

# The Day After Tomorrow is Now...

OPSGROUP Team  
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Pilots and operators are definitely not the ones hoping for a white Christmas because it means **horrible weather, delays and disruption**.

Unfortunately for all, weather news sites are calling a **'storm of epic proportions' is heading towards North America**. It might already have reached you even...

So here is the update on the weather forecast, and a hopefully handy refresher on some of the challenges this might mean for aviation. *(So you know we care and are thinking about you while we sit cosy in our warm houses drinking Eggnog).*

## The Forecast.

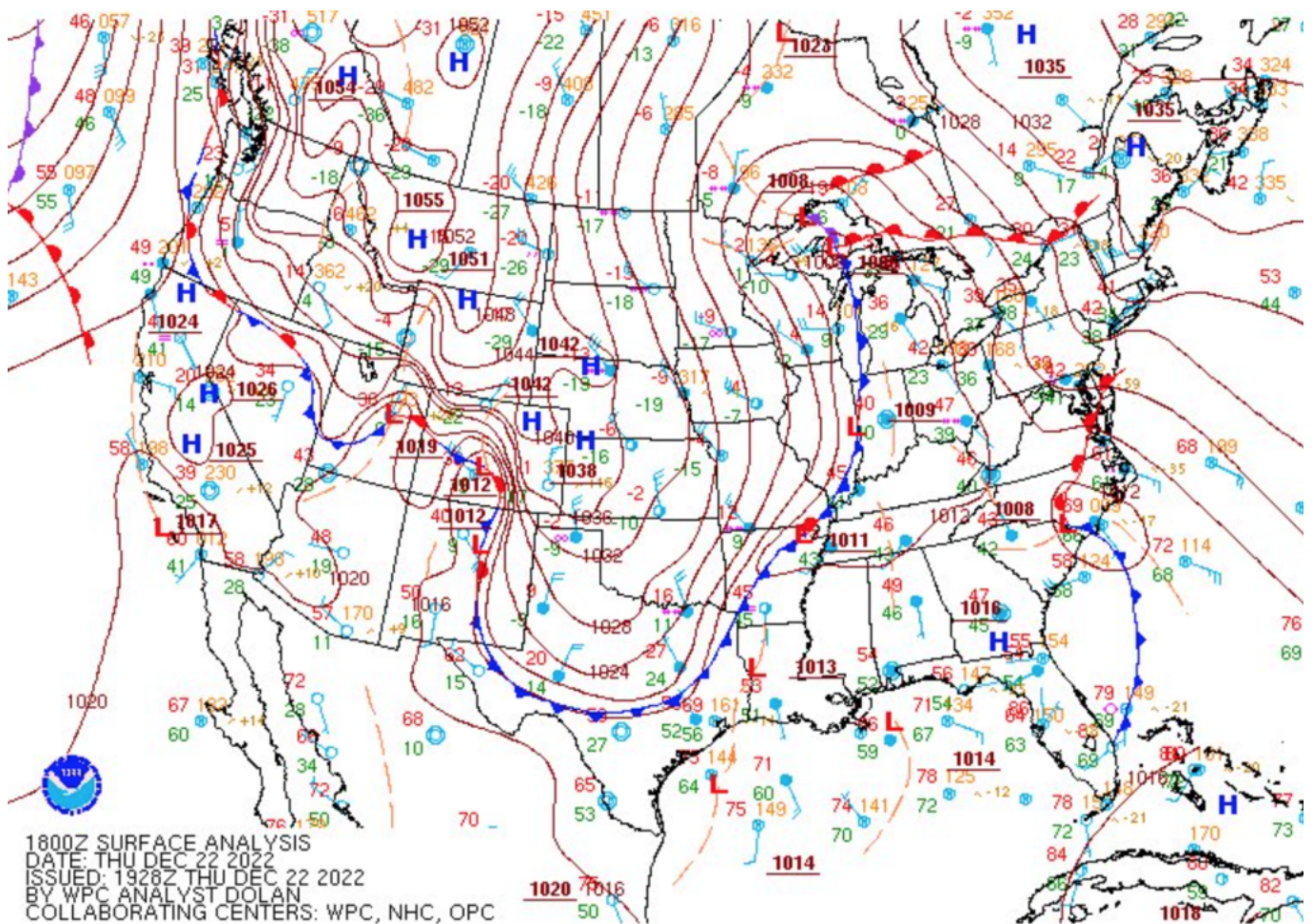
**On a scale of 1 to bad**, they are calling this a *'once in a generation'* weather event, a *'looming winter storm of historic proportions'*. Not quite A Day After Tomorrow level weather phenomena, but not far off...

