



PUTTING WINGS ON YOUR DREAMS

VOLUME XIII

ISSUE 3

MARCH WIND - THE JOLLY FELLOW:

An Article by Jim Hudson

March Wind

March wind is a jolly fellow;
He likes to joke and play.
He turns umbrellas inside out
And blows men's hats away.

He calls the pussy willows
And whispers in each ear,
"Wake up you lazy little seeds;
Don't you know that spring is here?"



We've had our taste of this "jolly fellow" lately, and a good time to assess our wind awareness, forecasting, and flying skills.

One of my students, Greg Graybadger, has had a couple of his cross country plans thwarted by bad weather and last weekend (March 19th) it was because of the winds. His plan was to make a trip to LaGrande, Oregon, stopping at Baker on the return for his long XC flight. In discussing the wind forecast Saturday morning, we decided to cancel the flight. As an instructor, this is always a tough call for me, especially when one forecast TAF

(Terminal Area Forecast) is probably within the students capability, but another MOS, (Nat Wx Service Model Output Statistics) shows more crosswind and velocity that exceeds the limits I've given Greg 10G5KTS and 5kts crosswind. Which forecast to believe? What has my experience told me?

This prompted me to do a little study of the short term forecasting tools I typically use for airport conditions and then compare the forecast to what actually happened. The following are the results from two days, March 19th and March 20st in which we experienced this "jolly fellow" is in full force.

Looking at METARS/TAF Saturday morning March 19th.

There are many places one can find this information, but one of the best is <http://www.aviationweather.gov/taf>

METAR FOR KMAN

191415Z AUTO 12010KT 10SM CLR 01/M06 A3025

At 8:15 am winds 120 at 10Kt, great viz, clear skys.

The BOI and BKE TAF were as follows. (no TAF for KMAN or KLGD)

KBOI 191125Z 1912/2012 12015KT P6SM SKC

Forecast made at 5:25 am for 19th from 6 am to 20th at 6 am MDST

6 am to 1 pm Winds 120 at 15 Kts good visibility and clear skies

FM 191900 14020G30KT P6SM BKN200 from 1 pm to 8 pm winds 140 at 20 Gust to 30 kts.

FM200200 14012KT P6SM SCT200 from 8 pm to 3/20 at 6 am winds 140 at 12 kt

KBKE191125Z 19912/2012 14008KT P6SM SCT200

Forecast made at 5:25 am for 19th from 5 am to 20th at am PDST

5 am to 12 pm Winds 140 at 8 Kts good visibility and clear skies

Continued on Page 6, below.

T-Craft Events to look forward to for the upcoming year.

- March 26 - April 2- Poker Run, Backcountry Presentation
- April -Tour of Boise Tower - Jim Hudson
- April 13- Mechanic's eye view of 686 J Eyre and Mike Metcalf
- April 26- Back Country Seminar
- May 03- Plane wash
- June 7- Shortfield landing Techniques - MAF - John Hook
- June 10-11- Garden Valley Fly-in
- October - Plane wash and Fall Wx Class

April 2016

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Calendar of Events for April:

- 4/12/2016 - Board Meeting.
- 4/26/2016 - General Membership
- 4/10/2016 - Accounts due
- 4/ 2- Poker Run Ends
- 4/26/2016 - Backcountry Presentation
- 4/20/16 - Accounts past due
- 5/3/16 - Plane wash

Fuel Reimbursement

\$3.50 per gallon.

The fuel account balance as of 03/20/16 was 7739 gallons.

Top flyers for the month*

Warren Kouba	10.4
Preston Rufe	9.3
Warren Hansen	8.9

Highest billing aircraft*

67375	\$ 2,811.00
7593S	\$ 2,656.00
9989E	\$ 2,599.00

Hours flown for aircraft*

67375	51.1
13686	32.3
7593S	23.3

*These figures are reported at the Directors meeting earlier in the month.

