

# IFR Communications

## A Pilot-Friendly Manual



*Master IFR Radio Communications with this Simple Guide*

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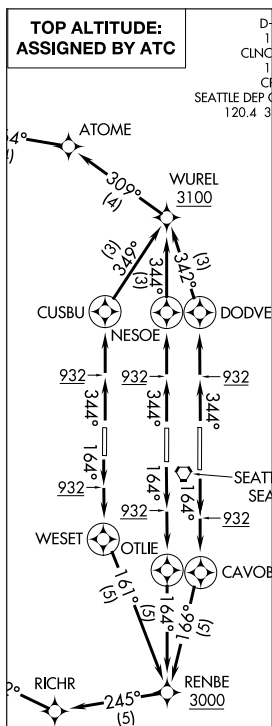
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This manual is organized by task. Each task is an *action* you take: request a clearance, contact a new controller, and so on during a flight. The actions tell you quite a bit about the situation: you “announce” your intentions at a non-towered airport, but you “request” permission for them at a towered airport. Think of this list as the 82 most likely or useful IFR communications you’ll take part in, even if just listening.

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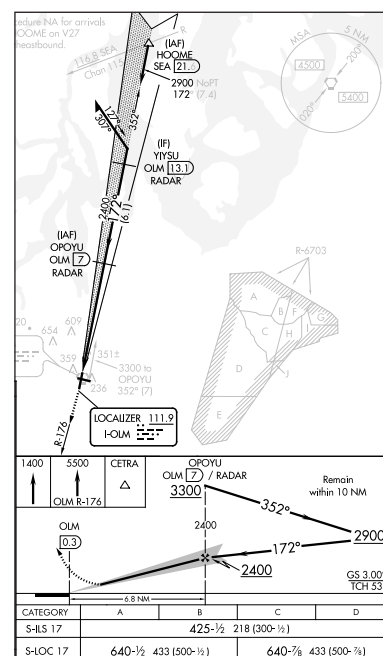


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## Resources and Review

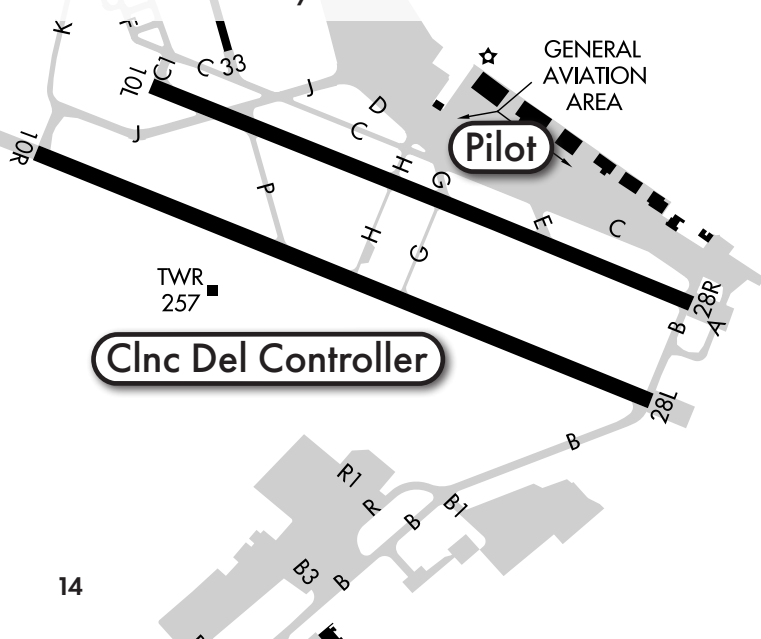
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## Request an IFR Clearance at a Towered Airport (with Departure Procedure)

- ① PILOT  
Oakland Clearance, Cirrus Eight Eight Seven Two Bravo. IFR to Nevada County, information Mike.
- ② CLEARANCE DELIVERY CONTROLLER  
Cirrus Eight Eight Seven Two Bravo is cleared to Nevada County Airport via the Nimitz Five departure, radar vectors to Victor Six, Sacramento VOR, direct. Maintain four thousand, expect seven thousand one zero minutes after departure. Squawk four five two two.
- ③ PILOT  
Cleared to Nevada County via the Nimitz Five departure, radar vectors to Victor Six, Sacramento VOR, direct. Maintain four thousand, expect seven thousand one zero minutes after departure. Squawk four five two two. Cirrus Eight Eight Seven Two Bravo.
- ④ CLEARANCE DELIVERY CONTROLLER  
Cirrus Seven Two Bravo, readback correct. Contact Ground point niner when ready to taxi.

Metropolitan Oakland Intl. Airport (KOAK)  
Oakland, CA  
Clearance Delivery 121.1



The most common addition to an IFR flight plan you filed is a standard instrument departure procedure (SID). These can save time because published items don't need to be spoken in the clearance. In this case, there's no heading for flight after departure and no frequency for the Departure controller ② because the SID (opposite page) includes instructions to fly heading 315 and that NorCal Departure is on 127.0.

The NIMITZ FIVE is pretty simple: You fly a heading until getting vectors. Some departures are quite complex, and you navigate via headings, radials, nav aids, or waypoints all the way to a specific fix (see the SAN JOSE TWO page 16). Some combine vectors with pilot navigation and may have altitude or speed restrictions for the pilot nav sections (see the NUEVO EIGHT page 19). Some have a common start but multiple exit points, called transitions (page 16).

No matter which kind of departure you're assigned, the routing part of a clearance with a SID always follows the same format:

Cleared to [Destination] airport via [SID name and number], [Transition name (if applicable)], [Additional instructions (if needed)] ... [the rest of the route] ... maintain [Altitude], [the remaining clearance].

You may include a departure procedure in your flight plan, but even if you don't, you may be assigned one. Even if you file the SID and get that route, the clearance will contain the name of the SID and then "as filed." This way there's no confusion. If you don't want to be assigned a SID, just write "No SID" in the Remarks section when you file.

SIDs also keep you clear of obstacles. However, it's up to you to ensure you have the required climb gradient, which is 375 feet per NM on the NIMITZ FIVE when departing certain runways. You must

### TIP

Ground frequencies are almost always on a frequency of 121.x. When you hear, "Contact Ground point niner," it means 121.9.



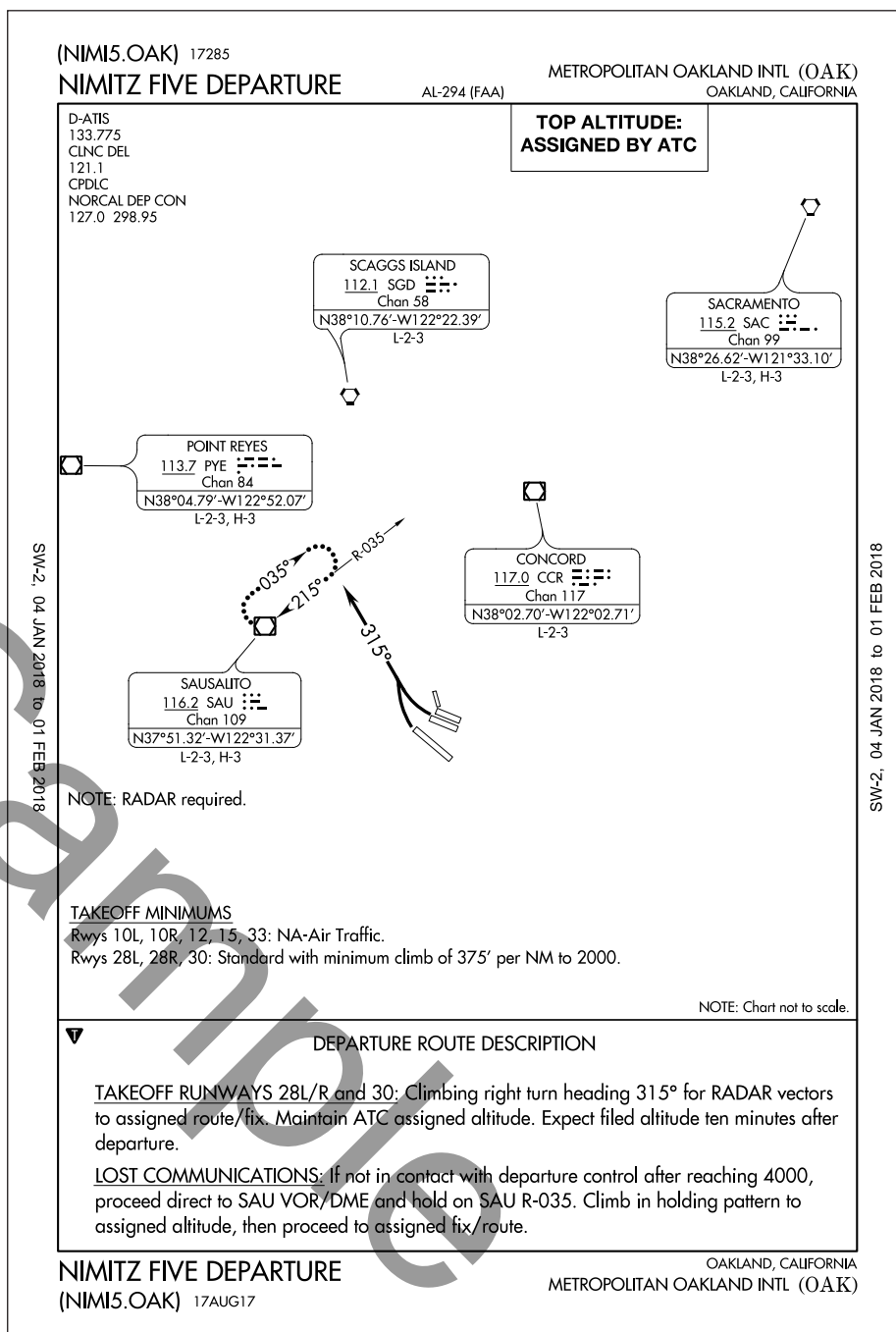
## TIP

If ATC doesn't assign a departure or provide other instructions on getting from the airport to your first waypoint, you are responsible for obstacle clearance on that climb until you receive a vector. Be sure you have a plan.

have at least a textual copy of the SID with you in order to accept it as part of your clearance.

There also may be charted Obstacle Departure Procedures (ODPs) that are solely for obstacle clearance, but the phraseology is the same as SIDs. It's unusual, but you can get assigned a textual departure procedure (no graphical chart) strictly for obstacle clearance, in which case the phraseology is different (see below).

Study with care any SID or ODP that's in your clearance, since that's exactly what ATC expects you to do. SIDs and ODPs can be found in printed approach chart books, in tablet apps, and in the FAA's Digital Terminal Procedures Publication (d-TPP).



## PHRASEOLOGY: AN ASSIGNED SID VERSUS ASSIGNED ODP

While it's permissible to file a departure procedure with your IFR flight plan, it's more common to file without it and let ATC add the departure in use when you actually depart. Some departure procedures are runway dependent, and that can be tough to know the night before you leave.

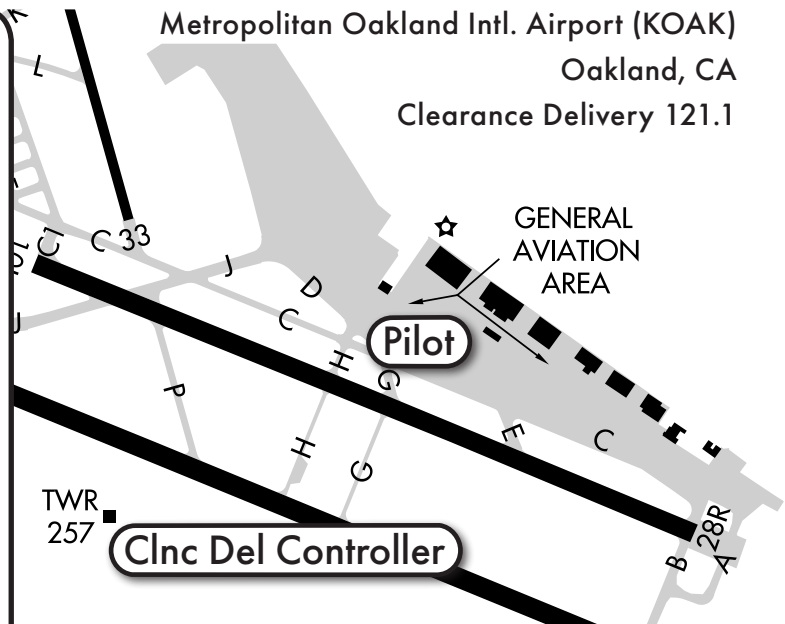
Whether you file it, or it gets added to your flight plan, the clearance will include the departure name, "Cleared to Lompac airport via the CREPE THREE departure, Morro Bay transition,

then as filed." You should review the chart and ensure you understand the procedure, and how it connects with your filed route. That's critical if you lose comms and have a time limit for action.

