



Federal Aviation
Administration

Best Practices for Mentoring in Flight Instruction

Best Practices for Mentoring in Aviation Education

Acknowledgements.....

Introduction.....

What Is Mentoring?.....

 Definition.....

 Roles & Responsibilities.....

Mentoring Process.....

 Mentoring New Instrument Pilots.....

 Mentoring New Flight Instructors.....

Tools & Resources.....

 Mentor Contract for IFR.....

 Personal Minimums Development Worksheet.....

 IFR Flight Planning Flow Chart.....

 IFR Flight Planning Analysis.....

 Local/Seasonal Factors Worksheet.....

 Mentor Contract for CFI.....

Acknowledgements

This document has been developed with assistance, contributions, and suggestions from a number of general aviation pilots and flight instructors. Special thanks are due to Barb Adams, FAA; Bob Conyers, Global Aerospace; Mike Gilbert, Aviation Adventures; Sandy and JoAnn Hill, National Association of Flight Instructors; Michael Lenz, FAA; Lindsey McFarren, NATA; Arlynn McMahon, Aero-Tech Incorporated; and members of the General Aviation Joint Steering Committee's Personal Aviation Subgroup.

It is intended to be a living document that incorporates comments, suggestions, and ideas for best practices from GA instructors like you. Please direct comments and ideas for future iterations to: susan.parson@faa.gov.

Happy – and safe – flying!

I. Introduction



Most pilot certificates are issued with advice that the hard-won document is only a “license to learn.” Newly certificated pilots are then dispatched into the real world to learn through their own experience. While there is ultimately no substitute for experience, too many pilots come to grief because the lessons of experience are harsh and sometimes fatal.

The tests of experience – given, as the saying goes, before rather than after the lesson – are especially challenging for two specific pilot groups. The first is new instrument pilots. With instrument rating in hand, the newly certificated instrument pilot can legally fly alone in conditions that would

challenge the most seasoned professionals – perhaps without having even experienced flight in instrument meteorological conditions (IMC).

There are also special challenges for the newly certificated, but inexperienced, flight instructor (CFI). The CFI performs one of the most vital and influential roles in aviation and, just as in medicine, the work can have life and death consequences. But while the medical profession uses internship and residency programs to provide supervised real world training for newly graduated MDs, newly certificated flight instructors – like new instrument pilots – are mostly left to learn on their own.

Many professions besides medicine use forms of mentoring to help newly-trained novices transition from real-world application of “book” knowledge and basic skills. Teacher certification boards require a stint of student teaching that pairs the novice with an experienced classroom instructor for both observation and supervised application of knowledge and skills. Mentoring in aviation generally takes place in the airline environment, which pairs experienced pilots with junior crew members.

Unfortunately, general aviation (GA) instrument pilots and flight instructors do not typically have regular or structured opportunities to fly with more experienced aviators. Because such opportunities could provide a major safety benefit to the GA community, this guide provides ideas and suggested mentoring practices that instructors and flight schools can use to help bridge the gap between training and experience.

II. What is Mentoring?

A. Definitions

At its most basic level, mentoring is a process in which an individual with more experience or expertise provides encouragement, advice, and support to a less experienced colleague, with the goal of helping the person being mentored learn something that he or she would have learned more slowly, less effectively, or not at all if left alone (*Managers as Mentors* by Chip Bell). As defined by Margo Murray in *Beyond the Myths and Magic of Mentoring*, mentoring is the

(D)eliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies.



Mentoring can be formal or informal. Aviation instructors and schools who seek to offer structured and personalized transitional experience to their newly-certificated instrument pilots and novice flight instructors may want to consider establishing a formal program. Such a program may involve both a structured transitional experience syllabus and the opportunity to work through it in consultation with a trained and standardized mentor pilot.

