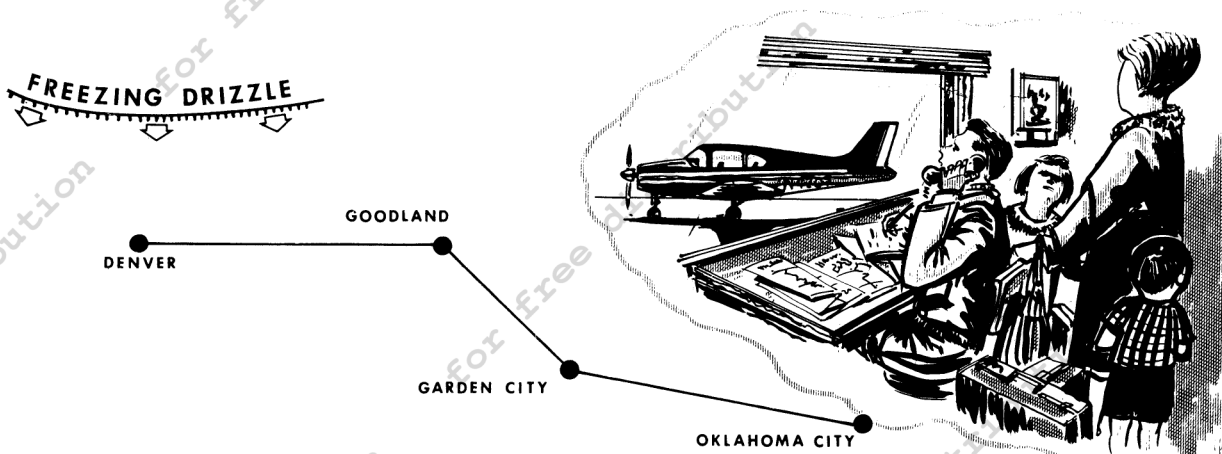


DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
VFR PILOT EXAM-O-GRAM* NO. 34

HOW TO OBTAIN PROPER WEATHER BRIEFING

A National Transportation Safety Board Statistical Review of General Aviation Accidents indicates that about one in every four fatal accidents in general aviation is the result of pilots continuing flight in adverse weather. This report lists weather as a causal factor in 1,039 accidents of which 296 were classed as fatal accidents and 743 were non-fatal.

Most FAA General Aviation Written Tests contain test items which deal with proper "Preflight Action" as required by Federal Aviation Regulations. Obtaining sufficient information concerning enroute and destination weather before beginning a flight is one of the most important parts of preflight action. The illustration and telephone conversation below is an example of an individual who "thinks" he has checked the weather.



PILOT: "This is Tom Jones. Will you give me the latest Garden City, Goodland and Denver sequence reports and the winds at eighty-five hundred feet?"

WEATHER BRIEFER: "Yes sir, at 1100 Central time, Garden City was reporting clear skies, visibility more than 15, surface wind 140 degrees at 20 knots. At Goodland the visibility is still good and they report scattered cirriform clouds. . . their wind is 150 degrees at 20 knots. At 1000 Mountain time, Denver is clear, visibility 50 miles, surface wind is from 040 degrees at 10 knots. Winds at eight thousand five hundred feet will average 220 degrees at 30 knots. Sir, would you like a weather briefing for your flight? A front lies. . ." (the pilot interrupts at this point.)

PILOT: "No, that's all right, thank you. I'm in a hurry. I'll check the weather along the way."

★★★★★

The above illustration portrays a pilot who is in a hurry to fly his family on an extended cross-country flight of approximately 463 miles. The weather looks good at his departure point and the hourly sequence reports indicate that present weather conditions are favorable along the route. However, this pilot is too anxious to get into the air -- too anxious to be on his way. He probably doesn't realize how rapidly the weather can deteriorate in the 3 hours that will be required to reach his destination--or-- he is a careless or inexperienced pilot whose flying is characterized by poor judgment. If Mr. Jones had stayed on the phone for perhaps another minute, the briefer would have given him information (Terminal and Area Forecasts, AIRMETS, etc.) which should have changed his mind about attempting the flight. He would have learned that the proposed flight would take him into rapidly deteriorating ceilings and visibilities as well as freezing drizzle. The briefer offered the pilot more information and it may have appeared to him that the briefer was questioning his competence. Nevertheless, the pilot should have listened to what the briefer had to offer. Sometimes it may be superfluous--often it is vitally important.

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* Exam-O-Grams are non-directive in nature and are issued solely as an information service to individuals interested in Airman Written Examinations.

ENROUTE WEATHER BRIEFING . . .



