This study aid was written by Austin S. Collins for the purpose of helping employees (or prospective employees) of Flight Express, Inc. learn what they need to know in order to be safe, compliant and effective courier pilots. This material was neither produced nor approved by the FAA, although it is based on facts found in FAA regulations, the Aeronautical Information Manual, advisory circulars and other official sources. There is no substitute for thoroughly studying and periodically reviewing such items.

Flight Express, Inc. is a Part 135 commercial air carrier. Accordingly, we must abide by the applicable federal requirements for planning IFR flights. These requirements are strict, explicit and specific. Don’t waste your time questioning them. They are non-negotiable. You might not like them or agree with them – in fact, I might not, either – but it doesn’t matter. Rules are rules.

Topics:

I. The GOM vs. the Op Specs

II. The Six Questions
INTRODUCTION

When you are preparing to fly under the provisions of FAR Part 135 – which you must any time you have *customer property* (even a single empty container) or *paying passengers* on board your aircraft – and IFR conditions exist, you must follow certain planning procedures before you attempt to depart. It may not be legal to make the trip . . . or it may only be legal to make the trip under certain circumstances.

In any case, *if you violate any aspect of Part 135 during your flight, the FAA will have grounds to suspend or revoke your commercial pilot certificate.*

So be careful! Guard your safety as well as your investment in your career. Remember that these regulations were designed to protect pilots by saving them from the pressure to attempt takeoffs or landings in dangerously low conditions. The general public is therefore indirectly protected as well.

I have broken down the regulatory requirements into six questions which you must ask yourself prior to commencing an IFR-135 flight. Those questions, along with examples of how to use them, appear on the following pages. I hope you find them helpful.

Remember these four things:

- First, remember that according to page C52 in our Op Specs, we are **ONLY** allowed to shoot category I ILS, LOC, LOC BC, VOR and NDB approaches, with or without DME. No others (GPS, RNAV, MLS, LORAN, SDF, LDA, PAR, ASR, CAT II, CAT III or anything else you can think of) may be considered in this planning process!

- Second, also remember that the only forecasts and reports that have any **legal** value (in case you ever have to defend yourself in court) are those reports *provided by or approved by* the FAA or the NWS. And watch out for airports that don’t have ASOS or AWOS or ATIS. If an airport does not have an official source of weather, then you **cannot conduct IFR operations there under Part 135**. (For VFR operations under Part 135, however, §135.213 says that the pilot may use his own observations when official weather is not available.)

- Third, remember that none of these six questions is relevant when operating under Part 135 under VFR. You only have to consider them when operating under Part 135 under IFR.

- Finally – and I cannot emphasize this too strongly – **read the regulations – all of them, every word, every punctuation mark!** The FAA holds you accountable to *them* . . . not to this. This is just a study guide.
I. The GOM vs. the Op Specs

The General Operations Manual –

The GOM contains official company policies and procedures, as well as the management structure and chain of command. Arranged in an industry-standard format, it has been approved by the FAA.

The Operations Specifications –

This book is a set of government authorizations permitting us to do certain things as a commercial air carrier operating under Part 135. Called the “Op Specs” for short, they are “custom-tailored” FARs which apply specifically and exclusively to Flight Express. The Op Specs take precedence over the “generic” FARs. Sometimes they allow us to do things that we would not otherwise be allowed to do. Other times they prevent us from doing things that we would otherwise be allowed to do.

The Op Specs are broken down into four parts:

Part A – general authorizations

Part B – enroute authorizations

Part C – terminal authorizations

Part D – maintenance authorizations

Both the GOM and the Op Specs are subject to periodic revision. When you receive an update, you must remove and/or install the affected pages and then make a notation in the Record of Revisions (located on page 6 of the preface).

At most air carriers, the GOM and the Op Specs are kept in separate binders. At Flight Express, however, we keep them in a single binder which you must carry with you in the airplane at all times when flying under Part 135. The Op Specs are included as Section III of the GOM. Don’t let this confuse you. They are two separate, different documents.
II. The Six Questions

Question #1.
What minimum weather conditions do I need reported at my airport of intended departure to be able to take off legally?
Reference - Op Specs, C57

Quick memory phrase: “Published, standard or landing.”