B. Roles & Responsibilities

Specific mentoring topics and activities are covered in the next sections, but since the mentor pilot is key, it is vital to ensure that those selected for such a role have the “right stuff” for the job. To be effective, a good mentor should have:

- **Substantial experience that is *relevant*** to the needs and goals of the mentored pilot. For example, an airline pilot will clearly have substantial experience, but if his or her recent experience consists entirely of flying high-performance airliners in a crew environment, it will not necessarily be relevant to someone flying single-pilot IMC in a typical GA aircraft.
- **Good “bedside manner.”** The ideal mentor pilot has a friendly, affirming, non-judgmental manner and seeks to be of service. He or she respects the mentored pilot’s privacy and feelings.
- **Strong communication skills.** The mentor pilot must be a good listener, with the ability to zero in on key issues of interest/concern to the mentored pilot. The mentor pilot’s ability to formulate appropriate questions is critical.

For example, a mentor working with a new instrument pilot trying to make a go/no-go decision might ask the mentored pilot to talk about how actual and forecast weather conditions relate to his or her personal minimums for ceiling/visibility, winds, performance, and other considerations.

- **Understanding of the mentor's role.** The mentor pilot should clearly understand that the goal of mentoring is not to “instruct,” but rather to provide “scaffolding” that supports and guides the mentored pilot’s own efforts to apply knowledge and skills to real situations. Although someone mentoring a new flight instructor should ideally be an experienced CFI, a mentor pilot does not necessarily need to have flight instructor qualifications. Far more important is the ability to provide “scaffolding” support through formulating good questions, listening carefully to the mentored pilot’s response, and offering appropriate feedback. Some of the best mentoring can take place during informal conversations on the ground.
- **Understanding of the pilot's goals.** To provide the kind of support and guidance that the mentored pilot most needs, the mentor must understand how the aircraft is to be used (i.e., recreational flying for fun, personal transportation for business or pleasure, professional operation).
- **Mutual understanding of responsibilities.** Both individuals should have a clear understanding of responsibilities – and liabilities – in the mentoring relationship. In general, the mentored pilot should always be PIC.
- **Personal connection.** Experience with mentoring in aviation and other professions strongly suggests that the most effective mentor is one who can establish and maintain a long-term personal connection to the mentored pilot.

General guidelines for mentor pilots:

- ***Listen*** to the full story (who, what, when and where).
- ***Ask*** what assistance the pilot needs from you.
- ***Help*** the pilot define the issue, prioritize concerns, and decide what additional information is needed to make a decision.
- ***Remember*** (and remind the pilot) that you are only a resource; the final decision rests with the PIC.
- ***Affirm*** the pilot’s decision (e.g., “...based on everything we’ve talked about, I believe that you’ve made a smart decision. If you need to talk more later, I’ll be here.”)
- ***Follow up*** with the pilot later on. Having the pilot describe and reflect on what actually happened is essential to building the kind of critical thinking, self-assessment skill, and judgment that you are helping to develop through structured experience.

courtesy of AeroTech Incorporated

III. The Mentoring Process

A. Mentoring for New Instrument Pilots

While aviation has come a long way since Kitty Hawk, one thing that has unfortunately not improved as much is the role that weather plays in fatal airplane accidents. Despite the broad availability of weather information, weather is still the factor most likely to result in accidents with fatalities. Ironically, the very abundance of weather information might be part of the challenge: with many weather providers and weather products, it can be very difficult for new instrument pilots to screen out non-essential data, focus on key facts, and then correctly evaluate the risk resulting from a given set of circumstances.

Accordingly, a mentor pilot working with a newly-rated instrument pilot can be of particular assistance in two key areas: building the pilot's *weather understanding*, and helping the pilot *apply* that knowledge to specific flights. The document in Appendix 1 provides a suggested basic framework for structuring a mentoring agreement for new IFR pilots.

Understanding Weather Information

Personal minimums. One of the most important things that a mentor pilot can do is to help the newly rated instrument pilot develop individual personal minimums, which can be presented as the human factors equivalent of reserve fuel. Just as reserve fuel is intended to provide a safety buffer between *fuel required* and *fuel available*, personal minimums should be set so as to provide a safety buffer between the *skills/performance required* for the specific flight, and the *skills/performance available* through training, experience, currency, proficiency, and equipment.

Mentor Pilot Action: For a step-by-step guide to developing personal minimums, see the worksheet in Appendix 2.

