Belfort Instrument Company
Summer FPAW Surface Observation Panel
August 8, 2012
The Belfort Instrument Company was founded in 1876 in Baltimore, Maryland by Julien Friez.

His vision was to furnish customers with instruments of uniform excellence and of highest reliability at fair prices so as to set the Standard of Measurement for the industry.

Today, Belfort has more than 7,000 customers Worldwide!
Only 1/3rd of key airports in US are equipped with traditional AWOS/ASOS equipment because...

- FAA regulatory hurdles;
- FCC regulatory hurdles;
- Large acquisition and support expenses;
- One-size-fits-all solutions dominate;

...the solution lies somewhere between a wind sock and traditional AWOS III...
DigiWx supports IFR operations and has...

- lowest cost for acquisition, siting and installation;
- remote support package significantly reduces maintenance costs;
- Automated Unicom or discreet frequency for fast commissioning;
- Internet based graphical user interface;
- modular architecture/easy to upgrade
DigiWx System Data Distribution Options

- Internet
- FBO
- Aircraft UNICOM or VHF freq
- Handheld
- Telephone
- Ceilometer
- Displays live info transmitted from weather station
- Historical files stored on PC with option for off-site backup
- Automated alerts from programmable event manager
- Internet & telephone dial in options
• The Belfort AWOS AV has been FAA certified since 2005.

• The AWOS AV meets the requirements of FAA Advisory Circular 150/5220-16

• The AWOS AV is Commissioned IAW the FAA AC

• The AWOS AV is maintained IAW the FAA AC
• The FAA Office, APP-500, Airports Financial Assistance Division Memo Dated July 11, 2008:

• “for most airports an AWOS A or AWOS AV will provide the capability needed, therefore a benefit-cost analysis is not needed to program an AWOS A or AWOS AV using AIP grant Funds” (page 4)

• AWOS III or higher requires a positive Benefit-Cost analysis.
• The AWOS AV is FAA certified to the same standard as it’s larger cousin, AWOS III.

• The AWOS AV is held to the same FAA maintenance standards as the AWOS III.

• The FAA Office, APP-500, Airports Financial Assistance Division prefers to grant AIP funds to the AWOS AV with no Benefit-Cost analysis.

• There is almost 150 certified AWOS AV installed in the lower 48.
• The AWOS AV is currently not permitted into the FAA WMSCR because of a **1990 FAA Order 7110.104** that states only AWOS III or higher is permitted.

In 2009, Belfort went through the procedures - submitting all the appropriate paperwork detailing our system and the personnel responsible for it, forming correct METAR files with correct naming protocol, establishing a secure VPN channel using Cisco Hardware VPN devices, and successful 72-hour testing of uploading METAR files to the FAA Test Facility in NJ.

FAA NADIN office accepted and cleared all our paperwork. FAA Test Facility monitored our 72-hour test and confirmed that all the data flowed perfectly from our server to their [test] database.

• The FAA Order stopped us dead in our tracks!
• The FAA has concerns about coding the METAR.

• At present the METAR message uses “AUTO” to designate an AWOS III or higher observation.

• It would be very easy to code a METAR issued by an AWOS AV with a different precursor like “AUAV” indicating that the METAR only contains altimeter and visibility data.

• As in the past, a third party could collect Non-Fed AWOS AV METARS and pass them on to WMSCR.
• The National Weather Service doesn’t appear to have a problem with the AWOS AV data.

• The NWS MesoWest web page for Montana has the 13 AWOS AV site plotted on the map with the current weather information.

  • http://mesowest.utah.edu/cgi-bin/droman/mesomap.cgi?state=MT&rawsflag=3

• AWOS AV data can also be found on XM WX in the cockpit as well as on the ForeFlight App for Iphone, Ipad, and Android phones.
August 7, 2012

Ralph F. Petragnani
Belfort Instrument Company
737 South Wolfe Street
Baltimore, MD 21231

RE: FAA NETWORK OF AWOS/NADIN

Dear Mr. Petragnani,

The West Houston Airport, (KIWS), is a privately owned FAA reliever airport located on Houston’s near west side. The Airport has almost four hundred based aircraft and over 150,000 annual operations. This year marks the Airport’s 50th anniversary.

West Houston is currently installing the Belfort AWOS system at its own expense as opposed to the other airports in the Houston area which are federally funded. After extensive review of the several different manufacturers, West Houston chose Belfort because of its reliability, operating costs and flexible location.

The only drawback to the purchase was that the Belfort model has not been approved for inclusion in the FAA network. This was a handicap for us as it is important for our customers, both based and transient, to have quick, easy access to current weather conditions at West Houston. This information is imperative for the safety of flight and for the continued operation of our extensive pilot and plane base.

Your assistance in getting Belfort approved into the system will help our airport and others so situated for disseminating the wealth of information for the public interest and in particular in West Houston where there is no other “live” weather broadcast.

I would greatly appreciate your help in this matter and invite you down to West Houston to view the Belfort System and the West Houston Airport operations.

Very truly,

Woody Lankford
President

[Signature]

Co
Congressman John Culberson
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Senator Kay Bailey Hutchison
1918 Smith St Suite 800
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Senator John Cornyn
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• The FAA’s number one goal is SAFETY.

• Recent NTSB hearing on General Aviation stated that the number 1 cause of GA accidents is weather related.

• In the NTSB investigation into EMS helicopter accidents said that a lack of weather reporting was a major contributing factor.

• The FAA now has 125+ commissioned AWOS AV providing altimeter and visibility which are not available to FSS or Air Traffic.
QUESTION

Who among you wants to be in front of the NTSB in the investigation of an EMS helicopter controlled flight into the terrain as a result of low visibility and there’s a commissioned AWOS AV within a couple of miles that neither the Flight Service Station nor Air Traffic had in their database?
The Wright Brothers relied on us.

December 17, 1903—Weather Station #6, Kitty Hawk, NC—Wind NE at 21 mph