Breakdown of Membership 87 Members

04 Social Members (non flying)
35 Class I Members (40%)
52 Class II Members (60%)

Ratings

15 Student Pilots
58 Private Pilots
01 Recreational Pilots
09 Commercial Pilots
05 Air Transport Pilots
23 Instrument Pilots

Welcome New Members:

Kent Murri = Student Pilot
Jack Rhines = Sport Pilot

Accomplishments:

If you've achieved a new rating, BFR, Solo, or other significant accomplishment, please inform the Membership Director Jim Hudson, or Secretary/Newsletter editor Bert Osborn

Congratulations to:

Preston Rufe for earning CFII – Helicopter and Ground Instructor Advanced Certificate.

If you have news or pictures that you would like to have included in the newsletter please submit them to Bert Osborn at 1berto@cableone.net

BFR's

Loren Dahl
Dennis Wheeler
Jack Rhines

SOLO's



Wyatt Gibson - Instructor Jim Hudson



Jason Jesser - Instructor John Baglien

Zach Quinn – Instructor Preston Riley

Hourly Rates



N1227G
\$48.00



N67375
\$55.00



N4464R
\$68.00



N13686
\$70.00



N1891X
\$99.00



N9989E
\$107.00



N7593S
\$109.00

SQUAWKS

All aircraft remain available for flight. March continued to be a busy month as the weather was improving and people were getting in some good spring flying hours. Students are keeping the birds busy as are pilots pursuing their instrument training.

7593S had its annual. The mechanic found cracks in the muffler and risers. Since the muffler and risers may be original equipment and are beyond welding, they were replaced. There was a trace of aluminum found in the oil filter. Just enough to know it's there and not enough to cause concern at this time. The PTT died. Cessna wanted \$300.00 for a new one. Justin the mechanic found a replacement for \$5.00. The ELT battery was replaced. There is prop discoloration from the governor. The prop has 1600 hours on it and has been in the prop shop 4 times. If it starts leaking we may need a new prop. We have re-sealed it 4 times and the shop probably won't seal it again. Jim encouraged people to cycle the prop both during run-up and during flight to make sure the oil is circulating properly.

9989E had been squawked during run-up for a huge drop in its left magneto. Mike checked it out and couldn't find a problem.

He even removed the lower plugs to see if they were fouled. Everything appeared to be fine.

13686 had to have its nose wheel changed and work was done on the shimmy damper. In conjunction with the 100 hour inspection the right fuel drain testing port was found to be dripping. On a high note, the missing fuel dipstick was discovered rolling around the gas island near the FBO. It has been returned.

67375 had a new #1 radio. The radio was an MX-385 and worked great for a short time. The radio went south and is now being analyzed for repair potential.

HATS OFF TO:

Thanks to Bill McGlynn for putting on his spring Wx program. The program was excellent.

MEMBERSHIP DUES

Effective February 1, 2016 membership dues dropped to \$60.00 per month. That rate combined with the newest low hourly charges for the airplanes makes T-Craft the leader in high quality, low cost flying.

PLEASE REMIT PAYMENT IN FULL BY THE 10TH OF THE MONTH.

Your account will be PAST DUE if not received by the 20th and there will be a \$10.00 late fee. There will be a finance charge if your account is over 30 days past due and flying privileges will be suspended.

GROUND SCHOOL: Preston Rufe is considering putting on a Private Pilot Ground school at the club hanger if there are enough members or non members are interested, 8 minimum. The class would be \$300 not including study materials or exam fee. The class would meet 2 nights a week for approximately 6 weeks. If you have an interest give Preston a call.

March Wind Continued from page 1.

FM 191900 11015G25KT P6SM BKN200

from 12 pm to 8 pm winds 110 at 15 Gust to 25 kts.

FM200300 12006KT P6SM BKN200

from 8 pm to 3/20 at 5 am winds 120 at 6 kt

METAR FOR KLGD

191415Z AUTO 17016G22KT 10SM CLR 06/M08 A3016

Conclusion: Wind forecast at BOI and BKE look to be within Greg's capability, if flight could be completed by 1 pm. Current wind at Nampa at the limit, winds at LaGrande too severe. Based on my knowledge of LaGrande, I would not trust BKE TAF forecast for LaGrande.