Flight planning flow chart. The worksheet in Appendix 3 offers “at-a-glance” guidance on using and integrating some of the resources available to today's instrument pilots (e.g. SkyVector, ADDS, Flight Service, weather datalink)

Mentor Pilot Action: For a specific trip, perhaps the first trip in IMC, help the mentored pilot work through the steps listed in the flight planning flow chart. Help the new instrument pilot develop the habit of explicitly listing the following items for each flight in MVFR or IFR conditions:

- ✓ *Escape options:* Is there good weather within the aircraft's range and endurance capability? Where is it? Which direction do you turn to get there? How long will it take to get there?

- ✓ *Reserve fuel:* Flight planning for only a legal fuel reserve could significantly limit your options if the weather deteriorates. More fuel means access to more alternatives.
- ✓ *Terrain avoidance:* Know how low you can go without encountering terrain and/or obstacles.
- ✓ *Passenger plan:* Encourage the pilot to brief passengers on personal minimums and weather conditions that will require cancellation or diversion to an alternate.

Declutter: Formal aviation training on weather can overwhelm a new instrument pilot, so the mentor pilot can assist by helping the mentored pilot “declutter” and focus on key points. GA pilots primarily need to know that the three basic elements of weather (temperature, wind, and moisture) combine to create conditions that affect GA operations in three ways. Specifically, they can:

- *Reduce visibility (clouds and precipitation)*
- *Impact controllability (winds, turbulence)*
- *Reduce aircraft performance (density altitude, icing)*

One approach to practical weather analysis is to review weather data in terms of how current and forecast conditions will affect visibility, turbulence, and aircraft performance for the mentored pilot’s specific flight.

Mentor Pilot Action: Help the pilot complete the Appendix 4 worksheets for a specific flight. Encourage the new instrument pilot to develop the habit of comparing each of the conditions to the corresponding section of his or her individual personal minimums worksheet.

Regional/seasonal specifics. While formal aviation weather training necessarily takes a broad approach, US weather patterns vary widely. A mentor pilot with instrument flying experience in a particular region can provide invaluable advice and counsel to new instrument pilots. In the mid-Atlantic region, for example, thick haze is common during the summer months. Coastal regions may have common fog formation patterns well known to experienced instrument pilots in the region.

Mentor Pilot Action: Using the worksheet in Appendix 5, create a list of the regional and seasonal weather features specific to your area, and discuss this list in detail with the new instrument pilot. Consider developing a packet of information specific to each season’s flying in your area.

Applying Weather Information

For a variety of reasons, many pilots obtain an instrument rating with little or no experience in actual IMC. Consequently, one of the most valuable services an experienced IFR mentor pilot can offer a newly-rated instrument pilot is advice and support while he or she logs the first 10-15 hours in IMC.

IFR ramp-up syllabus: While most pilots would agree with the concept of easing into IMC conditions, newly-rated instrument pilots may not have a good grasp of how to put it into practice. The experienced IFR mentor pilot can assist by helping the pilot develop an IFR “ramp-up” plan. Although the new instrument pilot will probably be eager to put the rating to use for specific “real-world” reasons (e.g., take the family on vacation or fly colleagues on a business trip), the mentor should encourage the pilot to first complete the agreed “post graduate” program. In this respect, counseling patience and self-discipline is one of the mentor pilot’s most crucial (and, perhaps, most challenging) tasks.

Basic sample guidelines for an IFR post-graduate ramp-up syllabus appear below, but the mentor pilot should help tailor them specifically to the pilot’s needs and personal minimums. The personalized ramp-up syllabus should address and accommodate regional and seasonal characteristics of the pilot’s likely operating area. To the greatest possible extent, it should also take into account the mentored pilot’s goals for IFR flying. Among other things, the mentor pilot might help the new instrument pilot look for weather conditions that meet goals on the IFR post-graduate syllabus.