(1) Published. Check the approach plates for your airport of departure. Look for a black triangle with a white “T” inside it. This means that there is either a non-standard takeoff minimum or a departure procedure published for one or more of that airport’s runways. Consult the “Takeoff Minimums and Departure Procedures” section at the front of the terps to find out what restrictions exist for that runway. If there is a published departure procedure, then it has no relevance to the question above. If there are published non-standard takeoff minimums, however, then you must abide by them. Remember that published non-standard takeoff minimums are always runway-specific. If the published non-standard takeoff minimums are associated with a climb gradient, i.e.,

Rwy 5, 1000-3 or std. with min. climb of 300‘ per NM to 1400

... then consult the Rate of Climb Table. Plug in your groundspeed and your rate of climb to determine if you can beat the gradient (altitude vs. distance). If you can, then the published non-standard takeoff minimums do not apply to you. If you can’t, or if the non-standard takeoff minimums are published without an associated climb gradient, i.e.,

Rwy 23, 400-2

... then you are stuck with those minimums (ceiling and visibility) for that runway.

(2) Standard. Under Part 135, the standard takeoff minimum for aircraft with two engines or less is 1 statute mile or 5000 RVR. (There is no standard ceiling.) If you have that, and there are no published non-standard takeoff minimums, you can take off.

(3) Landing. Page C57 of the Flight Express Operations Specifications allows you to use the lowest applicable landing visibility minimum of any available and authorized IAP on the airport as your takeoff minimum on any runway at the airport – as long as that runway does not have its own published non-standard takeoff minimum. Thus your landing minimum effectively becomes your takeoff minimum.

What does “available and authorized” mean? “Authorized” means that it is one of the approved approaches on page C52 of our Op Specs. (See the introduction on page 2 of this handout.) §135.225(h) clarifies that we can only use our landing minimum as our takeoff minimum when “the wind direction and velocity at the time of takeoff are such that a straight-in instrument approach can be made to the runway served by the instrument approach” and “the associated ground facilities upon which the landing minimums are predicated and the related airborne equipment are in normal operation.”
Here is what our Page C57 of our company Op Specs actually says verbatim:

1. When a takeoff minimum is not published, the certificate holder [Flight Express] may use the applicable standard takeoff minimum and any lower than standard takeoff minimums authorized by these operations specifications. When standard takeoff minimums or greater are used, the Touchdown Zone RVR report, if available, is controlling.

2. When a published takeoff minimum is greater than the applicable standard takeoff minimum and an alternate procedure (such as a minimum climb gradient compatible with airplane capabilities) is not prescribed, the certificate holder shall not use a takeoff minimum lower than the published minimum. The Touchdown Zone RVR report, if available, is controlling.

3. When takeoff minimums are equal to or less than the applicable standard takeoff minimum, the certificate holder is authorized to use a takeoff minimum equal to or greater than the lowest authorized straight-in Category I IFR landing minimum applicable to the certificate holder for that particular airport. The touchdown zone RVR report, if available, is controlling.

Or, to express it in the form of a flow chart:

Are there published non-standard takeoff minimums for your runway?  
NO

Are they associated with a minimum climb gradient?  
YES

Can you meet or exceed the MCG?  
YES

Is there currently at least 1 SM visibility?  
YES

Do you have at least the minimum ceiling and the minimum visibility?  
YES

Are there any charted IAPs at this airport which are available and authorized and have landing visibility minimums less than or equal to the current prevailing visibility?  
YES

Take off.  
More coffee.

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO

NO
EXAMPLE #1

- An airport has four runways: 7, 25, 31 and 13.

- There is a published takeoff minimum of 500-3 for runway 13.

- There is also a published takeoff minimum for runway 31. It says “300-2 or std. with min. climb of 389’ per NM to 1100.”

- There are two instrument approach procedures published for the airport – an ILS to runway 7 with a decision height of 200 feet and a minimum landing visibility of ½ SM and a VOR to runway 25 with a height above touchdown (HAT) of 624 feet and a minimum landing visibility of 1½ SM.