So, what do? What do the MOS models say for Saturday the 19th and Sunday the 20th ?

The site I use for MOS forecasts, which has a great graphical representation of wind velocity, direction, sky conditions, visibility, etc is USAIRNET: <http://www.usairnet.com/cgi-bin/launch/code.cgi?Submit=Go&sta=KMAN&state=ID>

You can find forecasts for several non-airport locations, for instance Stanley, ID. This site does not show wind gust forecasts. The MOS forecast is also available in ForeFlight in a user friendly format, in which gusts are indicated. The usairnet site and Foreflight app use the same raw MOS data from the National Weather Service's GFS MOS Guidance, however the time stamp may be different from one to the other depending on when the site or app was last updated.

What really happened in this time period? One site where you can find historical airport data is: <http://www.wrh.noaa.gov/mesowest/getobext.php?wfo=wrh&sid=KMAN&num=72&raw=0&dbn=m>

For any airport with automated weather reporting, substitute the identifier in the web address in place of MAN. To get winds in KTS and actual direction, click on the [Show Raw Observations](#) link at the top of the page.

The following are the MOS forecast charts in which I overlaid the graphical representation of the actual winds from the NOAA site on top of the partial MOS forecast. The MOS forecasts below were obtained the morning of the 19th. The raw data was from 0060Z, or midnight the 18th. On the overlay chart, the blue line represents wind speed, the gusts are represented by the dots, the gray line represents 20 mph, zero is the bottom of the chart. I also looked up the actual winds for the daytime periods on both days.

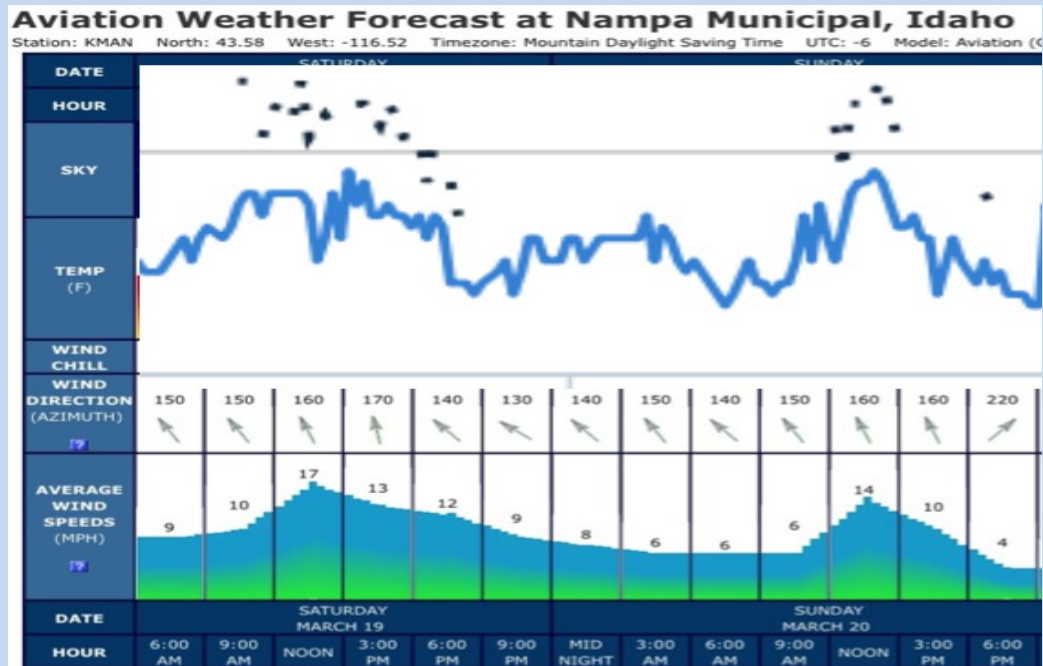
KMAN Runways 11/29

Actual winds at points in time:

Saturday 19th: 9 am: 12012, Noon: 13016G26 , 3 pm: 14015G24, 6 pm: 16012G17.