It's rare to have a textual ODP assigned by ATC, but if they do it will sound like, "Cleared to the Oceanside airport via the Runway 26R departure procedure, then as filed." In this case, review the textual departure procedure and how it connects to your filed route.

## Request an IFR Clearance at a Towered Airport (with “Climb Via”)

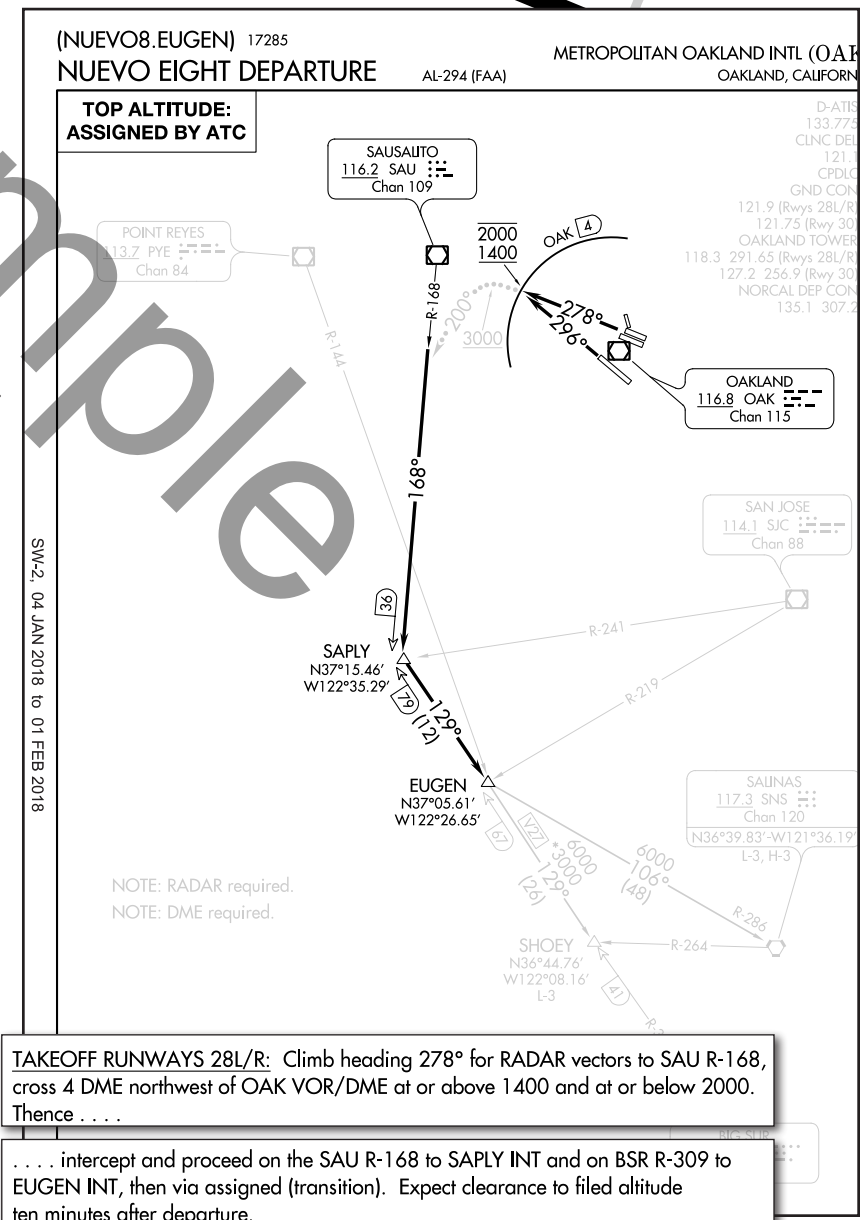
- ① PILOT  
Oakland Clearance, Cirrus Eight Eight Seven Two Bravo. IFR to Watsonville.
- ② CLEARANCE DELIVERY CONTROLLER  
Cirrus Eight Eight Seven Two Bravo is cleared to Watsonville Airport, Nuevo Eight Departure, direct. Climb via SID, except maintain four thousand. Squawk six six seven one.
- ③ PILOT  
Cleared to the Watsonville Airport, Nuevo Eight Departure, direct. Climb via SID, except maintain four thousand. Squawk six six seven one.
- ④ CLEARANCE DELIVERY CONTROLLER  
Cirrus Seven Two Bravo, readback correct. Contact Ground point niner when ready to taxi.



The words “climb via” in a clearance strike fear into the hearts of many IFR pilots. That’s only partly unfounded, because “climb via” is ATC’s way of saying, “however this gets screwed up, it’s your fault.”

Here’s a tip: The first use of the SID in your clearance—“cleared to [airport], [SID name] Departure ...”—is your lateral path, a.k.a. your route, including any of the published turns and segments. When ATC adds, “climb via SID,” that’s your assigned altitude, including any intermediate altitude or speed restrictions. If you departed Runway 28R with “climb via SID,” you must fly a heading of 278 and reach 4 DME from OAK at an altitude between 1400 and 2000 feet. Then continue climbing to the assigned top altitude while turning to intercept R-168 from SAU. Then proceed to SAPLY, and then on to EUGEN. No transition was assigned, so from EUGEN it’s direct Watsonville.

There’s no published top altitude, so ATC must assign one. The controller wants the altitude restriction at 4 DME OAK to remain in effect, so the words, “except maintain” only change the top altitude. See “‘Climb Via’ in a Clearance isn’t Supposed to be a Heads Up, But it Is” on page 19 for more details.



## "CLIMB VIA" IN A CLEARANCE ISN'T SUPPOSED TO BE A HEADS UP, BUT IT IS

It used to be that controllers would add "climb via SID" into a departure clearance to emphasize crossing restrictions in the SID—and help ensure pilots didn't miss those required turns, speeds, or altitudes. The FAA has issued guidance that this is "inappropriate use of this phraseology."

Functionally, however, that's still what happens. There are three ways you could hear a charted departure procedure included in your clearance, and if you hear "climb via," there is a crossing restriction you should look for.

The simplest case is number one (upper right). There are either no crossing restrictions, or there's a vector before any crossing restrictions occur, so ATC will step in before you worry about it. The NIMITZ FIVE (page 15) is an example, as is the RENTN THREE (page 31). Your cleared route starts with the SID, and you're told to maintain an altitude. Even if the clearance delivery controller is just restating the published top altitude, you'll still be told, "maintain [altitude]." Yes, that's redundant. Yes, the system is a bit broken.

If there are any crossing restrictions you'll meet before ATC steps in with a vector, which include pilot nav SIDs that have no vectors at all, you will hear the SID name in your clearance for your route, and you'll hear "climb via SID" (case two) or "climb via SID, except maintain" (case three) for your altitude.

If there's also no amendment to the published top altitude, then it's case two and you just hear "climb via SID" as an altitude assignment. If the NUEVO EIGHT (page 18) had a published top altitude, then it could fall into this category. "Climb via SID" would be the only altitude assignment you receive because the altitude was published and ATC didn't want it changed.

The SAN JOSE TWO (page 17) could fall into this category if the change of heading from 306 to 113 happened at a specified altitude rather than a specified distance.

Case three only differs from case two with the assignment of an altitude, but the wording is critical. When a clearance contains, "Climb via SID, except maintain [altitude]" the only thing affect-

1. No crossing restrictions, or crossing restrictions happen after a radar vector segment:

"Cleared to [destination], [SID name] departure ...  
Maintain [altitude] ..."

2. Crossing restrictions before any radar vectors, no changes to published altitude:

"Cleared to [destination], [SID name] departure ...  
Climb via SID ..."

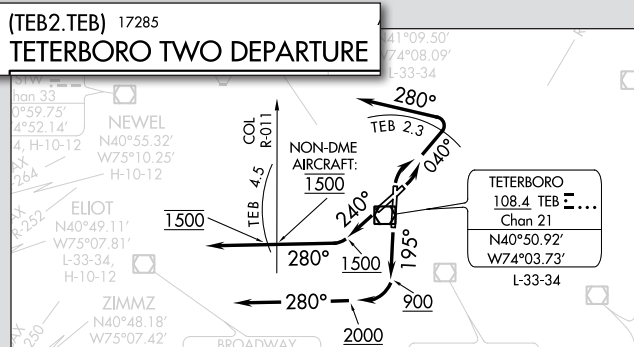
3. Crossing restrictions before any radar vectors, amended or assigned altitude:

"Cleared to [destination], [SID name] departure ...  
Climb via SID, except maintain [altitude] ..."

ed is the top altitude. All published crossing restrictions below that altitude remain in effect. In the case of the NUEVO EIGHT, that means you cross 4 DME from OAK between 1400 and 2200 feet and then climb to the top altitude assigned by ATC.

Had the clearance said, "maintain [altitude]" instead of "except maintain [altitude]" all crossing restrictions below the assigned top altitude are canceled. (Speed restrictions are still in effect.) You climb unrestricted to the assigned top altitude. Such a clearance would be highly irregular, so you would verify it with ATC.

This occasionally makes for some interesting phraseology departing different runways on the same SID. Departing northeast on the TETERBORO TWO, you'll hear a clearance with the SID name and "maintain altitude." There's no crossing restriction, only a distance to travel before turning west. Departing any other runway, you'll hear "Climb via SID," because they all have crossing restrictions by altitude before turning.



## IFR CLEARANCE FLOW CHART

The structure of a departure clearance you receive on the ground is fairly consistent, however the details vary depending on where you're departing from.

If there's a tower, your departure clearance will include a direction of departure that could be a heading, turn to make, or departure procedure. Turns would be made passing 400 feet AGL unless otherwise specified. That heading could be driven by local procedures, including standing agreements to avoid conflicts with traffic in and out of other airports.

Departing a Class E surface area, you'd be given a heading to fly that prevents conflicts with other traffic. Class E surface areas mean controlled air-

space goes down to the surface, so ATC can issue instructions starting as soon as your wheels leave the pavement.

Class E surface areas aren't that common. They appear on Sectional Charts as magenta dashed areas around non-towered airports. Some Class D areas of towered airports revert to Class E surface areas after the tower closes as well.

Most non-towered airports are Class G at the surface. Controlled airspace could start anywhere from 700 feet above the surface up to 14,500 feet above the surface. In this case, your clearance

should include a heading to be flying once you enter controlled airspace. How you get to that point is up to you. Note that in both the latter cases, you are still responsible for your terrain and obstacle clearance until ATC actually issues a vector.

When you contact ATC airborne, they must check a few items before issuing you vectors (page 30 and page 47) that might shortcut your path on course. You must be above their minimum altitude for vectors (MVA/MIA) or in an airport area surveyed for obstacles and approved for departure vectors (DVA). If you're more than about 40 NM from the radar, vectors may be limited by an increased required distance between aircraft.