I'LL TAKE A LOOK....I THINK
I CAN MAKE IT.



PILOT: ". . . Goodland Radio, I am 5 miles east of Goodland at 6,500. Will you give me the latest Denver weather . . .?"

GOODLAND RADIO: ". . . At 1200 Mountain time Denver was measured 1500 overcast, visibility 10, very light drizzle, temperature 38, dewpoint 34, wind 040 degrees at 15, altimeter 29.98, low clouds northeast approaching station. . . Denver AIRMET ALPHA 2, moderate icing in precipitation in northern third of Colorado east of the Rockies, conditions continuing beyond 1500 Mountain and moving southward. . . Pilot Report at 50 northeast of Denver, moderate rime icing 6,000 to 9,000 feet MSL, type aircraft unknown. . ."

PILOT: "I believe that I can make Denver okay VFR, don't you?"

GOODLAND RADIO: "Negative. The conditions have dropped rapidly during the past hour. I'll give you the Denver forecast."

PILOT: "That's okay, I'll take a look and I'll turn around if it gets too bad. It's 1500 and 10 at Denver--I think I can make it."

○ ○ ○

(Epilogue - Unfortunately, he didn't make it!
The pilot encountered freezing drizzle, crashed,
and all occupants aboard were killed.)

So often pilots are given SIGMETs, AIRMETS, or Pilot Reports, but they do not realize the significance of the information--nor have they gained a lasting respect for the forces of weather. Even though this pilot was made aware of the potential weather hazards on the flight from Goodland to Denver, he did not heed the warning received. It is not unusual for a pilot to be motivated to continue flight into deteriorating weather in order to: Keep a speaking engagement, attend a party with friends, get home to the family, or a multiplicity of other seemingly important reasons. Those oft spoken words "I think I can make it," are too frequently the pilot's last transmission.

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WAS THE "PREFLIGHT ACTION" BY THE PILOT IN ACCORDANCE WITH REGULATIONS? No! FAR Part 91 states in part: "Each pilot in command shall, before beginning a flight, familiarize himself with all available information concerning that flight. This information must include, for a flight under IFR or a flight not in the vicinity of an airport, available weather reports and forecasts, fuel requirements, alternatives available if the planned flight cannot be completed"

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This Exam-O-Gram covers several of the most common methods by which a pilot can obtain weather briefings. In certain localities, there are other ways that a pilot can receive weather information.

WHAT IS THE PROPER WAY TO REQUEST A WEATHER BRIEFING BY TELEPHONE? You get faster service and greatly assist the weather briefer by telling him:

1. That you are a pilot. (If you are a student, private, or commercial pilot--say so. The weather briefer needs to know that you are a pilot, not someone who calls just to find out the general weather picture.)
2. The type of airplane you are planning to fly. (light single engine, high performance multi-engine, and jets all present different briefing problems.)
3. Your route and destination. (If you plan to stop somewhere enroute or deviate from the normal course, you should tell the briefer your intentions.)
4. Your estimated departure time and the estimated time enroute.
5. Whether or not you can go IFR. (Instrument rated? . . . Aircraft equipped?)

WHAT PERTINENT INFORMATION SHOULD A WEATHER BRIEFING INCLUDE? A preflight weather briefing will be incomplete unless it includes:

1. Weather synopsis (position of lows, fronts, ridges, etc.).
2. Current weather conditions.
3. Forecast weather conditions.
4. Alternate routes (if necessary).
5. Hazardous weather.
6. Forecast winds aloft.

NOTE: All of these items are on the weather briefer's checklist!

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WHERE CAN YOU OBTAIN A WEATHER BRIEFING? Flight Service Stations (FSS) provide aviation weather briefing service, and at major strategically located cities weather briefings are also available through both the FSS and Weather Service Office (WSO). At many locations, the Weather Service furnishes Pilot's Automatic Telephone Weather Answering Service (PATWAS), which means that the weatherman records a briefing that is available to the pilot over his local telephone. Pilots may receive continuous broadcasts of weather information over certain VORs, VORTACs, and many of the low and medium frequency navigation aids - known as Transcribed Weather Briefings (TWEB). TWEB and PATWAS are similar in that they provide weather information for a radius of 250 miles.

WHERE CAN YOU FIND A LISTING OF FSS AND WEATHER SERVICE TELEPHONE NUMBERS? The Weather Service and Flight Service Stations provide weather briefings through both listed and unlisted telephone numbers. The unlisted numbers for all Weather Service Offices and FSS's providing this service are published in the Airman's Information Manual. See excerpt.