Sunday 20th 9am: 14008, Noon: 14016G24, 3pm: 18012G20, 6pm: 16008G15.

The MOS forecast is somewhat in agreement with BOI TAF, except the wind direction shows more crosswind in the MOS model. The MOS does not show as much wind velocity or gusts after 1 pm as does the BOI TAF. The actual wind velocities were closer to the BOI TAF, whereas the directions are closer to the MOS model. Both forecasts were off on the timing. The winds started to pick up with strong gusts at 10 am. There are no gusts indicated on the



MOS forecasts. Velocities are close to forecasts even out 24 hours, however the directions are 20-30 degrees off.

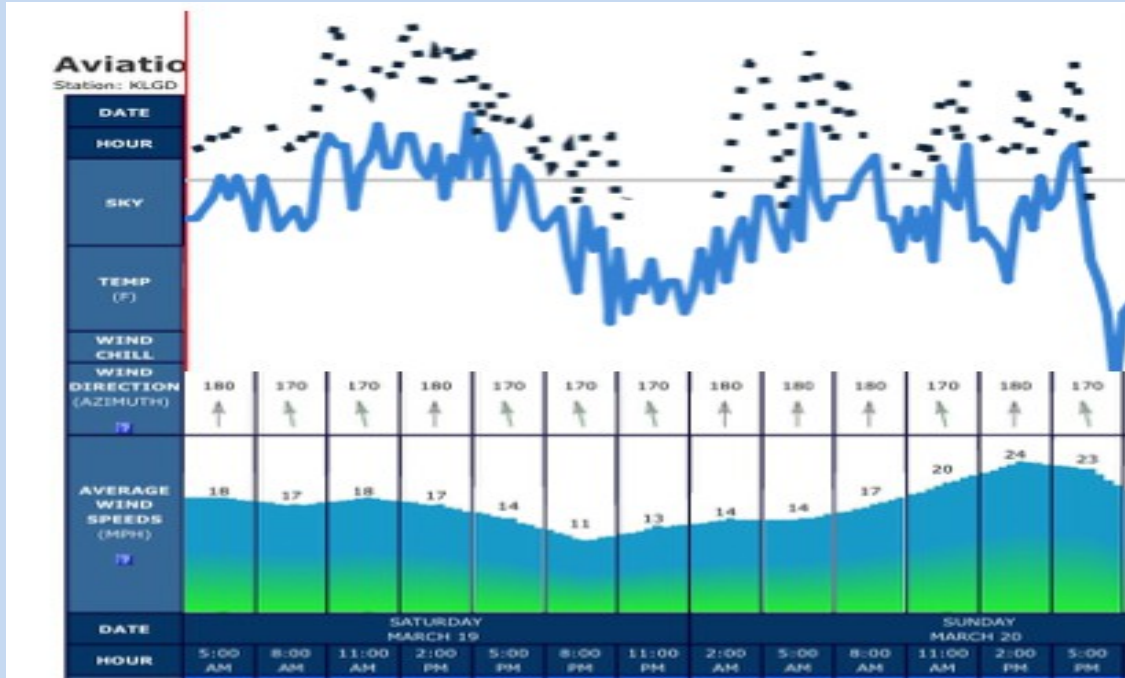
KLGD Runways 12/30 – 16/34 Actual winds (mph) Time PDT.

Actual winds at points in time:

Saturday 19th: 8am: 18018G25 , 11 am: 18023G35 , 2 pm: 16024G35, 5 pm: 18024G29.