While we're at it, you can also request your IFR clearance after takeoff. ATC's decision tree is to the left. See page 54 for the ensuing conversation.

| Aircraft on the Ground                                                                      |                                                                               |                                                                      |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Class B/C/D Airport                                                                         | Class E Surface Area                                                          | Class G                                                              |
| Specify direction of takeoff, turn, or initial heading consistent with published DP or DVA. | Specify initial heading. Verify assigned heading complies with local traffic. | Tell aircraft to enter controlled airspace heading [heading number]. |

### IFR, Airborne, in Radar Contact, and Seeking Vectors

Is the aircraft above the Minimum Vectoring or Instrument Altitude (MVA/MIA)?



Issue vectors, all is well.



Is there a Diverse Vector Area (DVA)?



Issue vectors, but not into charted obstacles.



Is the aircraft within 40 NM of the radar antenna?



Issue vectors, but not into charted obstacles.



Wait until aircraft is above MVA/MIA.

### VFR, Airborne, in Radar Contact, and asking for an IFR Clearance

Is the aircraft is above MVA/MIA?



Issue the IFR clearance, all is well



Ask pilot: "Can you maintain your own terrain and obstacle clearance?"



Issue the IFR clearance, all is well



Request of pilot: "Say intentions."



## Refuse an Unacceptable IFR Clearance

- ① PILOT  
Groton Clearance, Cirrus Eight Eight Seven Two Bravo, IFR to Nantucket.
- ② CLEARANCE DELIVERY CONTROLLER  
Cirrus Eight Eight Seven Two Bravo cleared to the Nantucket Airport via Sandy Point, Tango Two Sixteen, NEWBE. Newbe Three Arrival. Maintain niner thousand. Providence Departure frequency one two five point seven five. Squawk three six two four.
- ③ PILOT  
We're unable Tango Two Sixteen and Newbe Three. That's too far overwater for us. Any chance for Victor Three Seventy-Four via Martha's Vineyard?

The Pilot in Command is the final authority on operating the aircraft, not ATC. If you receive an IFR clearance you're not capable of flying—or are not willing to fly—it's time to negotiate.

ATC's algorithms assess your filed route against preferred routings, current traffic, and other factors. Changing what pops out of that computer might be as simple as the controller entering a change. It's more likely the controller will have to lobby on your behalf.

Avoiding bad weather, icing conditions, or overflying large expanses of inhospitable terrain are all fair reasons to refuse a clearance. Just work with ATC

Groton-New London Airport (KGON)

Groton, CT

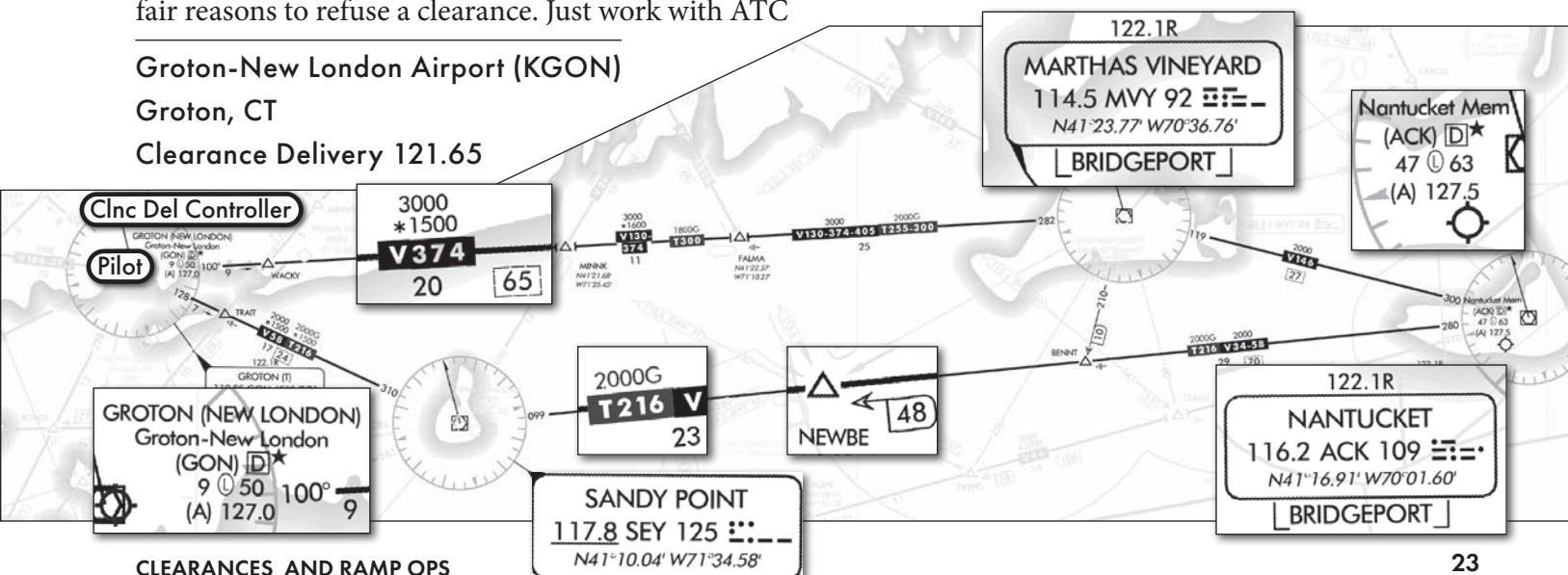
Clearance Delivery 121.65

- ④ CLEARANCE DELIVERY CONTROLLER  
Cirrus Seven Two Bravo, uh, standby.

*After some time waiting in suspense ...*

- ⑤ CLEARANCE DELIVERY CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, amend route of flight to Groton, Victor Three Seven Four, Martha's Vineyard, Nantucket, direct.
- ⑥ PILOT  
OK. Cleared to Nantucket via Groton, Victor Three Seven Four, Martha's Vineyard, Nantucket, direct. Maintain niner thousand. Departure on one two five point seven five. Squawk three six two four. Seven Two Bravo.
- ⑦ CLEARANCE DELIVERY CONTROLLER  
Cirrus Seven Two Bravo, readback correct. Contact Ground one two one point six five when ready to taxi.
- ⑧ PILOT  
Ground point six five. Thanks for the flexibility. Cirrus Seven Two Bravo.

to find a solution, knowing you may have to trade off convenience or timeliness.



## Contact Departure (and Receive “Climb via Except ...”)

- ① PILOT  
Potomac Departure, Cirrus Eight Eight Seven Two Bravo. One thousand, climbing via the ARSENAL FIVE departure.
- ② DEPARTURE CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, Potomac Departure. Radar contact. Climb via SID, except maintain two thousand. I'll have higher for you shortly.
- ③ PILOT  
Climb via SID except maintain two thousand, Cirrus Eight Eight Seven Two Bravo.
- ④ DEPARTURE CONTROLLER  
Cirrus Seven Two Bravo, climb via SID.
- ⑤ PILOT  
Climb via SID, Cirrus Seven Two Bravo.
- ⑥ DEPARTURE CONTROLLER  
Cirrus Seven Two Bravo, climb and maintain six thousand.
- ⑦ PILOT  
Leaving three thousand, climb and maintain six thousand. Cirrus Seven Two Bravo.

### CLEARED ROUTE

Cleared to the Roanoke-Blacksburg Airport via ARSENAL FIVE, Montebello transition, direct. Climb via SID.

### TIP

It's possible to get, "... climb via SID except maintain [altitude] ..." in your initial clearance on the ground. In that case, you fly the SID as published but with a new top altitude as assigned.

Manassas Regional Airport (KHEF)

Manassas, VA

Potomac Departure 128.525

While “Climb via SID” means climb to the published top altitude, “Climb via SID except maintain ...” means climb to an ATC-issued top altitude. That could be because there's no top altitude published in the SID, or because ATC wants you to level off at a different altitude.

The top altitude for the ARSENAL FIVE is 3000 feet, and your clearance on the ground simply included “Climb via SID.” There would be no altitude given in the clearance, because the SID specifies your first top altitude, and no departure frequency because it's on the departure chart. The next thing after “Climb via SID” in your clearance would be a squawk code. If you departed Runway 34L or 34R, you'd climb heading 341 until passing 800 feet, after which you'd turn left to intercept R-056 to CSN while climbing to 2000 feet. After SHRLI, you'd climb to 3000 feet. You'd anticipate a higher altitude somewhere after CSN.

Because you have this complete plan, when you contact Departure and say you're climbing via the SID ①, you're expecting a simple “Radar contact.”

The revised clearance of “Climb via SID, except maintain two thousand” ②, means you continue following the SID route, and climb to meet the published restriction of crossing SHRLI at exactly 2000 feet, but then stay at 2000 feet since it's your new ATC-issued top altitude.

When the Departure controller says, “Climb via SID” ④, it reinstates the original top altitude, along with any published restrictions along the way. Continue following the SID route, and continue climbing to the top altitude (3000 feet).

Without further instructions, you'd cross CSN at 3000 feet. If the controller had said in ⑥: “Cirrus Seven Two Bravo, climb via SID, except maintain six thousand,” then 6000 feet would be the new top altitude, but all other restrictions would still be in effect. You would have held 3000 feet until crossing CSN, and then climbed to 6000 feet.