1A – What minimum weather conditions do I need reported at this airport to be able to take off legally on runway 13 under Part 135?

Since runway 13 has a published non-standard takeoff minimum of 500-3, you need at least a 500 foot ceiling and at least 3 statute miles visibility in order to legally depart from that runway under Part 135.

1B – What minimum weather conditions do I need reported at this airport to be able to take off legally on runway 31 under Part 135?

Runway 31 has a published non-standard takeoff minimum associated with a minimum climb gradient. Assuming that a 210 can easily climb faster than 389 feet per nautical mile up to an altitude of 1100 feet, the published non-standard takeoff minimum does not apply. (If for some reason we could not meet or exceed that minimum climb gradient, then we would be stuck with 300 and 2.) Therefore, we revert to the standard takeoff minimum of 1 statute mile (for aircraft with two engines or less). Now we look to see if there are any available, authorized instrument approach procedures on the airport that have less than 1 mile minimum landing visibility. In this case there is one: the ILS to runway 7. The minimum landing visibility for that approach is ½ statute mile. Paragraph (3) of page C57 in our company Op Specs tells us that “the certificate holder [Flight Express] is authorized to use a takeoff minimum equal to or greater than the lowest authorized straight-in Category I IFR landing minimum applicable to the certificate holder for that particular airport.” Pay attention to that last word – “airport.” Not “runway,” but “airport.” That means you can use the ½-mile landing minimum for the ILS as your takeoff minimum on any runway at the airport . . . as long as the ILS is in service, the winds are favorable and there is not an applicable published non-standard takeoff minimum for the runway that you plan to use for departure. (In this situation the published non-standard takeoff minimum is not applicable because we can beat the minimum climb gradient.)
1C – What minimum weather conditions do I need reported at this airport to be able to take off legally on runway 7 or runway 25 under Part 135?

Neither 7 nor 25 has a published non-standard takeoff minimum. So we jump straight to the standard takeoff minimum of 1 statute mile (for aircraft with two engines or less). Now using the same procedure that we followed in example 1B, we refer to the ILS and use the ½-mile landing minimum for the ILS as your takeoff minimum.

1D – What if the ILS is unavailable?

The answer to example 1A would not change; you would still need the published non-standard takeoff minimum of 500-3 for runway 13. But to take off on 7, 25 or 31 you would need at least 1 statute mile . . . the standard takeoff minimum. (Although if you could not climb at a rate of at least 389 feet per nautical mile up to an altitude of 1100 feet, then you would still need 300-2 or better to take off from runway 31.)

1E – What minimum weather conditions do I need reported at this airport to be able to take off legally on runway 7, 25, 31 or 13 under Part 91?

Nothing; FAR §91.175(f) tells us that only pilots operating under Parts 121, 125, 129 or 135 must abide by standard or non-standard takeoff minimums. Part 91 pilots have no takeoff minimums.
**Question #2.**
What minimum weather conditions do I need forecast for my intended destination to be able to take off legally (from somewhere else)?
Reference - FAR §135.219

Reports, forecasts or any combination of them must indicate that weather conditions will be at or above the lowest applicable minimum landing visibility at your ETA. The forecast ceiling is not a factor in this case because technically the FAA does not publish minimum ceilings in Part 97 – they publish minimum descent altitudes and decision altitudes, which are not the same thing as a minimum ceiling. (A ceiling is the lowest broken or overcast layer. If there is a hole in the cloud cover and you can see the runway, for instance, then you can legally descend and land even if the reported ceiling is only 100 feet.)

**EXAMPLE #2**

- An airport has two runways: 15 and 33.

- There are two instrument approach procedures published for the airport – an ILS to runway 15 with a decision height of 200 feet and a minimum landing visibility of \( \frac{1}{2} \) SM and a localizer back course to runway 33 with a height above touchdown (HAT) of 437 feet and a minimum landing visibility of 2 SM.

2A – What minimum weather conditions do I need forecast for this airport to be able to take off legally (from somewhere else) with this airport filed as my destination under Part 135?