Sunday 20th : 8am: 14020G24, 11 am: 17012G21, 2 pm: 17010G23, 5 pm: 19018G24

The BKE TAF forecast the winds to kick up around noon. However, they were strong and gusting from the start of the day. There are no gusts indicated on the MOS forecasts. The wind directions were fairly close to what was forecast. The velocities were much stronger and higher gusts. Using either runway 12 or 16 one would expect some crosswinds.



KBKE Runways 13/31, 17/35, 08/26. Actual winds (mph) Time PDT

Actual winds at points in time:

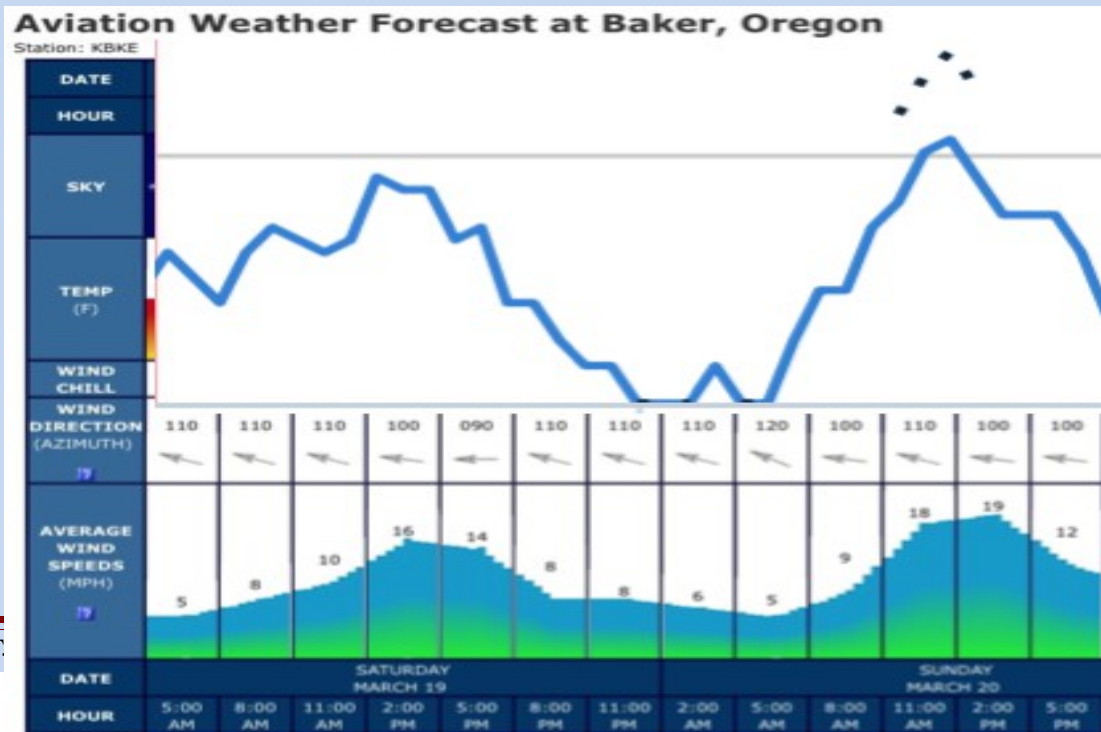
Saturday 19th: 8am: 09008, 11 am: 12012G20, 2 pm: 09017G23, 5 pm: 11013G21.

Sunday 20th: 8am: 11009, 11 am: 11020G26, 2 pm: 12015, 5 pm: 11112

At Baker the TAF and MOS were in agreement until noon with wind velocities, but were off 30 degrees in direction from the TAF 14010mph.

After noon the velocities and gusts increased and the direction and were in more agreement with the TAF at 11017G28mph. The winds calmed down as both models forecasted by 8 pm.

There are no gusts indicated on the MOS forecasts. The actual for Baker was very close to the 24 hour MOS forecast, winds were stronger and the wind directions were within 20 degrees.



I've found the MOS model to be fairly reliable, especially 12-24 hour forecasts and where there is not a TAF close. I'm using the MOS forecast in Foreflight more, since it forecasts gusts and gaining more experience on its forecast with respect to actual conditions.


