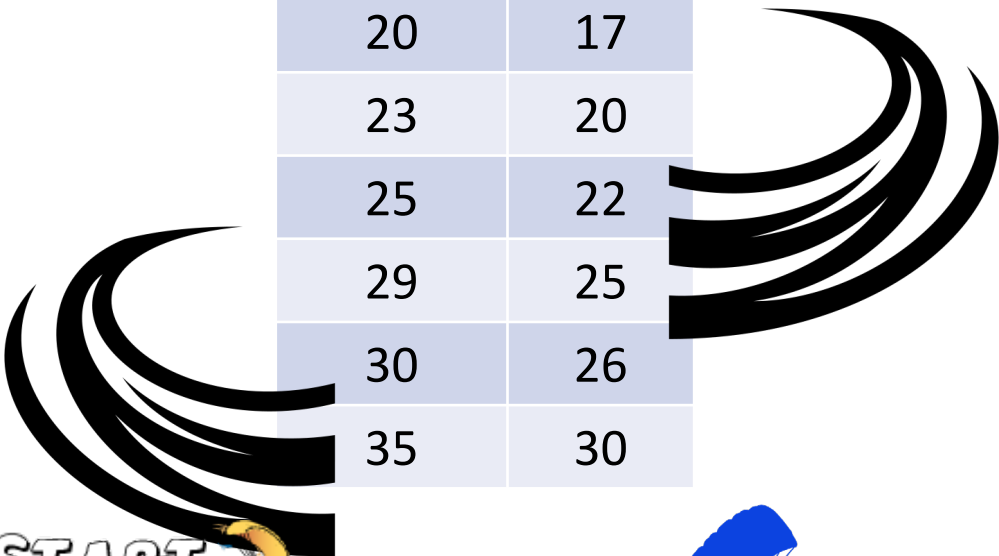


$KTS \times 1.151 = MPH$   
 $MPH \times 0.869 = KTS$



## MPH - KTS Conversion

MPH	KTS
5	4
6	5
10	9
12	10
15	13
17	15
20	17
23	20
25	22
29	25
30	26
35	30





# NOAA National Weather Service Terminal Air Forecasts (TAFs)



- Pilots use this when planning flight operations
- Gives windows of predicted clouds, temperature, precipitation, winds on the ground and aloft, and predicted periods of wind gusts
- NOTE: all information is given in Zulu time

March - October: *Ohio = Zulu - 4 hrs*  
November – February: *Ohio = Zulu - 5 hrs*

Above is a link to the aviation TAFs and METARs for airports surrounding KMWO (KCVG and KDAY)

**Data Source:** National Weather Service

## Strengths:

- Provides cloud layers and ground wind direction/strength predictions
- General area weather

## Weaknesses:

- Only available for major airports; KMWO is between CVG and DAY and often has slightly different weather
- Only update every 6 hrs
- Need to calculate Zulu



AIRNAV.COM

and

# Automated Weather Observation Station

**KMWO: (513)422-3505 (AWOS)**

- Link is for AirNav: a resource for finding airport data for any registered airport
- An AWOS is a physical weather observation tower installed at some airports
- If an airport has an AWOS on site, its phone number will be on the airport's AirNav listing
- For KMWO: call (513)422-3505 for a readout of current weather

## Data Source: KMWO AWOS

### Strengths:

- Very specific to MWO
- Near real time
- Cloud, visibility, and wind/gust readings
- Detects lightning in vicinity

### Weaknesses:

- Does not predict weather
- Screen in packing hangar needs refreshing for current data



# Winds Aloft by Mark Schulze

## *Winds Aloft*

- Possibly the most used weather resource by skydivers
- Weather prediction that uses a mathematical algorithm to predict winds and temperature at altitude.

**Data Source:** NOAA Rapid Refresh modeling system; if down, Schulze pulls from alternative sources and makes a note at the top of the page

### Strengths:

- Winds predictions for all altitudes
- Very specific to location
- Provides air temperature predictions at altitude
- Scroll to the bottom and click “See Raw Data” to find more accurate wind shear and
- Can click “+1 hr” at the top to see predictions

### Weaknesses:

- Ground winds are not good predictions
- Temperatures given in °C



# Ryan Carlton Balloonists' Wind Forecast



- Winds aloft forecast used by hot air balloonists

**Data Source:** NOAA Rapid Refresh modeling system

## Strengths:

- Winds predictions for all altitudes
- Very specific to location (when at an airport)
- Provides air temperature predictions at altitude
- Can view multiple hours at once
- Can click an arrow on the right side to see future predictions

## Weaknesses:

- Ground winds are not good predictions
- When not at an airport, must find a nearby airport as data source