Runway 15 has an ILS approach with a minimum landing visibility of \( \frac{1}{2} \) statute mile. Accordingly, you would need at least \( \frac{1}{2} \) statute mile forecast to exist at your ETA at this airport – assuming that the ILS is available.

2B – What minimum weather conditions do I need forecast for this airport to be able to take off legally (from somewhere else) with this airport filed as my destination under Part 135 if only the back course is being used?

Since the localizer back course to runway 33 has a minimum landing visibility of 2 statute miles, you would need at least 2 statute miles forecast to exist at your ETA at this airport.

2C – What minimum weather conditions do I need forecast for this airport to be able to take off legally (from somewhere else) with this airport filed as my destination under Part 91?

There is no such rule. Under Part 91 you can depart even if your destination is forecast to be zero-zero at your ETA.
**Question #3.**
What minimum weather conditions do I need *reported* at my airport of intended departure to be able to depart legally without having a takeoff alternate available?
Reference - *FAR §135.217*

If you can legally take off from but *not* return to land at the airport, then there must be a suitable takeoff alternate within one hour’s flying time at normal cruising speed. If there is not one, then you may not depart. (This could happen when there are no published IAPs available to you and authorized for your use or when the only IAPs available to you and authorized for your use have landing minimums greater than the standard takeoff minimum of one statute mile or 5000 RVR.)

**EXAMPLE #3**

- An airport has two runways: 9 and 27.
- There is only one instrument approach procedure published for the airport – a VOR to runway 9 with a height above touchdown (HAT) of 622 feet and a minimum landing visibility of 1½ SM.

3A – What minimum weather conditions do I need *reported* at my airport of intended departure to be able to depart legally without having a takeoff alternate available under Part 135?

You can depart from this airport with the standard visibility – 1 statute mile. You couldn’t shoot the approach, however, unless you have the minimum landing visibility for the approach – 1½ statute miles. So you would need to have a takeoff alternate available if you had less than 1½ statute miles.

3B – What minimum weather conditions do I need *reported* at my airport of intended departure to be able to depart legally without having a takeoff alternate available under Part 91?

There is no requirement for a takeoff alternate under Part 91.
Question #4.
What minimum weather conditions do I need forecast at my intended destination in order to legally depart without designating an IFR alternate?
Reference - FAR §135.223

(1) Look at all the published IAPs at your destination which are available to you and which you are authorized to use.
(2) Find the lowest applicable circling minimum. Look for the AGL number (the HAA) not the MSL number (the MDA), because ceilings are always reported and forecast in AGL.
(3) Round that number up (never down) to the nearest flat 100 feet. (Ceilings are always reported in hundreds of feet.) If it’s already a flat 100 you can leave it alone.
(4) Add 1,500 feet to that figure. This, or 2,000 feet (whichever is greater) is the minimum ceiling which must be forecast to exist at your destination from one hour before until one hour after your ETA in order to avoid having to file a landing alternate.
(5) Now look at all the published IAPs again. Find the lowest applicable visibility minimum. (It doesn’t have to be a circling minimum.)
(6) Add 2 statute miles to that. This, or 3 statute miles (whichever is greater) is the minimum visibility you need from one hour before until one hour after your ETA in order to avoid having to file a landing alternate.

The “magic numbers” that get you off the hook will never be less than 2,000 and 3 . . . but they may sometimes be greater than that!

In other words, just because you have 2,000 and 3 forecast to exist during that 2-hour period from an hour before until an hour after your ETA, it doesn’t automatically always mean that you don’t still have to designate an IFR landing alternate.
EXAMPLE #4

- An airport has two runways: 36 and 18.
- There are two instrument approach procedures published for the airport – an ILS to runway 36 and a VOR to runway 36. The category A and B minimums for those approaches are published as shown below:

<table>
<thead>
<tr>
<th>ILS RWY 36</th>
<th>VOR RWY 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-36</td>
<td>S-36</td>
</tr>
<tr>
<td>953-½ 200 (200-½)</td>
<td>1223-1 470 (500-1)</td>
</tr>
<tr>
<td>CIRCLING 1345-1½ 592 (600-1½)</td>
<td>CIRCLING 1397-1½ 644 (700-1½)</td>
</tr>
</tbody>
</table>

4A – What minimum ceiling do I need forecast at this airport to be able to depart legally (from somewhere else) without designating an IFR alternate under Part 135?