In this analysis, the forecasts were not too far off the actual conditions. At KMAN and KLGD the actual winds were stronger than forecast, BKE was fairly close. Regardless of what has been forecasted, one must use good common sense. The actual conditions could be better or worse than the forecast. If the forecasts are not favorable, error on the conservative side. I'd rather be a live chicken, than a dead duck.

Looking at forecasts and getting some idea as what to expect is only half of the picture. The other part is how about you and the aircraft. How much wind can you handle, how much can the aircraft handle? The FAA has an excellent guide on setting a personal minimums for winds; its on our website at: http://www.t-craft.org/Reference/Personal_Minimums_Wind.pdf

How do you determine how much wind you can handle. As in many things, it comes with experience; trial and error. When the winds are stronger than your comfort zone, grab a CFI and go out and dance with the wind.

Get ready for April Showers, May Flowers, and June bean bag drop.

Fly Smart, Fly Safe, Have Fun, and don't forget the

"This is Stupid" Abort Now.  Button

Jim Hudson

Safety/Membership Director

Suggested guidelines to be added to the scheduling policy encouraging pilots to schedule only those hours they would actually be flying. A pre-flight briefing or a post-flight briefing with an instructor should be done outside the scheduled flight time. That will free up several more hours for other students or other pilots to schedule the busy birds. Additionally, pilots should be encouraged to cancel any remaining flight time if they end their flight before their scheduled ending time.

Additional guidelines for students and instructors.

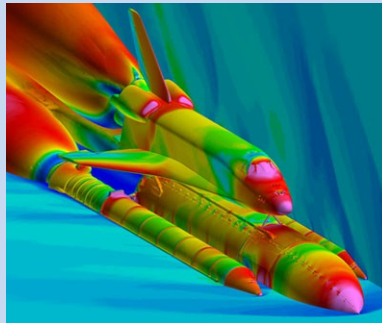
- ◆ Schedule the aircraft only for the time you need it for the flying portion of your lesson. Pre-flight and post flight briefings and ground lessons with your instructor should be done before or after your plane schedule. Most flight portions of a lesson are between 1 to 1.5 hours, so actual scheduling of the plane should be 2 to 2.5 hours. This

would allow an hour for pre-flight, fueling, post flight activities. There are exceptions of course, for cross country and check ride flights.

- ◆ Be aware of your schedule end time and make sure you have the plane back in time to do post flight cleaning. Do not run over your schedule, even if no one is scheduled to follow you. Someone may schedule while you're flying.
- ◆ Close out the remaining portion of your schedule on schedule master, if more than one hour remains scheduled upon your return.
- ◆ Cancel any schedule as soon as you know you will not be using the aircraft.

The Art and Science of Flying

April 23, 2016 from 8:00 am until 5:00 pm.



The Art and Science of Flying Ground School will take place at Jackson Jet Center, Boise Airport, Hosted by Ponderosa Aero Club and promoted as "a fun workshop that explores the magic and mechanics of flight," this FAA Wings-approved event includes dynamic discussions, interactive activities, and door prizes. According to co-presenter Rich Stowell, "In addition to a totally different view of flying for pilots, this is a community outreach program for school teachers and students to learn more about science, technology, engineering, and math through the lens of aviation." The registration fee, which includes lunch, is \$50/person until March 25th; \$59/person after. Event sponsors and partners so far include Idaho Division of Aeronautics, Idaho STEM Action Center, FAA Boise FSDO, Jackson Jet Center, Coca-Cola, and others.

To register and/or help us promote the event, or if you can assist with procuring sponsors, please contact Sharki Kontra at ArtandScienceBOI@gmail.com or visit www.ArtandScienceofFlying.com

In Additional information about the workshop and application can be found at this link: [Art_and_Science_of_Flight](#)

This fellow looks a bit young to be pre-flighting 375. Still, that's probably the best time to learn.