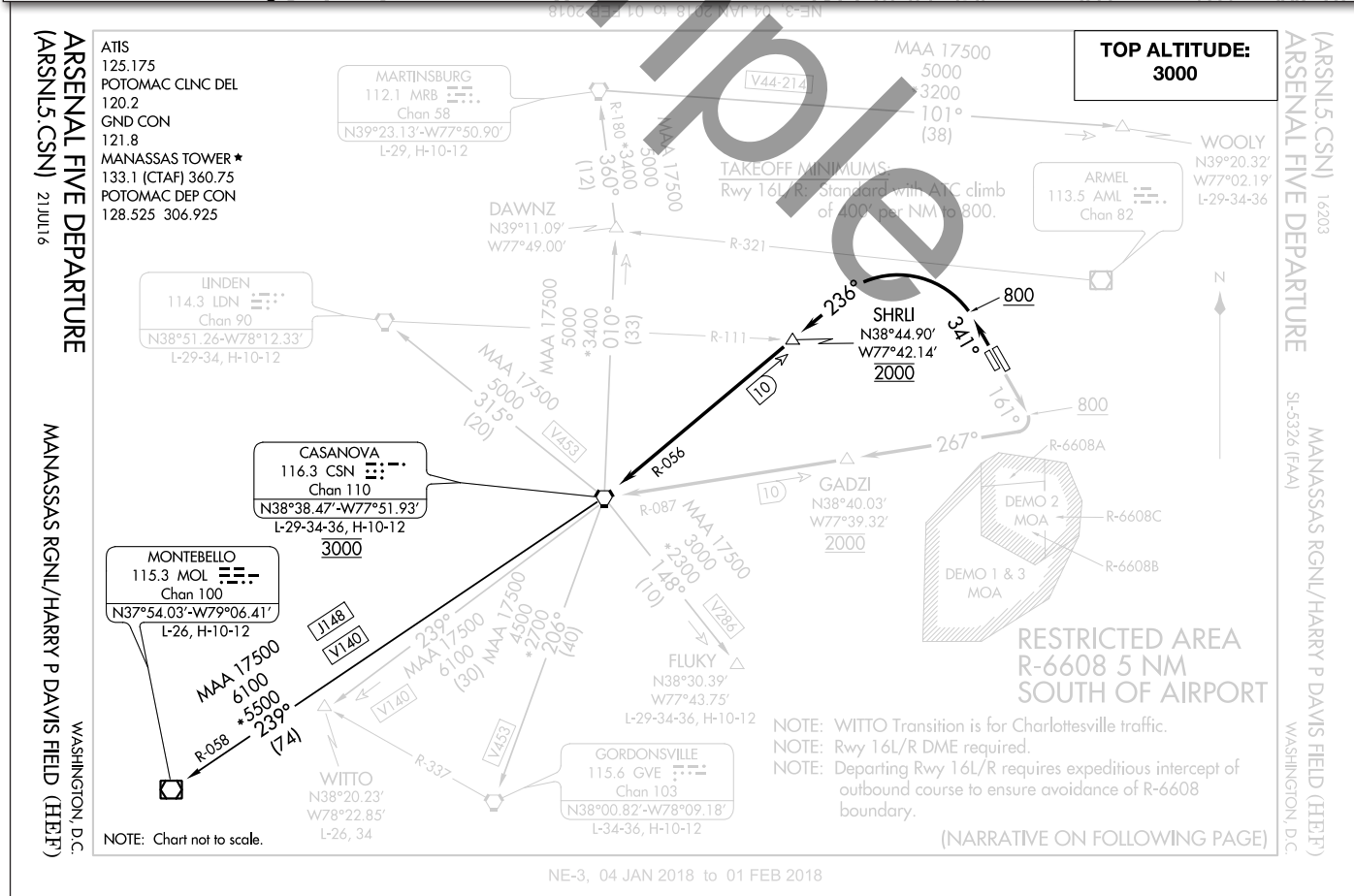
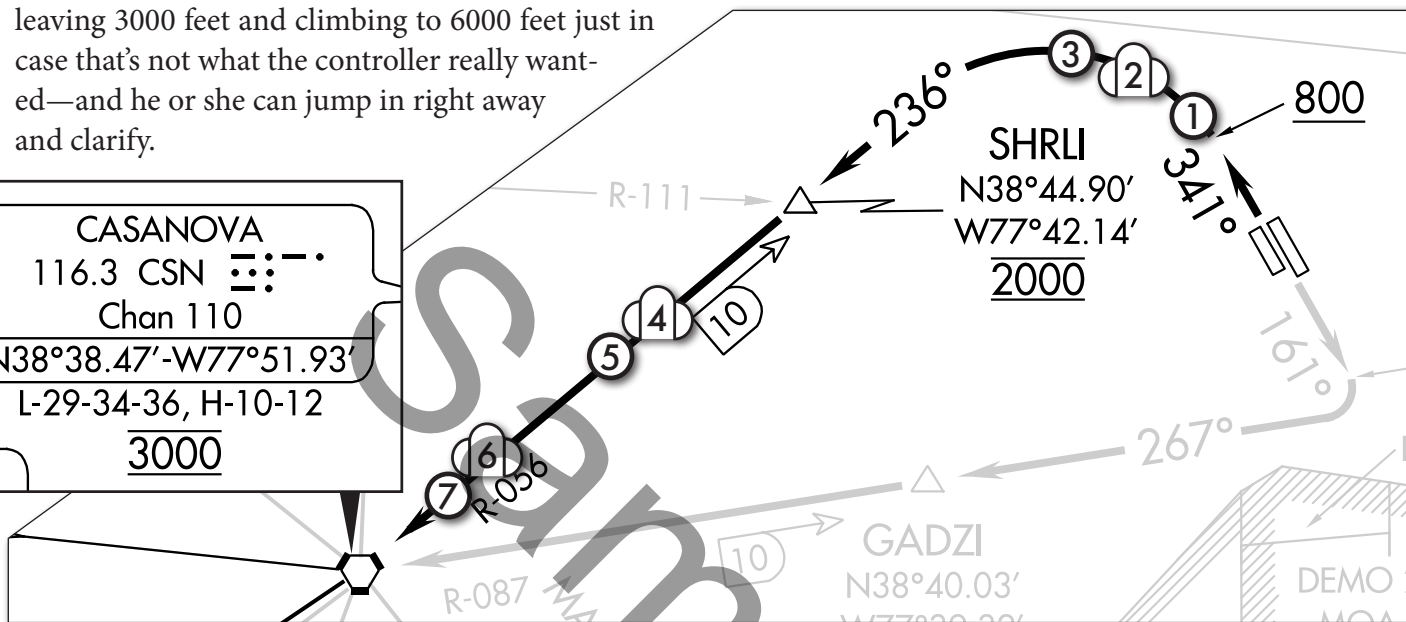
However, the controller told you to, “Climb and maintain six thousand.” This overrides all altitude restrictions and allows an unobstructed climb to 6000

feet. That's subtle, but critical to get right. That's why, while you could simply read back the altitude you're climbing to, it's better to say you're leaving 3000 feet and climbing to 6000 feet just in case that's not what the controller really wanted—and he or she can jump in right away and clarify.

**TAKEOFF RWY 34L/R:** Climb heading 341° to 800, then climbing left turn on CSN VORTAC R-056. Cross SHRLI INT/CSN 10 DME at 2000, cross CSN VORTAC at 3000. Thence....

**MONTEBELLO TRANSITION (ARSNL5.MOL):** From over CSN VORTAC on CSN R-239 and MOL R-058 to MOL VOR/DME.

**CASANOVA**  
116.3 CSN   
Chan 110  
N38°38.47'-W77°51.93'  
L-29-34-36, H-10-12  
3000



## Announce Takeoff and Contact Departure (Below MVA/MIA)

### ① PILOT

Oxford Traffic, Cirrus Eight Eight Seven Two Bravo, departing Runway One Five, straight-out departure. Oxford.

Vectors from ATC are the backbone of air traffic control these days, but that's only possible when the aircraft is above the controller's MVA/MIA or certain additional conditions are met (See "Minimum Vectoring and Instrument Altitude (MVA/MIA)" on page 48.) If those conditions are met, ATC can issue a vector even though you're still at low altitude.

Controllers know which airports in their airspace have good radar coverage, but ATC can't—by definition—issue a clearance in Class G (uncontrolled) airspace. Any instruction must include the phrase "Upon entering controlled airspace." It's possible to get a heading, "Enter controlled airspace heading 230 ...", but that is still after you've flown any ODP.

Neither of those instructions are vectors. They're clearances that go into effect once you're in controlled airspace. You're still responsible for navigation and terrain clearance. The Runway 15 ODP is heading 149 to 1300 feet. Presuming you reach 1300 feet at about call ④, you can proceed on course, which is direct NOTTY.

The controller can't even see you yet. You know that because there's no "radar contact" in call ⑤. Even when there is ⑦, and an altitude is issued, ATC is only separating you from other IFR traffic. You're still on the hook for obstacles and terrain as you join your cleared route. If ⑦ had included a heading to fly, then ATC is taking over for terrain clearance as well.

### ② PILOT (on 125.5)

Portland Approach, Cirrus Eight Eight Seven Two Bravo, off Oxford. One thousand two hundred climbing eight thousand.

### ③ APPROACH CONTROLLER

Cirrus Eight Eight Seven Two Bravo, Portland Approach, Portland altimeter two eight nine one.

### ④ PILOT

Two eight nine one, and we're direct NOTTY now, Cirrus Eight Eight Seven Two Bravo.

### ⑤ APPROACH CONTROLLER

Cirrus Seven Two Bravo, ident and say altitude.

### ⑥ PILOT

Passing two thousand four hundred, Cirrus Seven Two Bravo.

### ⑦ APPROACH CONTROLLER

Cirrus Seven Two Bravo, radar contact, three miles south of the Oxford airport, climb and maintain one zero thousand.

### ⑧ PILOT

Climb and maintain one zero thousand. Cirrus Seven Two Bravo.

Oxford County Rgnl (81B)

Oxford, ME

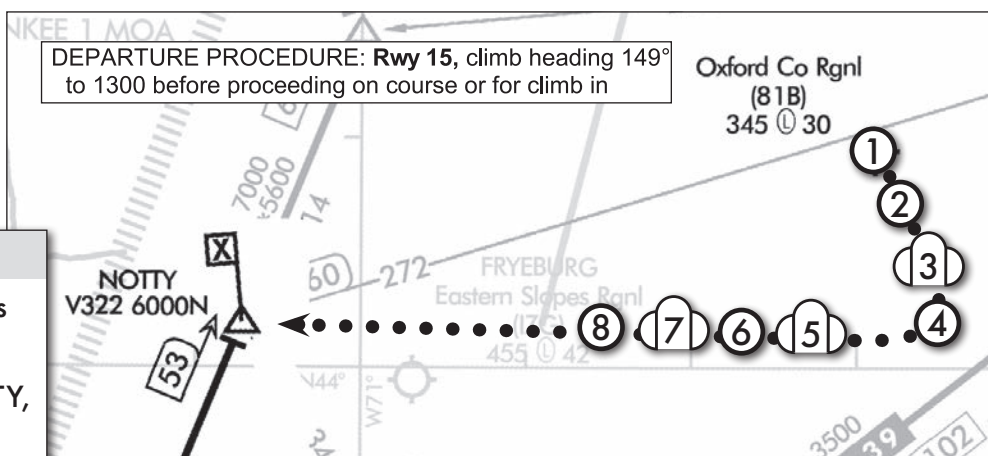
CTAF 122.8

Portland Approach 125.5

#### IFR CLEARANCE

... cleared to Albany Airport as filed, upon entering controlled airspace, proceed direct NOTTY, climb and maintain 8000 ...

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 149° to 1300 before proceeding on course or for climb in





① PILOT  
Phoenix Approach, Cirrus Eight Eight Seven Two Bravo, on the ground at Sedona. Request IFR clearance to Daggett, Kilo Delta Alpha Golf.

② APPROACH CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, cleared to Daggett via OATES ONE departure then as filed. Climb and maintain one two thousand squawk five five five two. Hold for release.

③ PILOT  
Cirrus Eight Eight Seven Two Bravo cleared ... Hold for release.

If there's an aircraft on approach to the non-towered airport you're trying to depart, you can't get an IFR release. One solution is departing VFR to pick up your clearance in the air (page 52). However, if you receive your clearance and *then* find out your release is on hold ④, you can't depart without permission.

The best fix is requesting a VFR departure ⑤. If approved, you make your normal traffic calls, and contact ATC once in the air (page 46).

Conditions must be good enough to remain VFR. You must avoid other aircraft, select your route, and maintain obstacle clearance until you receive an assigned IFR altitude ⑨. This differs from a vector because there's no heading to fly. Once you receive that altitude, you may continue under IFR and enter the clouds. ATC may confirm with "Consider yourself IFR at this time ..." ⑨, or not. ATC has assumed traffic avoidance; obstacle avoidance is still your responsibility, however, unless the controller issued a vector with a heading or direct to a fix.

ATC willingness to do this varies with facility. Some have you squawk 1200, or a temporary code, for the VFR climb. Others just refuse. Worst-case: Cancel IFR and tell ATC to keep your flight plan. Depart VFR and get your clearance in the air.

This technique works best when talking directly to Departure or Center on the ground, but it is possible to relay the request through FSS.

④ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, readback correct. It may be a few minutes, I've got a Cessna inbound on the GPS Runway Three Approach.

⑤ PILOT  
Phoenix Approach, Cirrus Seven Two Bravo, request VFR departure.

⑥ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, VFR departure approved. Maintain VFR. Report airborne on this frequency.

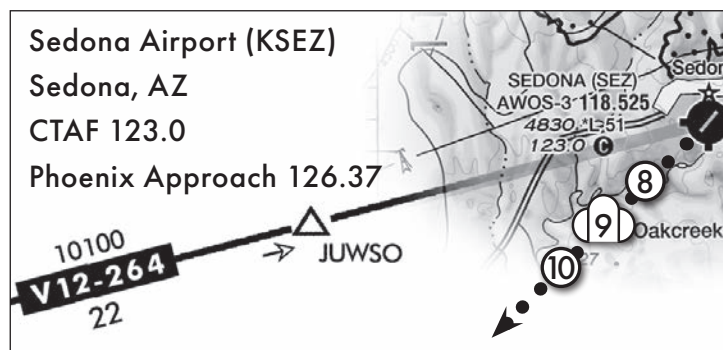
⑦ PILOT  
VFR departure approved, report airborne. Cirrus Seven Two Bravo.

*After departing Sedona VFR with CTAF calls...*

⑧ PILOT  
Phoenix Approach, Cirrus Eight Eight Seven Two Bravo, off Sedona, six thousand.

⑨ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, radar contact seven miles south of Sedona. Consider yourself IFR at this time, climb and maintain one two thousand.

⑩ PILOT  
Climb and maintain one two thousand, Cirrus Seven Two Bravo.