The weather is being caused by a **severe low pressure system** known colloquially as a *'bomb cyclone'* because of the **rapid and significant pressure drop** that occurs - around 24 millibars in 24 hours (and that right there is one thing to be cautious about).

The arctic storm is expected to fully impact the **east coast of the US and Canada** later on December 23, and the following warnings are in place:

- Powerful winter storm bringing sharp cold front and severe snowfall from **Midwest to Ohio Valley**: *Dec 23 onwards*
- Powerful winter storm bringing sharp cold front and severe snowfall through **Great Lakes and interior Northeast**: *Weekend Dec 24-25 onwards*
- Extreme cold and high gusts over **central an eastern US**: *Dec 23 onwards*
- Flooding in the **Northeast**: *Weekend Dec 24 onwards*

- **States of emergency** declared across New York, Kentucky, North Carolina, West Virginia, Georgia and Oklahoma. An 'energy emergency' in Wisconsin.



The approaching storm brings 'plunging' temperatures and QNHs to watch out for

### What is the impact for aviation?

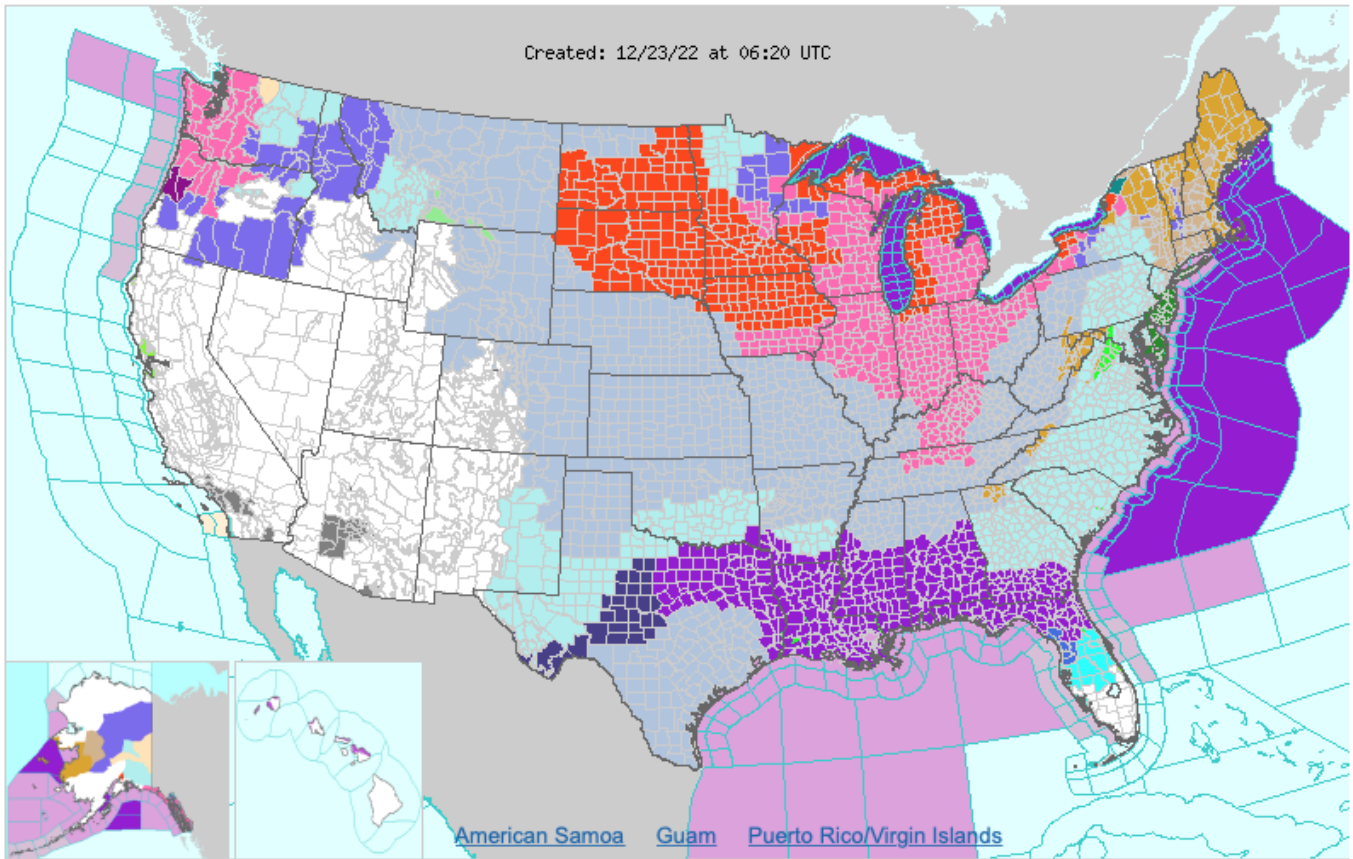
Here is a general 'things to look out for' list:

- Airports are likely to see **significant disruption, cancellations and closures** leading to limited alternate options. En-route airspace will be more congested with diversions and detours taking place
- Significant **ground delays for de-icing/anti-icing**, and during periods of extreme weather operations will be grounded leading to significant backlogs, parking issues and congestion
- **Power outages** are likely in the Midwest and Canada which may have a knock on effect for airports
- **Staff shortages** may occur if folk are unable to commute to airports
- **Oil prices** are leaping up. Check the costs for fuel.

You can find the **National Weather Service** page on the storm warnings here. They post regular updates

via their Twitter page as well.

You can monitor the current US **National Airspace System Status** here.



Purple is bad

### Is there anything you can prepare for?

The weather conditions are severe, they are saying things like “*life-threatening wind chills*” so think about that before sending your poor First Officer out, unless you want a fingerless icicle trying to fly with you. It really is going to get nasty in places.

Here is our list of **Winter Chillers & Thrillers** to look out for:

- **Conditions might really get too severe** so *don't push it* if they do. Look after yourselves!
- There are going to be **significant delays in the air and on the ground**. Take fuel and make a plan B (preferably before you need it).
- **HOTs are going to be hard to manage:** Anyone who has ever operated out of JKF on a winter's day and has waited 7+ hours for de-icing knows what I am talking about. With queues of traffic and bad weather there is a good chance you'll go out of your HOT so keep an eye on the clock.
- **The Global Reporting Format** is great but if it is saying things like 1/1/1 then you might find you can't stop so well, so check that performance. Some operators don't allow takeoff on icy runways unless treated, for example.
- Ice pellets, hail etc, and severe icing ain't great. Check them SigWx charts too.

- Refresh on **Cold Weather operations procedures**. We found some that might or might not be helpful:
  - IFALPA put this guidance out on Finland airport operations (but it is applicable to anywhere cold)
  - The FAA published this (which is geared to GA but still has some handy info in it)
  - AOPA published this and it looks pretty helpful
- **Look after your batteries** - they have minimum temperature limits and you might need to take them off if you're parking up outside.
- **Watch the fuel temperatures** - JET A1 freezes at -47°C, Jet A at -40°C.
- **Check your altitudes** - apply those cold temperature corrections
- Snow and blizzards bring **LVPs**

We have a few posts which you might find handy for swotting up on all things chilling:

- Fuel Facts: Let's get to the (freezing) point
- De-ice De-ice Baby

**Be careful!**

Not much more to say than that. Stay warm and safe.