Sample guidelines for IFR “ramp-up” syllabus:

- File IFR on all flights to get comfortable with procedures.
 - First solo IFR trip should be no worse than MVFR – 1,000 and 3.
 - Stretch to 500 and 2 for day IFR after becoming comfortable with MVFR.
 - Keep night IFR at 500 and 3.
 - Never intentionally take off with 200/1 anywhere along the route.
- Consider 200/1 ***only*** after 6 months and 50 hours of time in instrument meteorological conditions (IMC)
- If you have not logged at least 10 hours of IMC in the 6-month period, get an IPC.
- Update weather, plan and profile at the top of each hour.

courtesy of AeroTech Incorporated

Safely stretching personal minimums.

Another valuable service the mentor pilot can provide is guidance for expanding the mentored pilot's personal minimums envelope to match growing experience, skill, and judgment. For example, after the new instrument pilot has comfortably flown in accordance with baseline personal minimums for several months, you might want to sit down together and assess whether and how to safely push the envelope. If, for instance, the pilot's personal minimums call for daytime visibility of at least 5 miles, and he or she has developed some solid experience flying in those conditions, it is appropriate to consider lowering the visibility value to 4 miles for the next flight. Two important cautions:

- First, stress that the pilot should *never* adjust personal minimums to a lower value for a specific flight. The time to consider adjustments is when there is no pressure to fly.
- Second, keep all other variables constant. For example, if the goal is to lower baseline personal minimums for visibility, the pilot should not try to lower the ceiling, wind, or other values at the same time. Never push the baseline if there are special conditions (e.g., unfamiliar aircraft) for this flight.

Using new technologies

Aircraft flight manuals explicitly prohibit using the moving map, topography, terrain awareness, traffic, and weather datalink displays as the primary data source, but these tools nonetheless give the pilot unprecedented information for enhanced situational awareness. Without a disciplined information management strategy, though, these tools can also make it easy for an unwary instrument pilot to slide into the complacent role of passenger-in-command. Mentor pilots with knowledge and experience of new technologies can play an important role in helping the new instrument pilot take full advantage of the safety benefits by encouraging consistent use of good information, automation, and risk management strategies. For example, pilots should:

- *Always double-check the system.* Does the presentation make sense? If the aircraft is equipped with weather datalink, the pilot must understand that it presents *recent* weather, not real-time radar returns. It also pays to be familiar with product content/format and coverage limitations.
- *Use callouts.* Appropriate callouts can help the pilot maintain situational awareness. For example, the mentor pilot can encourage such practices as reading the appropriate displays (e.g., PFD, MFD, autopilot status annunciator) aloud after making any change in course or altitude. Callouts for what is expected next (e.g., next fix, next altitude) are useful as well.

B. Mentoring for New Flight Instructors

Conventional wisdom holds that the practical test for initial issuance of a flight instructor certificate is one of the most challenging assessments a pilot can face. Most would agree that the high level of scrutiny is appropriate in view of the great responsibility that the instructor certificate bestows. However, even high standards for instructor training, evaluation, and certification cannot fully bridge the gap between the world of training and the real world of actual instruction. In addition, many new instructors are simply put to work in busy flight schools with relatively little guidance and support for making this transition.

One way to support and accelerate the flight instructor's transition from novice to skilled practitioner is for flight schools to adopt the supervised student teaching concept that the academic community uses in its basic teacher certification process. For example:

- Pair each newly certificated flight instructor with an experienced CFI who will serve as the new CFI's mentor. At a minimum, the mentor CFI should meet the regulatory requirements for training a flight instructor (i.e., held a flight instructor certificate for at least 2 years and given at least 200 hours of dual).
 - Alternatively, or in addition, establish a "peer mentoring" program of team teaching for CFI applicants.
- Make ground and flight training observation of experienced instructors part of the regular curriculum for CFI applicants.
- Establish a system of graduated authority for instruction and signoffs.
- Establish standard guidelines and procedures for instructors who are mentoring new instructors. These guidelines and procedures should include regularly scheduled meetings between the mentor and the new instructor.
 - As part of this process, encourage the new flight instructor to record personal observations on initial instructional experiences in a journal.
 - The mentor CFI or peer mentor should periodically observe the new instructor conducting each phase of a lesson: preflight briefing flight lesson, and post-flight debriefing.