The lowest circling minimum is 592 feet. (Remember that we want the AGL figure, not the MSL figure, because ceilings are always reported and forecast in AGL.) Round that up to 600 feet. Add 1,500 feet to get 2,100 feet. Therefore you need at least a 2,100-foot ceiling forecast to exist from at least 1 hour before until 1 hour after your ETA in order to avoid having to designate an IFR alternate.

4B – What minimum visibility do I need forecast at this airport to be able to depart legally (from somewhere else) without designating an IFR alternate under Part 135?

The lowest applicable landing visibility minimum is ½ statute mile. Add 2 statute miles to that to get 2½ – 3 is greater, so you need at least 3 statute miles forecast to exist from at least 1 hour before until 1 hour after your ETA in order to avoid having to designate an IFR alternate.

4C – What minimum ceiling and visibility do I need forecast at this airport to be able to depart legally (from somewhere else) without designating an IFR alternate under Part 91?

§91.167(b) tells us that you need at least 3 statute miles and at least 2,000 feet forecast to exist from at least 1 hour before until 1 hour after your ETA in order to avoid having to designate an IFR alternate.
Question #5.
What minimum weather conditions do I need forecast at my intended IFR landing alternate to be able to actually file it as my IFR landing alternate?
Reference - Op Specs, C55

First, make sure that the airport and approach or approaches you are considering are authorized for designation as an IFR alternate; not all of them are.

Assuming that the airport and approach or approaches are authorized, apply the “one-nav / two-nav” rule. Begin by looking at all the available and authorized IAPs published for your intended landing alternate.

- You can use the “one-nav” rule any time you have at least one suitable IAP. (You can still use it if you have multiple approaches; just consider one of them and ignore the others.)

- You can use the “two-nav” rule only if you have at least two suitable straight-in IAPs involving separate navaids going to different runways.

  “Separate vs. Different”

  A VOR and an NDB are separate navaids. An ILS approach and a localizer approach going to the same runway, however, do not use separate navaids. (They both use the localizer antenna.)

  Reciprocal runways 7 and 25 are considered different even though they aren’t separate. (If the wind favors landing on 7, it may preclude landing on 25. But if an airplane crashes in the middle of 25, 7 becomes unusable as well.) Runways 9L and 9R are separate but not different. (If the wind precludes landing on 9L, it also precludes landing on 9R. On the other hand, an airplane could crash in the middle of 9L and 9R would still be usable.)

For the “one-nav” rule: Add 400 feet to the lowest applicable Category I HAT or HAA. The result is the minimum ceiling you need forecast at your ETA at your alternate in order to be able to legally file it as such. Now add 1 statute mile to the lowest applicable Category I landing minimum. The result is the minimum visibility you need forecast at your ETA at your alternate in order to be able to legally file it as such. (Don’t forget to round UP to the next 100 feet!)

**The “One-Nav” Rule: ADD 400 and 1 to the approach mins.**

For the “two-nav” rule: Of the two IAPs with the lowest minimums, you must select the one with the higher HAT and higher minimum landing visibility. (You may criss-cross with two different approaches.) Then add 200 feet to the higher HAT and ½ statute mile to the higher minimum landing visibility. The results are the minimum ceiling and visibility you need forecast at your ETA at your alternate in order to be able to legally file it as such. (Don’t forget to round UP to the next 100 feet!)

**The “Two-Nav” Rule: ADD 200 to the HIGHER HAT; ADD ½ to the HIGHER vis.**
Here is what our Page C55 of our company Op Specs actually says verbatim:

a. The certificate holder [Flight Express] is authorized to derive alternate airport weather minimums from the “Alternate Airport IFR Weather Minimums” table listed below.

b. Special limitations and provisions.

1. In no case shall the certificate holder use an alternate airport weather minimum other than any applicable minimum derived from this table.

2. In determining alternate airport weather minimums, the certificate holder shall not use any published instrument approach procedure which specifies that alternate airport weather minimums are not authorized.