## Request IFR Clearance for Filed Flight Plan in the Air (below MVA/MIA)

- ① PILOT  
Harvey Traffic, Cirrus Seven Two Bravo, departing Runway Three Three Right, downwind departure. Harvey.
- ② PILOT (on 128.5)  
Seattle Approach, Cirrus Eight Eight Seven Two Bravo, VFR off Harvey Field, looking for our IFR clearance to Medford, Oregon.
- ③ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, Seattle Approach, can you maintain your own terrain and obstacle clearance to three thousand feet?
- ④ PILOT  
Affirmative. Cirrus Seven Two Bravo.
- ⑤ APPROACH CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, cleared to the Medford Airport as filed, climb and maintain five thousand, leaving three thousand, fly heading two zero zero, report leaving three thousand, squawk two two five five.
- ⑥ PILOT  
Cleared to the Medford airport as filed. climb and maintain five thousand, leaving three thousand, fly heading two zero zero, report leaving three thousand, squawk two two five five. Cirrus Eight Eight Seven Two Bravo.
- ⑦ APPROACH CONTROLLER  
Seven Two Bravo, readback correct. Seattle altimeter two niner niner one.
- ⑧ PILOT  
Altimeter two niner niner one, and we're leaving three thousand, Cirrus Eight Eight Seven Two Bravo.

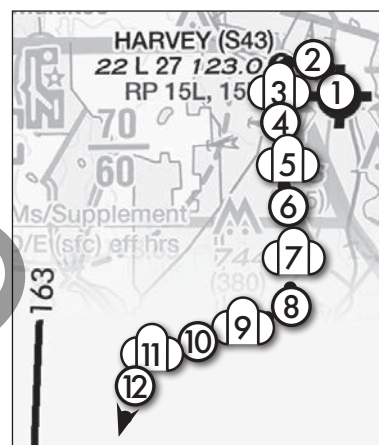
- ⑨ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, ident and say altitude.
- ⑩ PILOT  
Three thousand seven hundred, Cirrus Seven Two Bravo.
- ⑪ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, radar contact, five miles southwest of Harvey airport. Cleared direct Seattle.
- ⑫ PILOT  
Direct Seattle, Cirrus Seven Two Bravo.

If you depart VFR without a clearance and try to pick it up in the air, ATC may pose a question before issuing the clearance: "Can you maintain your own terrain and obstacle clearance to [altitude]?" ③.

This happens when you're below the controller's MVA/MIA, and he or she can't issue instructions at your current altitude. If you say "yes" ④, then the controller can issue you the clearance, probably with some instructions that go into effect when you get high enough ⑤. The difference between this scenario and the one on page 47 is in that situation you departed IFR, with a clearance and a release, but you were too low to get a vector from ATC right away. In this case, you're departing VFR—no clearance—so the phraseology is different.

If you know this question is coming, you can include this information in call ②: "Seattle Approach ... IFR clearance to Medford. *We can maintain our own terrain and obstacle clearance to three thousand.*"

Harvey Field (S43)  
Snohomish, WA  
CTAF 123.0  
Seattle Approach 128.5



## Request a Contact Approach

- ① CENTER CONTROLLER  
Cirrus Seven Two Bravo, proceed direct CERNU, descend and maintain three thousand. Verify you have the Hattiesburg weather?
- ② PILOT  
We have the Hattiesburg weather and request contact approach to Hattiesburg, Cirrus Seven Two Bravo.
- ③ CENTER CONTROLLER  
Cirrus Seven Two Bravo, cleared contact approach to Hattiesburg Bobby Chain airport at or below three thousand. If unable contact approach, proceed direct HILGA, maintain three thousand, report IFR cancellation this frequency or on the ground. Change to advisory approved.
- ④ PILOT  
Cleared contact approach at or below three thousand, direct HILGA and three thousand if missed approach, change to advisory. Cirrus Seven Two Bravo.

Hattiesburg Bobby L. Chain Municipal (KHBG)

Hattiesburg, MS

Houston Center 126.8

The contact approach is one of the most versatile, and most underused, tools for the IFR pilot. Once granted, it gives you the freedom to find your own route to the airport maintaining at least one mile visibility and staying clear of clouds. You don't need the airport, or a preceding aircraft, in sight. You simply need reasonable confidence that you can find your way to the airport visually without hitting anything. That's much more lenient than a visual.

If weather conditions are too poor for a visual approach, ATC must plan for a published instrument approach. If you want a contact approach instead, you must request it ②. ATC can't assign them. This can be a huge help when the airport doesn't have any approaches from your current direction of flight. It's also handy if you're being vectored for an approach, and you suddenly see the airport off your wing.

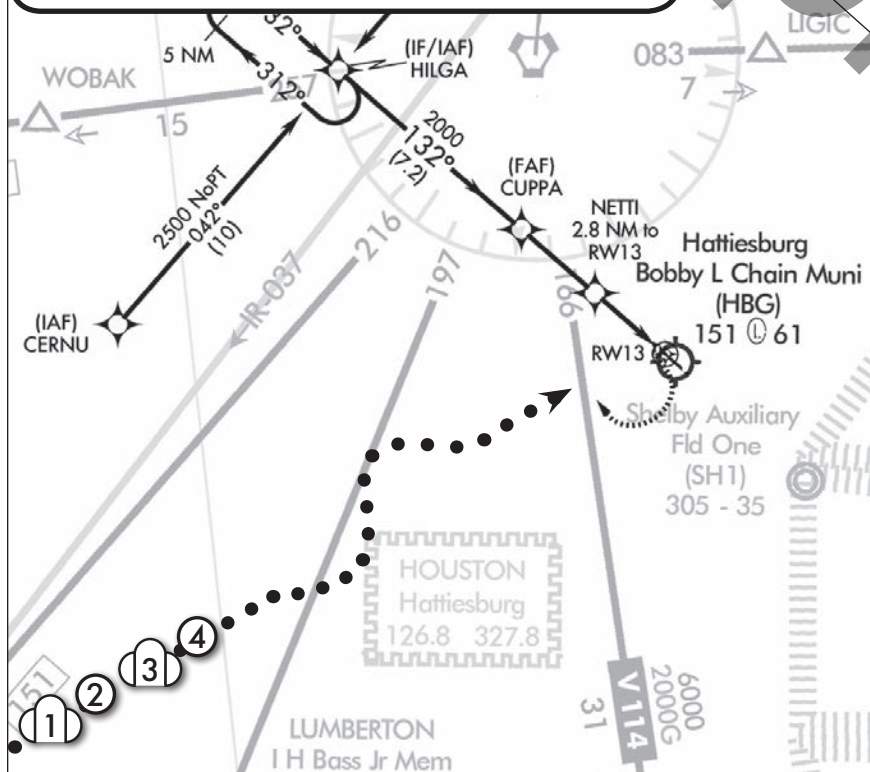
There are some limitations. The airport must have a published instrument approach, so it's not a hack to land at a remote airstrip with no approaches. The reported visibility must be at least one statute mile.

Because you fly your own route to the airport, contact approaches are more often used at non-towered airports where there isn't a steady stream of traffic. That said, you can request one to a towered airport, but the request should include the runway you want for landing.

There's no missed approach procedure, so you should be confident you can find the airport and land. If you can't land, your next move is like a visual approach (page 98), except with worse visibility.

### TIP

While a contact approach at night is technically legal, just don't.



Receive Guidance for an ASR Approach

- 1

PILOT

Key West Approach, Cirrus Eight Eight Seven Two Bravo, four thousand, information Oscar, request ASR Runway Two Seven approach to Key West.
- 2

APPROACH CONTROLLER

Cirrus Eight Eight Seven Two Bravo, Key West Approach, we can do that. Fly heading two three zero, vectors for the ASR Runway Two Seven approach. The published minimum descent altitude is four hundred forty. Descend and maintain one thousand five hundred. Key West altimeter two nine nine seven.
- 3

PILOT

Heading two three zero, leaving four thousand for one thousand five hundred, altimeter two nine nine seven. Cirrus Eight Eight Seven Two Bravo.
- 4

APPROACH CONTROLLER

Cirrus Seven Two Bravo, verify this will be a gyro approach?
- 5

PILOT

Affirmative, Cirrus Seven Two Bravo.
- 6

APPROACH CONTROLLER

Cirrus Seven Two Bravo, contact final approach controller on one three three point seven five.
- 7

PILOT

Contact Approach one three three point seven five. Cirrus Seven Two Bravo.

It's possible to fly an instrument approach without any navigation equipment on board. The Airport Surveillance Radar approach (ASR, sometimes shown as SRA or SRE internationally) has the controller guiding your aircraft laterally, and letting you know your distance from the FAF and the runway. All it requires in the aircraft is an operable radio and transponder.

Few airports offer ASR. If the airport does, you'll see "ASR" in the briefing strip of all the Approach Charts for that airport. Jeppesen users get an actual approach chart for the ASR. Everyone else has to reference the Terminal Procedures Publication (TPP) for the area of the country in question to find the Radar Minimums, or ask ATC to look up the MDA and visibility requirements (see "Things You Can Ask from ATC in a Pinch" on page 118). ATC may give you the information anyway 2.

Make your request on first contact with the facility that would offer the service 1. You may be asked if this is a no-gyro or gyro ASR 4. The former is for gyro instrument failure and doesn't use headings (page 120). At some point, you will be handed to a final controller on a discrete frequency 7. From this point, you only need to acknowledge altitude changes. The controller will provide guidance in the format:

[Call sign], [Course position], [Correcting/diverging], [Rate of correction], [Heading (if needed)].

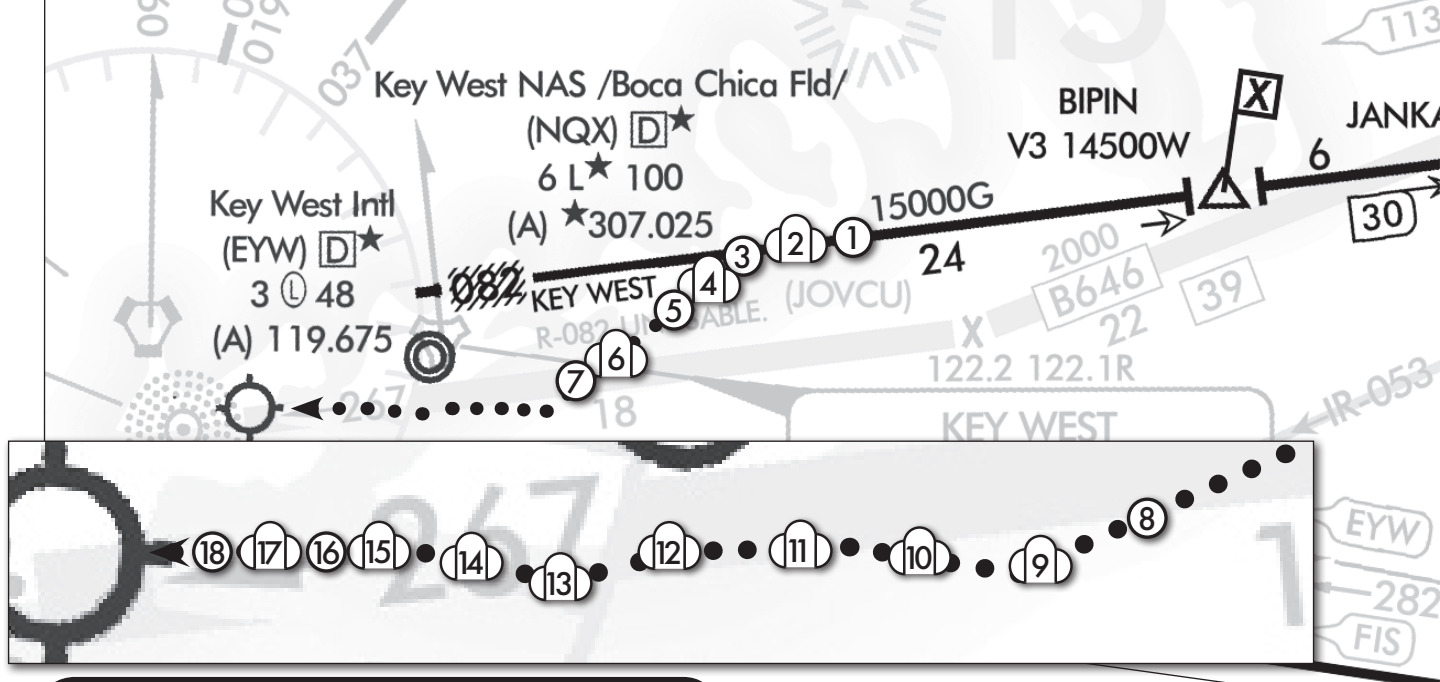
The controller should speak about every 15 seconds (three times as many transmissions as shown in 10-15) and should have issued instructions if you lose contact 9. Simply transmit "Radio check," if you're get worried. As you get close, Approach may relay a landing clearance, "Cleared to land Runway Two Seven, contact Tower one one eight point two on rollout." Runway distances are spoken each mile, unless requested by the pilot.