Sample Best Practices for New CFI Transition

- Standardization flights in each make/model used by the flight school with the chief flight instructor or an assistant chief flight instructor.
- Structured orientation program to standardize new instructors in the school's policies and procedures for ground and flight instruction.
 - New instructors should observe ground school or ground instruction session by experienced instructor (ideally by assigned mentor).
 - New instructors should observe flight training session by experienced instructor (ideally by assigned mentor)
- Supervised "student teaching" program might include the following:
 - First 10 flights assigned to new instructor are for flight review customers.
 - Next 5 flights assigned to new instructor are for aircraft checkout.
 - Next 5 flights assigned to new instructor are transition training (new aircraft or endorsement)
 - Next 5 flights assigned to new instructor are introductory ("discovery") flights.

Sample Best Practices for New Instrument Instructor Transition

- Standardization flights in each make/model the flight school uses for IFR training with the chief flight instructor or an assistant chief flight instructor.
- Structured orientation program to standardize new instrument instructors in the school's policies and procedures for instrument ground and flight instruction.
 - New instructors should observe instrument ground school or instrument ground instruction session by experienced instructor (ideally by assigned mentor).
 - New instructors should observe instrument flight training session by experienced instructor (ideally by assigned mentor)
- Supervised "student teaching" program might include the following:
 - First 10 flights assigned to new instrument instructor are for instrument proficiency checks (IPCs) or instrument recurrency.

Personal Minimums Recommended for New CFIs

- Separate personal minimums: when you are PIC vs when you are giving dual
 - On a VFR day, **fly alone** in broken clouds. Then...
 - On an IMC day, **fly alone** in the clouds. Ceilings 600-800 ft, 2 miles visibility.
- Limit **dual given** weather to day, basic VFR minimum the first IFR flights – 1,000' ceilings and 3 miles visibility. Then ...
 - After you've logged 10 hours actual IMC, reduce personal minimums and **dual given** weather to day minimums of 500 and 2. Then ...
 - After 20 hours actual IMC reduce **dual given** weather to night 500/2.
 - After 50 hours of IMC, you *might* be ready for dual given at 200/1 minimums.
- Use the FTD to maintain proficiency in IAPs not commonly flown.
- Fly **each type** of IAP (VOR, ILS, GPS, ADF) and hold every 30 days.

courtesy of AeroTech Incorporated

Sample Best Practices for New Multi-Engine Instructor Transition

- Standardization flights in each make/model the flight school uses for ME training with the chief flight instructor or an assistant chief flight instructor.
- Structured orientation program to standardize new ME instructors in the school's policies and procedures for ME ground and flight instruction.
 - New instructors should observe ME ground school or ME ground instruction session by experienced instructor (ideally by assigned mentor).
 - New instructors should observe ME flight training session by experienced instructor (ideally by assigned mentor)
- Supervised "student teaching" program might include the following:
 - First 10 flights assigned to new ME instructor are for ME checkouts or recurrency work.
 - New MEI must log at least 25 hours of ME PIC time before working with a new ME student. (i.e., a customer seeking his or her initial ME rating).

Appendices

1. Mentor Contract for IFR
 - Mutual Understandings
 - Mutual Expectations
 - Goals for Mentoring Activity
 - Metrics (i.e., how to assess completion)
2. Personal Minimums Development Worksheet
3. IFR Flight Planning Flow Chart
4. IFR Flight Planning Analysis
5. Local/Seasonal Factors Worksheet
6. Mentor Contract for CFI

Agreement for Mentoring of New IFR Pilot

Understandings

In the interest of enhancing aviation safety, _____ (name of mentor pilot) hereby agrees to serve as a mentor pilot to _____ (name of mentored pilot) beginning on _____ (date) and ending _____ (specify date or triggering event, such as completion of agreed activity program).

It is mutually understood and agreed that:

- The mentored pilot will always be pilot in command (PIC).
 - Observations or suggestions from the mentoring pilot are strictly advisory.
 - The mentored pilot always remains the final authority on conducting the flight.
- The mentor pilot is not acting as a flight instructor.