<table>
<thead>
<tr>
<th>Approach Facility Configuration</th>
<th>Ceiling</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>For airports with at least one operational navigational facility providing a straight-in non-precision approach procedure, a straight-in precision approach procedure or, when applicable, a circling maneuver from an instrument approach procedure.</td>
<td>A ceiling derived by adding 400 feet to the authorized Category I HAT or, when applicable, the authorized HAA.</td>
<td>A visibility derived by adding 1 SM to the authorized Category I landing minimum.</td>
</tr>
<tr>
<td>For airports with at least two operational navigational facilities, each providing a straight-in non-precision approach procedure or a or a straight-in precision approach procedure to different, suitable runways.</td>
<td>A ceiling derived by adding 200 feet to the higher Category I HAT of the two approaches used.</td>
<td>A visibility derived by adding ½ SM to the higher authorized Category I landing minimum of the two approaches used.</td>
</tr>
</tbody>
</table>
EXAMPLE #5

- An airport has four runways: 3, 21, 18 and 36.

- There are four instrument approach procedures published for the airport – an ILS to runway 3, a localizer to runway 21, a VOR to runway 18 and an NDB to runway 36. The category A and B minimums for those approaches are published as shown below:

<table>
<thead>
<tr>
<th>Approach</th>
<th>Minimum ceiling</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILS RWY 3</td>
<td>S-3 275-½ 200 (200-½)</td>
<td>CIRCLING 620-2 545 (600-2)</td>
</tr>
<tr>
<td>LOC RWY 21</td>
<td>S-21 498-1 423 (500-1)</td>
<td>CIRCLING 620-2 545 (600-2)</td>
</tr>
<tr>
<td>VOR RWY 18</td>
<td>S-18 545-1½ 470 (500-1½)</td>
<td>CIRCLING 620-2 545 (600-2)</td>
</tr>
<tr>
<td>NDB RWY 36</td>
<td>S-36 711-1¾ 636 (500-1¾)</td>
<td>CIRCLING 620-2 545 (600-2)</td>
</tr>
</tbody>
</table>

5A – What minimum ceiling and visibility do I need forecast at this airport to be able to designate it as my IFR alternate under Part 135?

First, try using the “1-nav” rule with the single lowest approach, which in this case would be the ILS. Add 400 feet to the HAT (200 feet) to get 600 feet and then 1 mile to the visibility (½ mile) to get 1½ miles. Thus, the answer is 600 and 1½.

Next, try using the “2-nav” rule. The two lowest approaches are the ILS and the localizer. Add 200 feet to the higher HAT (423, rounded up to 500) to get 700 and then add ½ mile to the higher visibility (1 mile) to get 1½ miles. Thus the answer is 700 and 1½. In this case, the “1-nav” rule works more to our advantage.

5B – What minimum ceiling and visibility do I need forecast at this airport to be able to designate it as my IFR alternate under Part 135 if the ILS is completely out of service?

Try using the “2-nav” rule. The two lowest remaining approaches are the localizer and the VOR. Add 200 feet to the higher HAT (470, rounded up to 500) to get 700 and then add ½ mile to the higher visibility (1½ miles) to get 2 miles.
Now let’s look at a different airport, one with two approaches:

<table>
<thead>
<tr>
<th>VOR RWY 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S-2</td>
<td>609-1½ 450 (500-1½)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>847-2 688 (700-2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOR RWY 20</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S-20</td>
<td>619-1½ 460 (500-1½)</td>
</tr>
<tr>
<td>CIRCLING</td>
<td>858-2 699 (700-2)</td>
</tr>
</tbody>
</table>

5C – What minimum ceiling and visibility do I need forecast at this airport to be able to designate it as my IFR alternate under Part 135?

We can’t use the “2-nav” rule because both approaches use the same ground facility, the VOR. So we have to use the “1-nav” rule. It doesn’t matter which approach you use because 450 and 460 both round up to 500 and both approaches have the same minimum landing visibility, 1½ miles. Add 400 feet to 500 feet to get 900 feet and then add 1 mile to 1½ miles to get 2½ miles.