ASRs have no published missed approach. Unless ATC gave instructions otherwise, climb straight ahead and try to reestablish contact.

| KEY WEST, FLORIDA |                                          |         |      |
|-------------------|------------------------------------------|---------|------|
| WAAS              | CH 82100                                 | APP CRS | 273° |
|                   | W27A                                     |         |      |
| ASR               | DME/DME Rwy received, use Rwy 27 helicop |         |      |

| RADAR INSTRUMENT APPROACH MINIMUMS                                                                        |            |                   |                               |                              |                                           |                 |            |                              |                                           |                 |        |
|-----------------------------------------------------------------------------------------------------------|------------|-------------------|-------------------------------|------------------------------|-------------------------------------------|-----------------|------------|------------------------------|-------------------------------------------|-----------------|--------|
| KEY WEST, FL                                                                                              |            |                   | Amdt 5, 19SEP13 (14149) (FAA) |                              |                                           |                 |            |                              |                                           |                 | ELEV 3 |
| KEY WEST INTL (EYW)                                                                                       |            |                   |                               |                              |                                           |                 |            |                              |                                           |                 |        |
| RADAR-1 124.025 313.7  |            |                   |                               |                              |                                           |                 |            |                              |                                           |                 |        |
|                                                                                                           | <u>RWY</u> | <u>GP/TCH/RPI</u> | <u>CAT</u>                    | <u>DA/</u><br><u>MDA-VIS</u> | <u>HAT/</u><br><u>HATH/</u><br><u>HAA</u> | <u>CEIL-VIS</u> | <u>CAT</u> | <u>DA/</u><br><u>MDA-VIS</u> | <u>HAT/</u><br><u>HATH/</u><br><u>HAA</u> | <u>CEIL-VIS</u> |        |
| ASR                                                                                                       | 27         |                   | AB                            | 440-1                        | 437                                       | (500-1)         | CD         | 440-1½                       | 437                                       | (500-1½)        |        |
|                                                                                                           | 9          |                   | AB                            | 460-1                        | 457                                       | (500-1)         | C          | 460-1½                       | 457                                       | (500-1½)        |        |
| CIRCLING                                                                                                  | ALL RWY    |                   | AB                            | 500-1                        | 497                                       | (500-1)         | C          | 620-1½                       | 617                                       | (700-1½)        |        |
|                                                                                                           |            |                   | D                             | 620-2                        | 617                                       | (700-2)         |            |                              |                                           |                 |        |





- (8) PILOT (on 133.75)  
Navy Key West Approach, Cirrus Eight Eight Seven Two Bravo, one thousand five hundred.
- (9) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, this will be vectors for the ASR Runway Two Seven Approach. No acknowledgment needed except to report the runway in sight. Missed approach point at the runway threshold. If no transmissions received for fifteen seconds on final approach, attempt contact one one eight point two and proceed visually. Seven miles from runway threshold. Fly heading two seven five.
- (10) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, slightly left of course correcting slowly.
- (11) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, turn left heading two seven zero, six miles from runway, prepare to descend to minimum descent altitude in one mile.
- (12) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, five miles from runway, on course, descend to your minimum descent altitude.

Key West International Airport (KEYW)  
Key West, FL  
Navy Key West Approach 124.02  
Navy Key West Approach 133.75  
Key West Tower 118.2

- (13) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, four miles from runway, slightly left of course, fly heading two seven five.
- (14) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, three miles from runway, slightly left of course, correcting slowly.
- (15) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, two miles from runway, on course.
- (16) PILOT  
Runway in sight, Cirrus Seven Two Bravo.
- (17) APPROACH CONTROLLER  
Cirrus Seven Two Bravo, take over visually, contact Tower one one eight point two.
- (18) PILOT  
Over to Tower. Cirrus Seven Two Bravo.

## Request Practice Approaches Under VFR

- ① PILOT  
Chicago Approach, Cirrus Eight Eight Seven Two Bravo, five west of Dupage VOR, request.
- ② APPROACH CONTROLLER  
Cirrus Seven Two Bravo, go ahead.
- ③ PILOT  
We'd like VFR practice approaches at Aurora, starting with vectors for the localizer Runway Three Three.
- ④ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, squawk two six six two and ident.
- ⑤ PILOT  
Two six six two and we're at three thousand five hundred, Cirrus Seven Two Bravo.
- ⑥ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, radar contact four miles southwest of Dupage. Maintain VFR, fly heading one six zero, vectors for the localizer Runway Three Three approach, descend and maintain two thousand six hundred.
- ⑦ PILOT  
Maintain VFR, heading one six zero, leaving three thousand five hundred for two thousand six hundred. Cirrus Seven Two Bravo.
- ⑧ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, what are your intentions after this approach?
- ⑨ PILOT  
After a low approach, we'd like the RNAV Runway Nine from DECAK. Cirrus Seven Two Bravo.

Practicing your approaches under VFR falls into a potentially confusing morass when it comes to communication. ATC instructions during VFR practice approaches sound like instructions when IFR, but they are not an instrument clearance—you must maintain VFR cloud clearance and visibility. Clouds aren't depicted on the radar scope. You're responsible for keeping the required distance.

The key to a good VFR practice request is clarity. Ask for exactly what you want, but keep it on topic ③. The controller doesn't need to hear you're dusting off the rust after a long winter out of the cockpit.

VFR practice approaches come in two forms: One is where separation services are provided. In this case, you'll get assigned altitudes when on a vector ⑥, and guaranteed separation from any IFR traffic once cleared for an approach. If that's not available, you should be told, "No separation services provided," and you'll hear, "Practice approach approved," rather than "Cleared [name] approach."

Clearance to fly an approach under VFR does *not* include clearance to fly the missed approach. After the approach, you climb back up, and contact the controller with the next request. That's why it's often best to keep the controller informed of what you want next ⑨. If you don't, the controller may ask ⑧. An advantage of setting this up ahead of time is getting missed approach instructions that set you up for the next approach.

You don't need to be IFR current—or even instrument rated—to fly VFR practice approaches. It's a great way to get current or learn with ATC's help.

**Aurora Municipal Airport (KARR)**

**Chicago, IL**

**Chicago Approach 133.5**

**Aurora Tower 120.6**

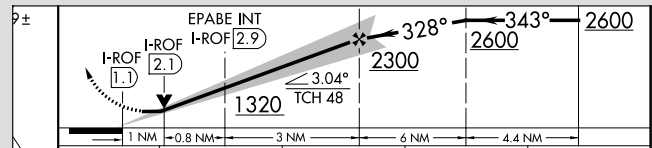
### TIP

When receiving practice approaches under VFR, be extra conscientious about airspace. Under IFR, you don't need to worry about flying through Class B, or special use, airspace. Your IFR clearance or vector is enough. Not so under VFR, and the controller might not notice in time.

## "VFR ALTITUDE YOUR DISCRETION"

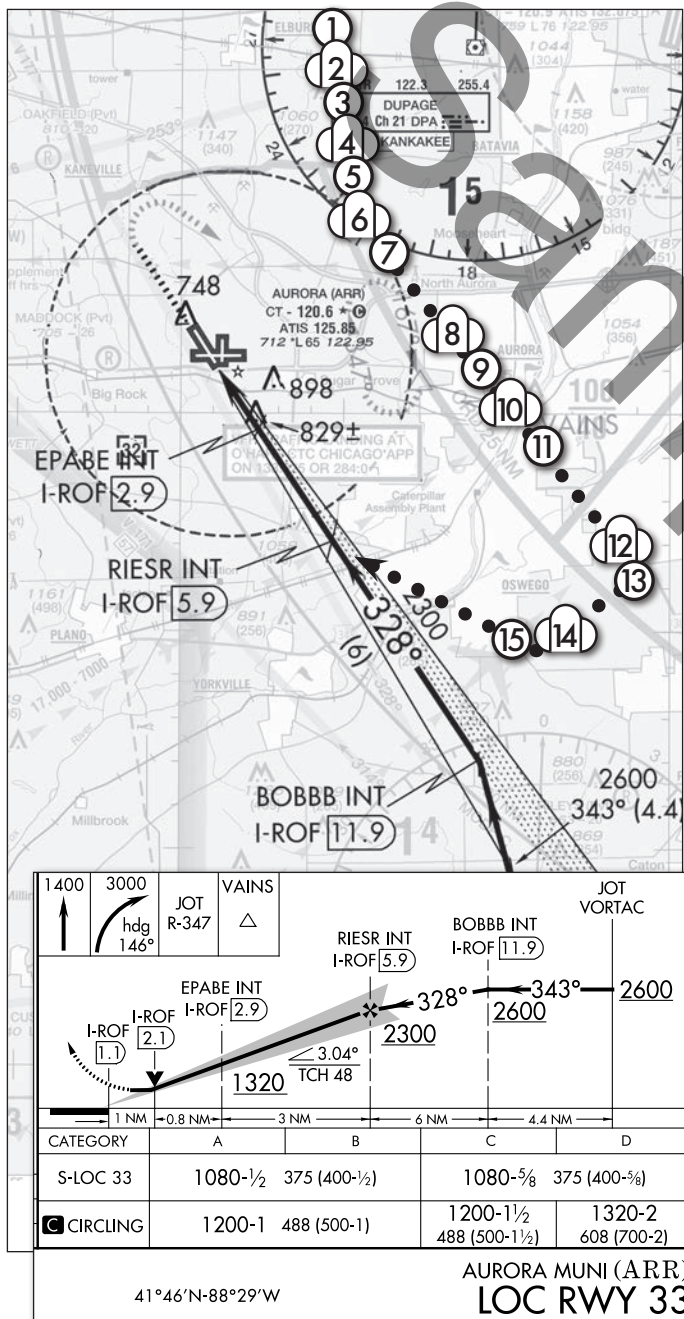
A common confusion on VFR practice approaches is whether you must ask to change altitudes. Many pilots doing instrument practice under VFR have motored along getting closer and closer to the final approach course, waiting for the controller to issue a descent that never comes. Finally, they ask if they can descend only to hear, "VFR altitude your discretion."

Unless you were assigned an altitude or a restriction, such as "Maintain at or below 5000 for traffic ...", then you may fly any altitude you wish as you fly the approach. That said, it's polite to notify



ATC if you change altitudes, especially in a busy environment. You'd simply say you were descended to [altitude] rather than requesting a descent to [altitude]. You'll probably hear the same "VFR altitude your discretion" anyway.

ATC assumes you'll fly the published altitudes once you're on the approach. If that's not your plan, it's best to alert the controller beforehand.



### (10) APPROACH CONTROLLER

Cirrus Seven Two Bravo, you can expect that. On completion of the approach, fly runway heading, climb and maintain three thousand, maintain VFR, Departure on this frequency.

### (11) PILOT

Missed approach is runway heading to three thousand, contact you. Cirrus Seven Two Bravo.

### (12) APPROACH CONTROLLER

Cirrus Seven Two Bravo, fly heading two four zero.

### (13) PILOT

Two four zero, Cirrus Seven Two Bravo.