Goals

The mentor pilot and the mentoring pilot agree that the goals of the mentoring relationship are to help the new instrument pilot safely acquire the following experience:

- _____ flights under instrument flight rules (IFR).
- _____ hours in instrument meteorological conditions (IMC).
- _____ instrument approaches in IMC.

Activities

To meet these goals, the mentoring pilot will assist the mentored pilot as follows:

- _____ developing a personalized IFR “ramp-up” flight syllabus.
- _____ developing appropriate personal minimums.
- _____ consultation during preflight planning.
- _____ discussion (upon request) of go/no-go decision.
- _____ accompany on IMC trip(s) when mutually convenient.
- _____ consultation (as needed) from diversion or destination point.
- _____ post-flight review of “lessons learned” plus next steps
- _____ assistance in modifying personal minimums as needed.
- _____ other (specify below)

Mentoring Pilot: _____

Starting Date: _____

Mentored Pilot: _____

Completion Date: _____

Step 4: Assemble and evaluate baseline personal minimums.

Baseline Personal Minimums					
Weather Condition		VFR	MVFR	IFR	LIFR
Ceiling					
	Day				
	Night				
Visibility					
	Day				
	Night				
Turbulence		SE	ME	Make/Model	
	Surface Wind Speed				
	Surface Wind Gust				
	Crosswind Component				
Performance		SE	ME	Make/Model	
	Shortest runway				
	Highest terrain				
	Highest density altitude				



Federal Aviation Administration

Developing *Personal* Minimums

Think of personal minimums as the human factors equivalent of reserve fuel. Personal minimums should provide a solid safety buffer between:

- *Skills required* for the specific flight, and
- *Skills available* to you through your training, experience, currency, and proficiency.

Step 1 – Review Weather Minimums

Step 2 – Assess Weather Experience and Personal Comfort Level

Step 3 – Consider Winds and Performance

Step 4 – Assemble Baseline Values

Step 5 – Adjust for Specific Conditions

Step 6 – Stick to the Plan!

Step 5: Adjust for specific conditions.

	If you are facing:	Adjust baseline personal minimums to:	
Pilot	Illness, medication, stress, or fatigue; lack of currency (e.g., haven't flown for several weeks)	A d d	At least 500 feet to ceiling
			At least ½ mile to visibility
Aircraft	An unfamiliar airplane, or an aircraft with unfamiliar avionics/ equipment:	S u b t r a c t	At least 500 ft to runway length
enVironment	Airports and airspace with different terrain or unfamiliar characteristics		At least 5 knots from winds
External Pressures	"Must meet" deadlines, passenger pressures; etc.		

Step 1: Review definitions for VFR & IFR weather minimums.

Category	Ceiling		Visibility
VFR	greater than 3,000 AGL	and	greater than 5 miles
MVFR	1,000 to 3,000 AGL	and/or	3 to 5 miles
IFR	500 to 999 AGL	and/or	1 mile to less than 3 miles
LIFR	below 500 AGL	and/or	less than 1 mile

Step 2(a): Record certification, training, & recent experience.

CERTIFICATION LEVEL	
Certificate level (e.g., private, commercial, ATP)	
Ratings (e.g., instrument, multiengine)	
Endorsements (e.g., complex, HP, high altitude)	
TRAINING SUMMARY	
Flight review (e.g., certificate, rating, Wings)	
Instrument Proficiency Check	
Time since checkout in airplane 1	
Time since checkout in airplane 2	
EXPERIENCE	
Total flying time	
Years of flying experience	
RECENT EXPERIENCE (last 12 months)	
Hours	
Hours in this airplane (or identical model)	
Normal Landings	
Crosswind landings	
Night hours	
Night landings	
Hours flown in high density altitude	
Hours flown in mountainous terrain	
IFR hours	
IMC hours (actual conditions)	
Approaches (actual or simulated)	
Time with specific GPS navigator	
Time with specific autopilot	

Step 2(b): Enter values for weather experience/ "comfort level."