5D – What minimum ceiling and visibility do I need forecast at this airport to be able to designate it as my IFR alternate under Part 91?

Part 97 tells us that the standard IFR alternate minimums are 600-2 for airports with precision approaches or 800-2 for airports with only non-precision approaches . . . unless non-standard alternate minimums are published for that airport. It is the pilot’s responsibility to check. If the airport above does not have published non-standard alternate minimums but is still authorized for designation as an alternate, then you would need at least 800-2 forecast to exist at your ETA at that airport in order to designate it as your IFR alternate under Part 91.
**Question #6.**
What minimum weather conditions will I need reported at any airport in order to be able to commence or continue any instrument approach?

Reference - **FAR §135.225**

Prior to commencing the final approach segment, the *visibility* must be at or above the published landing minimum. If it is below, or if it drops below, you must refuse the clearance and break off the approach. Once established on the final approach segment, however, you may elect to continue with the approach even if the airport goes below, but you still can't descend below DA or MDA unless you find that at least the minimum landing visibility exists. RVR, when installed and operational, is always controlling.

Paragraph (a) of FAR §135.225 specifies that no pilot may begin an instrument approach procedure to an airport unless that airport has a weather reporting facility operated by the U.S. Weather Service, a source approved by it or a source approved by the FAA.

It also specifies that no pilot may begin an instrument approach procedure to an airport unless the latest weather report issued by that facility indicates that weather conditions are at or above the authorized IFR landing minimums for that airport.

You are never allowed to descend below MDA or DH and land when the visibility is below minimums – regardless of whether you are flying under Part 91 or Part 135.

If you land when the ASOS is reporting a quarter mile or the RVR is reporting 1,600 feet you could get busted. It could be grounds for a suspension or revocation. You might appeal the certificate action by arguing before an administrative law judge that the weather reporting facility was wrong and that your own observation of the conditions at the time you landed was right. You could win this appeal or you could lose. Do you really want to spend all that time and money gambling in a courtroom with your career at stake? Don’t flirt with the law’s “gray areas.” If it’s below minimums and you know it – go missed.

**EXAMPLE #6**

- An airport has two runways: 4 and 22.
- There is one instrument approach procedure published for the airport – an ILS to runway 4 with a decision height of 200 feet and a minimum landing visibility of $\frac{1}{2}$ SM.

6A – What minimum weather conditions do I need reported at this airport to be able to accept an approach clearance under Part 135?

Runway 4 has an ILS approach with a minimum landing visibility of $\frac{1}{2}$ statute mile. So you would need at least $\frac{1}{2}$ statute mile currently reported there by an official source.
6B – What minimum weather conditions do I need reported at this airport to be able to accept an approach clearance under Part 91?

Nothing; there is no such rule.

6C – What minimum weather conditions do I need to find at this airport to be able to descend below DH or MDA and land under Part 91 or Part 135?

At least ½ SM. §135.225(c) says that “the approach may be continued and a landing made if the pilot finds, upon reaching the authorized MDA or DH, that actual weather conditions are at least equal to the minimums prescribed for that procedure.” §91.175(c), on the other hand, says that “no pilot may operate an aircraft at any airport below the authorized MDA or continue an approach below the DH unless the flight visibility is not less than the visibility prescribed in the standard instrument approach being used.”

This is an often-misapplied regulation. Some pilots try to be clever by pointing out, perhaps with a sly wink, that no one can know for sure what they were seeing in terms of flight visibility at the moment they made the decision to continue the approach and land – apparently thinking that this fact protects them against being violated by an operations inspector who catches them doing it. Well, good luck using that argument in court. I hope you have a good lawyer and an excellent pilot legal services insurance plan to pay for him. Who knows? You might win your case. But if the RVR was reporting 1600 and the tower was calling it a quarter mile and you claim you had a mile out the window . . . well, I wouldn’t put a coin in that slot machine.

Landing below minimums can lead to a violation, a fine and/or a certificate action by the FAA. True, you might be able to overturn it on appeal. But then again, you might not. Do you want to take that chance? If the answer is no, don’t land below minimums.