# Windy (WindyTV)



← *Website (good for radar)*

- General weather app geared toward outdoor sports enthusiasts who need ground wind data



← *App*

**Data Source:** Provides multiple to choose from (NWS, Euro model, NASA, Eumetsat, etc.)

## Strengths:

- Ground gust predictions
- Radar visualization
- Can use overseas

## Weaknesses:

- Less intuitive to use
- Winds aloft data is available but tougher to find



# Spot Assist



- Specifically designed by and for skydivers

## Data Source:

### Strengths:

- Very visual
- Helps with spotting to determine how far you can exit from the DZ and still have a high chance of making it back
- Provides visual of canopy flight
- Ability to choose canopy type and wing loading (and thus takes glide ratio into account)
- Can use overseas

### Weaknesses:

- Does not produce weather predictions
- Canopy types are generalizations
- Fairly generic information provided



*“...Eagerly I share useful knowledge with others...”*

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Have a favorite weather source or application to share with other skydivers?

Email [info@startskydiving.com](mailto:info@startskydiving.com)  
(Subject line: “Weather Resources”)  
with the following information:

- Name of website/application
  - Description
  - Data source it uses (if you know)
  - Strengths of the site
  - Weaknesses of the site
- 

*Thanks for sharing your knowledge!*





# Cloud Clearance Regulations

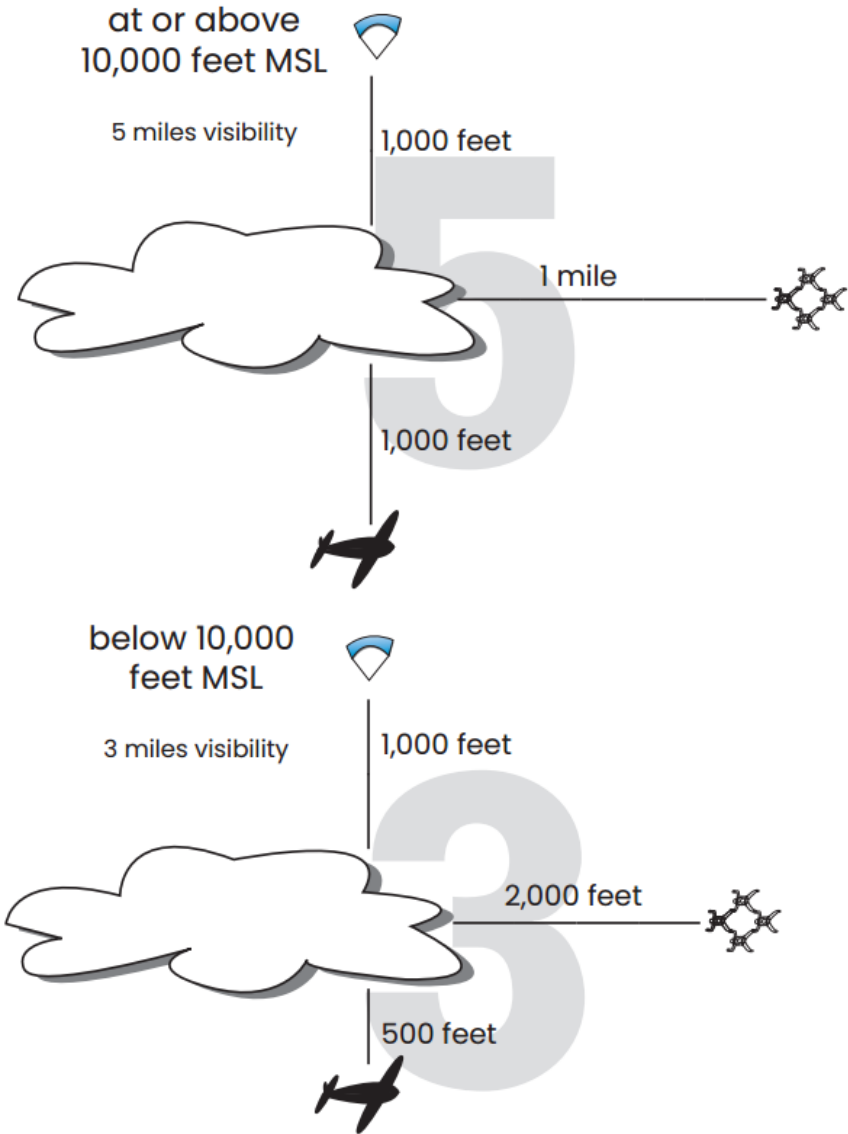


Illustration 4-D.1. Jumpers must observe the FAA requirements for visibility and clearance from clouds to avoid other aircraft flying over the drop zone.