Experience & "Comfort Level" Assessment Combined VFR & IFR				
Weather Condition	VFR	MVFR	IFR	LIFR
Ceiling				
	Day			
	Night			
Visibility				
	Day			
	Night			

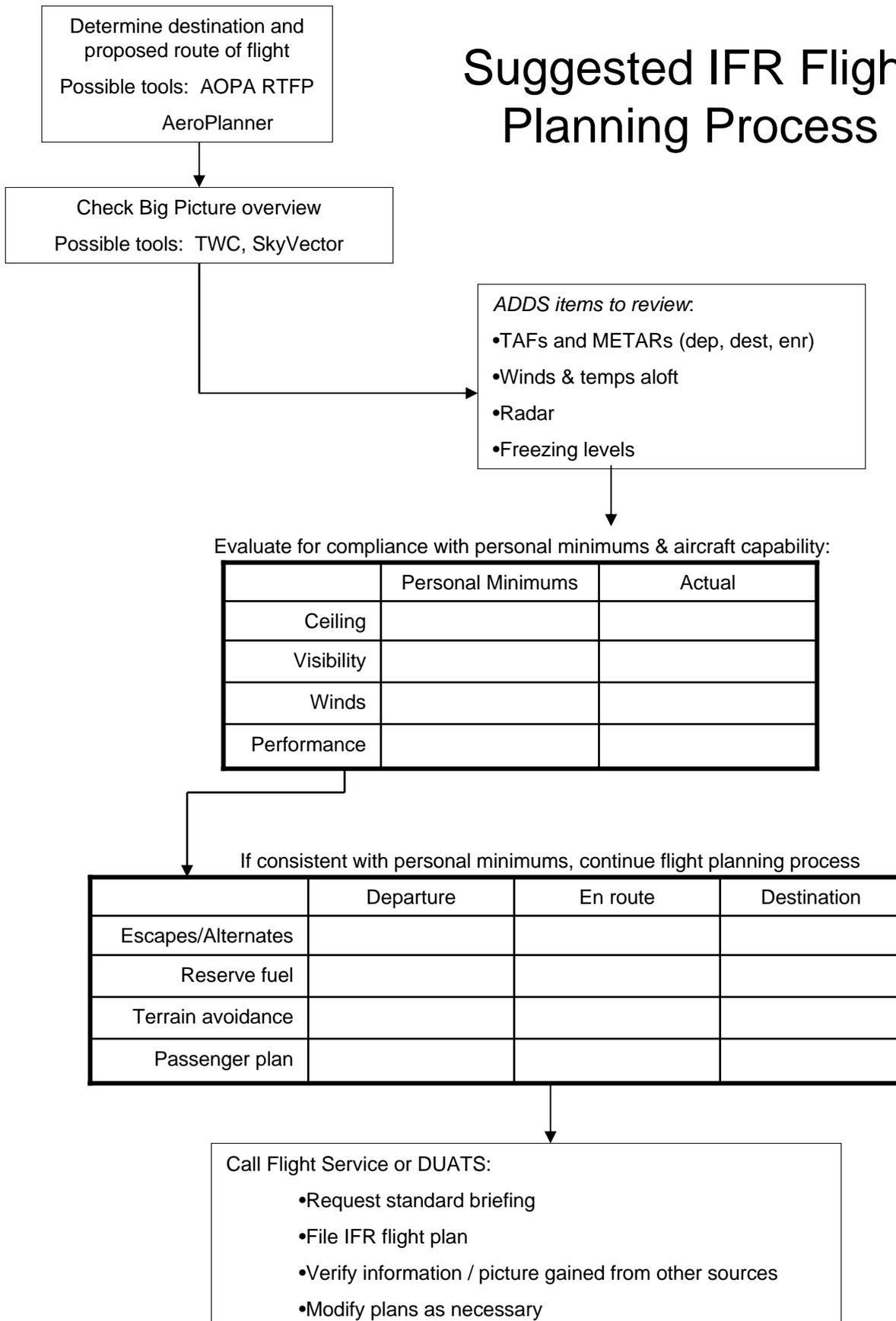
Step 3(a): Enter values for experience / comfort in turbulence.