FSS-CS/T AND NATIONAL WEATHER SERVICE TELEPHONE NUMBERS

AIRMAN'S INFORMATION MANUAL
Excerpt

Location and Identifier	Area Code	Telephone
OKLAHOMA		
Gage GAG.....	FSS (405)	923-2601
Hobart HBR.....	FSS (405)	726-5234
McAlester MLC.....	FSS (918)	GA 3-4091
Oklahoma City OKC (Wiley Post).....	FSS (405)	787-9323 ■
	FSS (405)	787-9060 ★
	FSS (405)	787-9061 ★
Ponca City PNC.....	FSS (405)	RO 5-5485
Tulsa TUL.....	FSS (918)	TE 6-3505 ■
	FSS (918)	835-2364 ★

★ Indicates Pilot's Automatic Telephone Weather Answering Service (PATWAS) or telephone connected to the Transcribed Weather Broadcast (TWEB) providing transcribed aviation weather information.

◆ Indicates a restricted number, use for aviation weather information

■ Call FSS for "one call" FSS/WSO briefing service.

★ Automatic Aviation Weather Service (AAWS).

For long cross-country flights or flights in marginal weather, the pilot may choose a face-to-face briefing by FSS or Weather Service personnel. If a planned flight is short (250 miles or less) a visit with a weather briefer may be unnecessary except in marginal or poor weather situations. Often, a briefing by telephone or the information contained in recorded weather briefings (PATWAS or TWEB) will fill a pilot's needs. NOTE: At the conclusion of a PATWAS recording, you may get additional information by holding the phone and waiting for the weather briefer to answer.

HOW CAN YOU DETERMINE WHERE RECORDED WEATHER BRIEFINGS (TWEB) ARE AVAILABLE?

By referring to the Airport/Facility Directory section of Airman's Information Manual (AIM). In the excerpt to the right, notice the **black square** which appears after the frequency and indicates that recorded weather briefings are available. A pilot on the ground at a small airport 50 miles from Will Rogers World Airport might utilize this service by tuning his ADF (or low frequency) receiver to 350 kHz, and thereby receive continuous transcribed weather briefings of the area around Will Rogers within a 250 mile radius.

WHAT IS THE MEANING OF FOREIGN EXCHANGE TELEPHONE SERVICE AS PROVIDED BY FAA? Pilots departing from many of those airports having neither a Weather Service Office nor a FSS may call a nearby FSS on foreign exchange telephone service provided by FAA at no cost to the pilot. For example: In the Oklahoma City area there are 3 surrounding towns that have been provided this service. These towns are Norman, Chickasha, and Stillwater, and the distances from Oklahoma City are 22, 27, and 62 miles respectively. Calls can be placed to Oklahoma City FSS from any telephone located in these towns by dialing the local number listed in Airport Directory section of AIM. See excerpt for Chickasha, which lists the local call number CA 4-6440.

OKLAHOMA—Continued

WILL ROGERS WORLD IFR 6 SW FSS: OKLAHOMA CITY (DL)
 1284 H98/17R-35L(4) (S-120, T-160, TT-) BL4, 6, 8
 S5 F5, JP1, JP4 U2 VASI: Rnwy 17
Remarks: Rnwy 3-21 and taxiway (C-1) to 15000 lbs or less. Rnwy 3-21 3800' N daltg on (2726' MSL) (2749' MSL) twr 11 NM NNE. Due non-vsbty, etc twr.

Tower 118.3 **Unicom** 122.7R **Gnd Con** 121.9
Radar Services: (BCN)
Oklahoma City App Con 119.3 134.1x 122.5R 120.5
Oklahoma City Dep Con 121.1
ASR Rnwy 17, 35 Ceil 400 Vsbty 1 mi Min Alt 1684
ILS 109.9 I-OKC App Brg 351° **LOM:** 219/OK
Oklahoma City (H) BVORTAC 115/OKC 098° 8.1 NM to rwny 12
Oklahoma City NDB SABH 350/OKC 092° 1.6 NM to fld
Remarks: 'Glide slope unusable below 1417' MSL. **VOT:** 108.8

AIRPORT DIRECTORY

CHICKASHA
CHICKASHA MUNI 3 NW
 1146 H38 (1) BL4 S5 F4 U-1
FSS: OKLAHOMA CITY (LC CA 4-6440)
Remarks: Attended daltg hrs.

FAA Aeronautical Center
 Flight Standards Technical Division,
 Operations Branch,
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 Oklahoma City, Oklahoma 73125
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PROPER AND COMPLETE WEATHER INFORMATION IS A
 PILOT'S BEST LIFE INSURANCE - IT PAYS OFF IN LIFE
 INSTEAD OF DEATH.

VFR - No. 34

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