### (14) APPROACH CONTROLLER

Cirrus Seven Two Bravo, four miles from RIESR, fly heading three three zero until established on the localizer. Cleared localizer Runway Three Three approach. Contact Aurora Tower now on one two zero point six. See you on the missed.

### (15) PILOT

Heading three three zero until established, cleared for the approach, contact Tower. Cirrus Seven Two Bravo.

## Request a No-Gyro Vector to an Approach

- ① PILOT  
Boston Approach, Cirrus Seven Two Bravo, request.
- ② APPROACH CONTROLLER  
Cirrus Seven Two Bravo, Boston Approach. Go ahead with your request.
- ③ PILOT  
Do you have time to give us a practice no-gyro vector to the Hyannis ILS Runway Two Four? Cirrus Seven Two Bravo.
- ④ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, affirmative. You want to do it from your current position?
- ⑤ PILOT  
Affirmative, we're ready now. Cirrus Seven Two Bravo.
- ⑥ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, this will be a no-gyro vector for the ILS Runway Two Four approach. Make standard rate turns. Turn left.
- ⑦ PILOT  
Turn left. Cirrus Seven Two Bravo.
- ⑧ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, stop turn.
- ⑨ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, turn left.
- ⑩ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, stop turn.

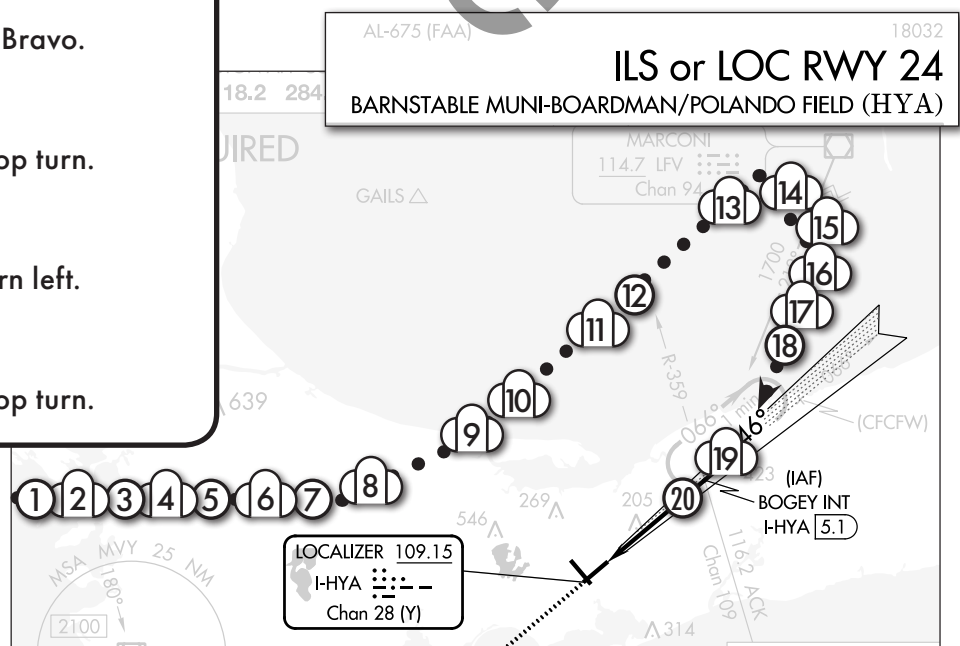
Barnstable Muni. Airport (KHya)  
(which everyone calls "Hyannis")  
Hyannis, MA  
Boston Approach 118.2

When ATC issues vectors, it's assumed you can fly a reliable heading. If you're flying a simple trainer and lose the vacuum-driven heading and attitude, or your primary flight display (PFD) fails, you could be left without a reliable heading source, not to mention no attitude source. This is a legitimate emergency, so you should declare that to ATC and get help. One tool available is no-gyro vectors.

Instead of giving you headings to fly, the controller watches your target progress across the scope and steers it by saying, "turn [direction]" and "stop turn." You don't need to acknowledge these instructions because the controller is watching you comply on his or her scope. However, if the instruction was combined with other items ⑥, or is for an altitude change or approach clearance ⑪ & ⑰, you should read it back.

No-gyro vectors end with an intercept to the final approach course. You still have to fly this part of the approach on your own with the on-board equipment, although you can certainly ask ATC to keep a close eye on you to catch deviations early.

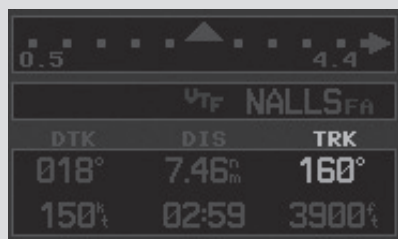
You may be able to combine no-gyro vectors with a no-gyro version of an ASR approach (page 112). A normal ASR approach has ATC giving you heading corrections all the way to the runway. No-gyro vectors to a no-gyro ASR approach means the controller will continue giving you "turn left ... stop turn" type instructions through the approach itself.





## FLYING GPS TRACK INSTEAD OF HEADING

With a panel-mounted GPS, no-gyro vectors may be more trouble than they're worth. Your GPS provides track information, which is your actual path



over the ground. Tell ATC you can't fly headings, but can fly tracks. The controller will issue

tracks to fly without the wind correction ATC normally adds with headings. Turn until your GPS track is what you want and hold wings level to maintain it.

However, if you have no attitude information and are having trouble just flying partial panel, it's better to have someone else minding your track over the ground while you concentrate on keeping the aircraft upright.

ASR approaches aren't widely available, but you can ask for no-gyro vectors to virtually any airport with sufficient radar coverage. Because there's lag in the radar update, the controller must anticipate the turn of your airplane. Make all turns at standard rate, which is three degrees per second. (If you're getting

no-gyro guidance on an ASR approach, make turns at half standard rate on final approach.) The rapid update rate of ADS-B-out transponders give controllers even better visibility of your movements.

Hopefully, you'll never lose heading reference in the clouds, and never have to fly no-gyro vectors for real. That's no reason not to practice, however, so you know what it's like. Controllers have to practice, too, so they're usually happy to accommodate the request ③. Just be sure to say, "Request no-gyro vectors for practice," or "Request a practice no-gyro approach." If you leave out the word "practice," the controller may assume you've experienced an actual instrument failure, and declare an emergency for you.

⑪ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, descend and maintain one thousand four hundred.

⑫ PILOT  
Descend and maintain one thousand four hundred. Cirrus Seven Two Bravo.

⑬ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, turn right.

⑭ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, stop turn.

⑮ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, turn right.

⑯ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, stop turn.

⑰ APPROACH CONTROLLER  
Cirrus Seven Two Bravo is three miles from BOGEY. Maintain one thousand four hundred until established on the localizer, cleared ILS Runway Two Four approach.

⑱ PILOT  
One thousand four hundred until established, cleared ILS Runway Two Four, Cirrus Seven Two Bravo.

⑲ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, contact Tower now, one one niner point five.

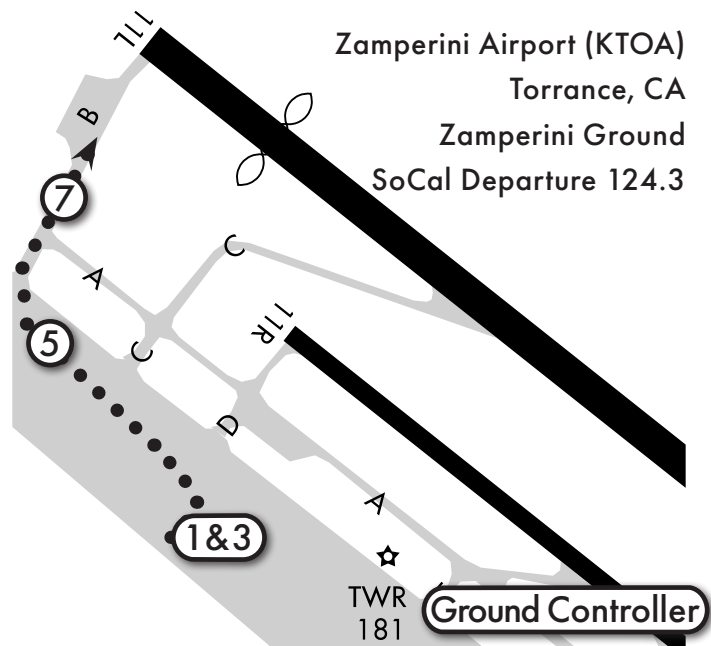
⑳ PILOT  
Contact Tower. Cirrus Seven Two Bravo.

### TIP

Unlike ASR approaches with transmission every 15 seconds, you could go for several minutes on a vector without turn instructions. Feel free to request a radio check if you get worried.

## Request an IFR Climb to VFR-On-Top

- ① PILOT  
Torrance Ground, Cirrus Eight Eight Seven Two Bravo, at South Bay Aviation with Delta. Request an IFR climb to VFR-on-Top, preferably eastbound towards Cottonwood, which is Papa Fifty Two, and we're also ready to taxi.
- ② GROUND CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, Torrance Ground. Runway One One Left, taxi via Bravo. Clearance on request.
- ③ PILOT  
Runway One One Left via Bravo. Cirrus Eight Eight Seven Two Bravo. Thanks.
- ④ GROUND CONTROLLER  
Cirrus Seven Two Bravo, I have your clearance, advise ready to copy.
- ⑤ PILOT  
Ready to copy. Cirrus Seven Two Bravo.
- ⑥ GROUND CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, cleared to the Seal Beach VOR, via fly runway heading, radar vectors, Seal Beach. Climb to and report reaching VFR-on-top, no tops reports, if not on top at three thousand, maintain three thousand and advise. Departure frequency one two four point three, squawk seven three six one.
- ⑦ PILOT  
Cleared to the Seal Beach VOR, runway heading, vectors, Seal Beach. Climb to and report reaching VFR-on-top. If not on top by three thousand, maintain three thousand and advise. Departure one two four point three, squawk seven three six one. Cirrus Eight Eight Seven Two Bravo.



One way to depart an airport and get above localized clouds, fog, haze, or smoke is to request an IFR climb to VFR-on-top.

The formal way to do this is filing an IFR flight plan to an airport and putting “OTP/[altitude]” in the altitude block. “OTP/45” would mean climb to VFR-on-top with requested altitude of 4500 feet.

You can skip the flight plan and just make the request from Clearance Delivery or Ground ① at a towered airport. Departing a non-towered airport, you could make the request from the Departure or Center controller for the overlying airspace.

The clearance you receive ⑥ will include a clearance limit (your destination, or a fix near the departure airport), and these phrases:

Climb to and report reaching VFR-on-top.  
Tops reported [Altitude] (or “No tops reports”). If not on top at [Altitude], maintain [Altitude] and advise.

If you simply report on top in VFR conditions, ATC will tell you to “Maintain VFR-on-top.” This is

### TIP

If the weather allows for a visual climb VFR, but with only one mile visibility and clear of clouds, you can ask for a Special VFR climb to VFR. This is not an IFR clearance, and may be quicker.

- ⑧ GROUND CONTROLLER  
Cirrus Eight Eight Seven Two Bravo,  
readback correct.

*After taxiing out, taking off, and getting  
handed to Departure ...*

- ⑨ PILOT (on 124.3)  
SoCal Departure, Cirrus Eight Eight  
Seven Two Bravo, one thousand one  
hundred climbing three thousand.

- ⑩ DEPARTURE CONTROLLER  
Cirrus Eight Eight Seven Two Bravo,  
radar contact. Turn left heading zero  
seven zero. Report reaching VFR-on-  
top.

an IFR altitude (page 59). Because you're on an IFR flight plan, you have a clearance limit, and it probably isn't an airport where you could fly an approach and land. That might be fine if you were just climbing above the clouds for maneuvers or sight seeing. If you actually plan to go somewhere, you'll probably cancel IFR ⑫ and continue the flight VFR.

Of course, if you reach the "if not on top" altitude in your clearance and you're still IMC, you'll be asked what your intentions are. Any time you depart on an IFR climb to VFR-on-top, you'd best have a

- ⑪ PILOT  
Left zero seven zero. Report VFR-on-top,  
Cirrus Eight Eight Seven Two Bravo.