Experience & "Comfort Level" Assessment Wind & Turbulence			
	SE	ME	Make/ Model
Turbulence			
Surface wind speed			
Surface wind gusts			
Crosswind component			

Step 3(b): Enter values for performance.

Experience & "Comfort Level" Assessment Performance Factors			
	SE	ME	Make/ Model
Performance			
Shortest runway			
Highest terrain			
Highest density altitude			

Suggested IFR Flight Planning Process



IFR Analysis Worksheet		Turbulence	Ceiling & Visibility			Visibility & Performance	Trends
Place	Time	Wind	Visibility	Weather	Ceiling	Temp/Dewpt	Altimeter

Turbulence Analysis

Ceiling and Visibility Analysis

Performance Analysis

Nearest VFR Weather

Direction:
N S E W

Distance:
___ nm

Flying time to nearest good VFR: _____

Personal Minimums:
 Wind speed = _____
 Gust factor = _____
 Crosswind = _____

Departure wind = _____ @ _____
 Destination wind = _____ @ _____
 En route wind = _____ @ _____
 Maneuvering speed = _____ *

T-storms forecast? Yes No

Convective SIGMETS? Yes No

* V_A decreases as weight decreases

Personal IFR Approach Minimums:
 Ceiling = _____
 Visibility = _____

Planned altitude = _____
 - Lowest en route ceiling = _____ } ground clearance

Planned altitude = _____
 - Highest en route obstacle = _____ } clearance

Planned altitude = _____
 - Highest en route terrain = _____ } clearance

Cloud bases = _____ Cloud tops = _____

Alternate required ? Yes No

Over mountainous terrain ? Yes No

Over large bodies of water ? Yes No

Departure visibility = _____

Lowest en route visibility = _____

Destination visibility = _____

Density altitude = _____
 Freezing level = _____

Takeoff distance = _____
 Runway length = _____

Landing distance = _____
 Runway length = _____

Cruise performance = _____

Fuel available = ___ gal ___ hrs
 Fuel required = ___ gal ___ hrs
 Fuel reserve = ___ gal ___ hrs

Note: Since values listed in the approved flight manual (AFM) are determined under controlled conditions, it is a good practice to add a 50% to 100% safety margin to the "book numbers" you derive from performance charts.

Regional / Seasonal Weather Considerations

Location: _____

Topography

- Mountains: highest elevation _____
- Bodies of water: _____
- Other features: _____
- _____

Seasonal Weather Characteristics

	Winter	Spring	Summer	Autumn
Average temps				
Ceiling				
Visibility				
Wind direction				
Wind velocity				
TS activity				
Icing potential				
Other				

Most Important "Local Knowledge" Tips

Agreement for Mentoring of New CFI

Understandings

In the interest of enhancing aviation safety, _____ (name of mentor pilot) hereby agrees to serve as a mentor pilot to _____ (name of mentored pilot) beginning on _____ (date) and ending _____ (specify date or triggering event, such as completion of agreed activity program).

It is mutually understood and agreed that:

- The mentored pilot will always be pilot in command (PIC).
 - Observations or suggestions from the mentoring pilot are strictly advisory.
 - The mentored pilot always remains the final authority on conducting the flight.
- The mentor pilot is not acting as a flight instructor or supervisor.

Goals

The mentor pilot and the mentoring pilot agree that the goals of the relationship are to help the new CFI acquire practical instructional experience by conducting:

- _____ flight reviews.
- _____ transition training or recurrency flights.
- _____ ground school sessions.
- _____ first student solo flights.

Activities

To meet these goals, the mentoring pilot will assist the mentored pilot as follows:

- _____ help establish a personalized CFI skill development plan.
- _____ observe & critique preflight & postflight briefings.
- _____ discuss issues and questions arising from dual sessions with students.
- _____ observe (upon request) flight training activity with students.
- _____ consultation prior to first solo of CFI's first ___ students.
- _____ consultation prior to practical test of CFI's first ___ students.
- _____ other (specify below)

Mentoring CFI: _____

Starting Date: _____

Mentored CFI: _____

Completion Date: _____