time to go back to "teaching the material." **—END**

START— The FAA has chosen to use multiple choice exams as a basis to test an applicant's knowledge followed by a practical test including an oral portion to test the applicant's skill. The FAA publishes a Practical Test Standard, as well it should, so that that an applicant knows exactly what is required to meet the standard on the practical test and to ensure the examiner grades to that standard. Publishing the knowledge test question bank and notifying the industry of changes to the question bank allows applicant's to know what is expected to meet the standard on the knowledge test and allows the educator to ensure what they are teaching is what the FAA expects the applicant to know. **—END**

START— Changes to the test bank of questions should be proposed to the industry as a whole. Especially since the FAA submits notice of proposed rule making to the public for comment. We have an interest in what the FAA is doing and when 50% of the applicants fail a test due to the changes, doesn't mean those applicants studied the test answers. The FAA is not perfect and the test answers may also be erroneous or incorrect as well. **—END**

START— The FAA should give a 90 day notice if new subject material is being added to the exam. This would give educators and students the opportunity to study the material.

If the changes are to existing subject matter, it is totally fair game for them to change up questions. Rote learning is a valid issue with the way the industry trains today. I've had students score 100% on online quizzes then miserably flop when they take a written exam that I administer for them to earn their sign off. When reviewing the results with them, it is clear they do not have an adequate grasp of the material. They often flop the same exam, missing questions they previously marked correctly, an indication of guessing. **—END**

START— I don't think we necessarily need to know before question change. My concern is that the questions are so narrow that pilots in training can't reasonably be expected to know answer them without the ability to study the question. The performance chart questions are atrocious. If we're taking the test with a magnifying glass and a safety pin so we can determine the takeoff distance (for instance) when there are two answers that could be correct and they're within 25 feet of each other, that's just wrong.

I think the FAA needs to go one of three ways. 1) Make it open book or a combination of open and closed boook tests; 2) Continue with the questions that are often aviation trivia and minutia and let us have the questions beforehand; or 3) restart the test from scratch and build it with reasonable, important questions, in which case we wouldn't need the questions in advance.

Actually, I suppose there's a fourth option. Eliminate the written test and let instructors and DFEs determine through practical means whether the individual is ready to be a pilot. **—END**

START— If some of the flight schools would stop teaching the test and start teaching the theory, then the flight training industry would not need to be notified. **—END**

START— If you teach a student something, and then it is cahnged on a test, it doesn't make the FI look very professional. **—END**