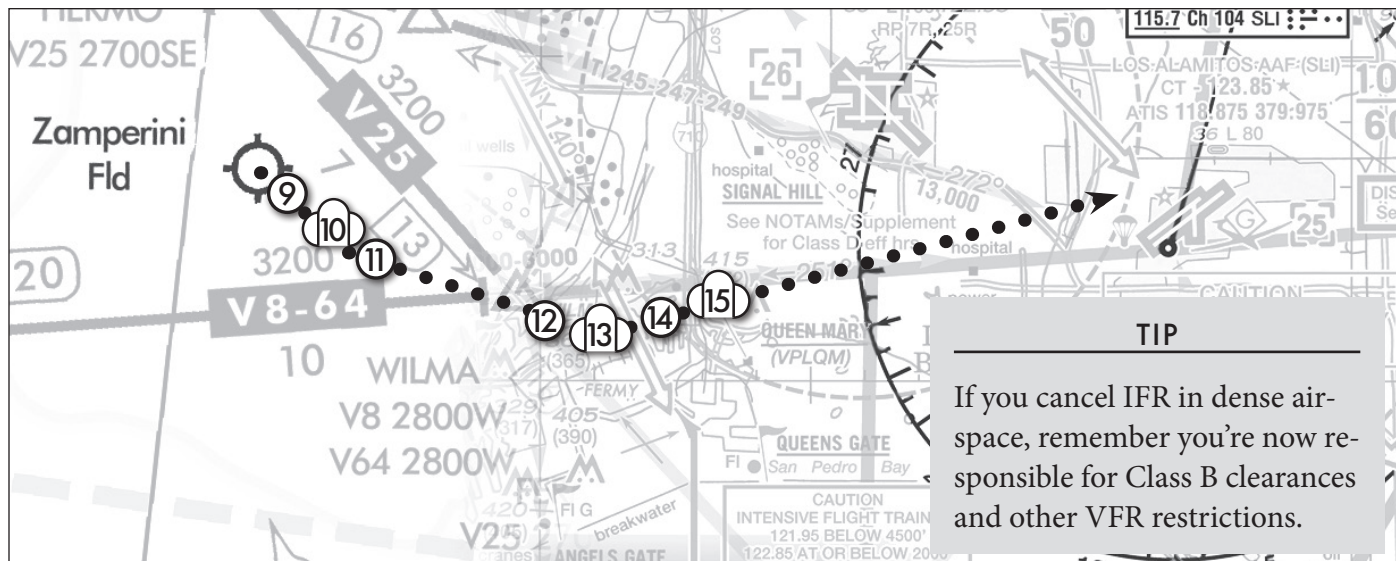
- ⑫ PILOT  
SoCal Departure, Cirrus Eight Eight  
Seven Two Bravo is in VFR conditions on  
top. We'd like to cancel IFR, but stay with  
you for advisories to Cottonwood.

- ⑬ DEPARTURE CONTROLLER  
Cirrus Seven Two Bravo, roger. IFR  
cancellation received. Say destination  
again, and on-course heading and  
altitude.

- ⑭ PILOT  
Destination is Cottonwood, Papa Fifty  
Two, heading zero seven zero at five  
thousand five hundred. Cirrus Seven Two  
Bravo.

- ⑮ DEPARTURE CONTROLLER  
Cirrus Seven Two Bravo, roger. Keep  
your current squawk code. Maintain  
VFR. Enjoy your flight.

plan for what you'll do if you can't reach visual conditions. Eventually, you do have to come back down.



## Request a Through Clearance

① PILOT  
Tri-City Approach, Cirrus Eight Eight Seven Two Bravo, level seven thousand with current weather for Johnson City.

② APPROACH CONTROLLER  
Cirrus Seven Two Bravo, Tri-City Approach. Say approach request at Johnson City.

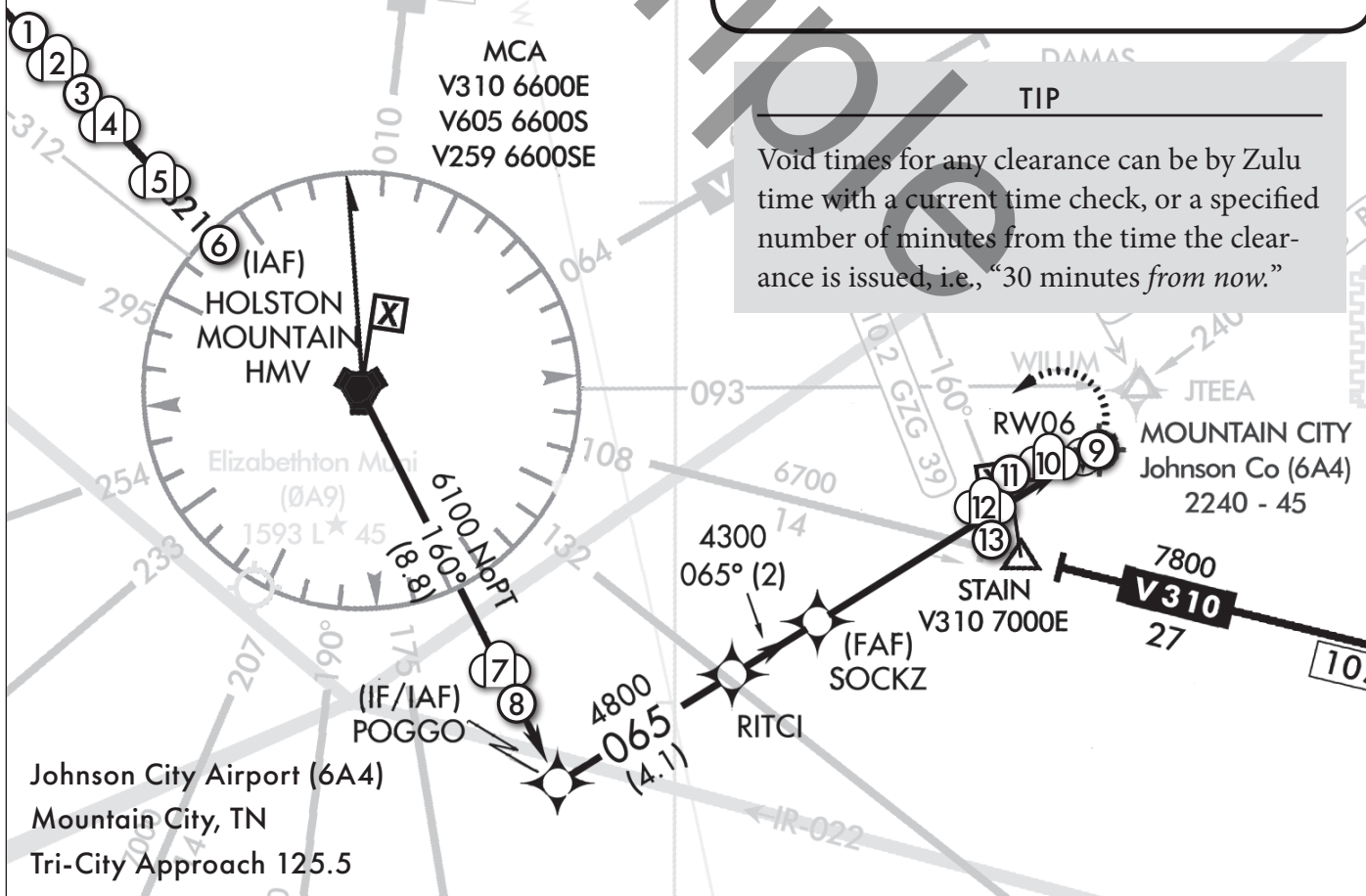
③ PILOT  
We have a flight plan on file to Billy Mitchell Airport, and request a clearance through Johnson City to Billy Mitchell. We'll be on the ground at Johnson County for one five minutes. We'll be departing Runway Two Four. Cirrus Seven Two Bravo.

④ APPROACH CONTROLLER  
Cirrus Seven Two Bravo ... uh, standby.

After the controller looks up what a "through clearance" is, and retrieves your flight plan:

⑤ APPROACH CONTROLLER  
Cirrus Seven Two Bravo is cleared through the Johnson County Airport to the Hotel Sierra Echo Airport via STAIN, Victor Three Ten, Tar River, Victor Two Ninety, PUNGO, direct. Maintain niner thousand. Squawk three zero two five. Void if not off in thirty minutes. If not off in thirty minutes, advise Tri-Cities Approach of intentions.

⑥ PILOT  
Cleared through the Johnson County Airport to the Hotel Sierra Echo Airport via STAIN, Victor Three Ten, Tar River, Victor Two Ninety, PUNGO, direct. Maintain niner thousand. Squawk three zero two five. Void if not off in thirty minutes. Cirrus Seven Two Bravo.





The “through clearance” is an IFR clearance that lets you make a quick stop at a non-towered airport on the way to your destination. Similar to hearing a simple “Cleared approach” or a cruise clearance, the through clearance lets you fly any approach into the through airport, including a visual or contact approach. You land, spend a short time on the ground, and depart—all without closing your IFR flight plan and getting a new IFR clearance and release.

You can’t file for a through clearance. Instead, you file two IFR flight plans, and then connect them with a through clearance you get from ATC after you’re airborne.

Suppose you were headed from Blue Grass Airport (KLEX) to Johnson County Airport (6A4) to pick up a friend. The two of you will continue east to Billy Mitchell Airport (KHSE) on Cape Hatteras. Because you’re already talking to the ATC facility who would give you an IFR departure clearance from 6A4, you short-cut the procedure by requesting a through clearance to KHSE ③.

You’ll only get a through clearance at low-traffic airports (or in the middle of the night) because the airspace is blocked to all other aircraft. In fact, nearby airports may be blocked as well to protect your departure route, so the stop must be short. You can’t get a through clearance at a towered airport. There would be no point.

Back in the day, through clearances were popular with freight dogs, check haulers, and helicopters servicing oil rigs on the Gulf Coast who would land, drop off or pick up some cargo, and get flying again ASAP. Through clearances are rare these days, and few pilots—or controllers—have any experience with them.

That said, they’re useful if you need to make a quick stop at a non-towered airport to drop off or pick up a passenger or some cargo, to quickly get some fuel, or to run (perhaps literally) to a restroom. Another use is a stop at a really remote airport that has no RCO or cell tower within range, and no landline on the field. Getting a through clearance may be the easiest way to legally get back into the IFR environment if the weather is low IFR. Just remember you’re still responsible for flying any departure procedure needed to climb out safely.

⑦ APPROACH CONTROLLER  
Cirrus Seven Two Bravo. Change to advisory approved. See you in a few.

⑧ PILOT  
Over to advisory. Talk to you soon.  
Cirrus Seven Two Bravo.

*After flying the RNAV (GPS) Runway 6 approach from HMY, landing, picking up the passenger, and departing Runway 24:*

⑨ PILOT  
Tri-City Approach, Cirrus Eight Eight Seven Two Bravo, off Johnson City Airport, four thousand niner hundred climbing niner thousand.

⑩ APPROACH CONTROLLER  
Cirrus Eight Eight Seven Two Bravo, ident. Johnson County altimeter two eight eight seven.

⑪ PILOT  
Ident and two eight eight seven. Cirrus Seven Two Bravo.

⑫ APPROACH CONTROLLER  
Cirrus Seven Two Bravo, radar contact three miles south of Johnson City.  
Proceed direct STAIN

⑬ PILOT  
Direct STAIN. Cirrus Seven Two Bravo.

#### TIP

You can request a through clearance for an unplanned stop part way through an IFR flight, such as if “nature calls” and you’re passing over an airport with “facilities.” Your route would become, “... cleared through [airport] to [destination] remainder of clearance remains unchanged ...” plus, uh, “void” times and other instructions.

The preceding are sample pages from *IFR Communications: A Pilot-Friendly Manual*, from PilotWorkshops.  
For more details, visit our website at: [www.PilotWorkshop.com](http://www.PilotWorkshop.com).

