

Hurricane Helper

Editor's note: This column will appear weekly until the end of the hurricane season (30 November). Another good source of information is the USAF Be Ready program: <https://www.beready.af.mil/> . You can download the Be Ready program on your phone by visiting the Google Play store or the Apple App Store. Please address questions regarding this to the PSFB Emergency Management office by calling 494-4224 or the CCSFS Emergency Management Office at 476-5521.

What is HURCON?

The term HURCON is short for Hurricane Condition. HURCONs are used by the Department of Defense (and other Federal Agencies) to calculate the time to the onset of a hurricane. Department of the Air Force guidance is Air Force Manual 10-206 "Operational Reporting". The definition of each is:

HURCON 5 = 96 hours prior to the onset of destructive winds (50 knot/58 mph)

HURCON 4 = 72 hours prior to the onset of destructive winds (50 knot/58 mph)

HURCON 3 = 48 hours prior to the onset of destructive winds (50 knot/58 mph)

HURCON 2 = 24 hours prior to the onset of destructive winds (50 knot/58 mph)

HURCON 1 = 12 hours prior to the onset of destructive winds (50 knot/58 mph)

HURCON 1C = Caution: Winds of 35-49 knots/40-57 mph sustained are occurring

HURCON 1E = Emergency: Winds of 50 knots/58 mph sustained and/or gusts of 69 mph/60 knots or greater are occurring

HURCON 1R = Recovery: Destructive winds have subsided and are no longer forecast to occur; survey and work crews are permitted to determine the extent of the damage and to establish safe zones around hazards (e.g. downed power lines, unstable structures). Non-essential personnel are asked to remain indoors.

What is a Hurricane Watch and a Hurricane Warning?

Previously we discussed the Hurricane Conditions (HURCONs) that the Department of Defense uses. However Brevard County and the State of Florida uses a different set of benchmarks measuring time before the onset of hurricane force winds. These are described below.

Hurricane Watch - Hurricane Watch is issued when a tropical cyclone containing winds of 64 kt (74 mph) or higher poses a possible threat, generally within 48 hours. These winds may be accompanied by storm surge, coastal flooding, and/or river flooding. The watch does not mean that hurricane conditions will occur. It only means that these conditions are possible.

Hurricane Warning - A Hurricane Warning is issued when sustained winds of 64 kt (74 mph) or higher associated with a tropical cyclone (hurricane) are expected in 36 hours or less. These winds may be accompanied by storm surge, coastal flooding, and/or river flooding. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continue, even though winds may be less than hurricane force.

More information on this subject can be obtained from the USAF Be Ready Program: <https://www.beready.af.mil/> or by calling the PSFB Emergency Management office at 494-4224 or the CCSFS Emergency Management Office at 476-5521.

What is a RECON?

The term RECON is short for Recovery Condition. After a hurricane has passed there will be several hazards present around the installation. We don't know the status of water, sewer, electric, networks, phones and other utilities. There will also be several other hazards to include debris on roads, hazards in buildings, standing water, insect out of control and several other hazards. To make a long story short the installation is not ready to support dependents, retirees and other personnel.

The RECON system was created by the (former) 45th Space Wing after the 2004 hurricane season when the installation had to be evacuated twice the same year. As soon as a "weather safe" condition was announced there were people trying to access the base for routine errands and potentially facing the hazards previously announced. The RECON system allows a systematic return of personnel based on the capabilities of the installation so support those personnel. The RECON system focuses what personnel should be doing at a given time during recovery.

The RECONs are not time based (like the Hurricane Conditions are). The RECONs are based on the capability of the installation to support a certain number of personnel. This could take several weeks or even months after a higher category hurricane.

The RECONs are as follow:

RECON 1 = “Critical Infrastructure” The purpose of this phase is to secure installation and mission assets, to assess damage caused by the storm, and to restore missioncritical infrastructure. The only personnel allowed on PSFB and CCSFS are personnel assigned to the respective Hurricane Recovery Team (HRT). Each installation has a HRT and in both cases the HRT is less than 100 personnel. You would already know if you are assigned to a HRT.

RECON 2 = “Mission Essential” During RECON 2 the HRT and additional mission essential personnel focus on restoring facilities and services essential to the 45 SW mission (e.g., air operations, launch operations, C4 systems, emergency food and shelter for recovery teams and family housing. Each unit commander is responsible for determining his/her Mission Essential personnel. If your commander has not assigned you as mission essential you should not be returning to the installation yet.

RECON 3 = “Non-Mission Essential” RECON 3 begins once the HRT/CC reports that mission essential functions are operating at sustainable levels. At this point operations to receive the general population can begin. During this phase all military, civilian employees and most mission contractors should be allowed access to PAFB. This phase focuses on restoring functions and services that support the mission and people, but are not essential for mission success (e.g., AAFES, Defense Commissary Agency operations, financial institutions)

RECON 4 = Full Mission Capability All base functions are in place and operating at a sustainable level. This indicates the base is ready to receive the general population. RECON 4 focuses on restoring quality of life (e.g., base beautification, debris removal and morale functions). Dependents and Retirees should not return until RECON 4 is declared.

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Do I need to evacuate for a hurricane?

As hurricane approaches the Installation Commander will order an evacuation that mirrors a Brevard County evacuation. Brevard County evacuations are based on

predetermined zones based on the expected category of hurricane and can be found here:

<https://www.brevardfl.gov/EmergencyManagement/BePrepared/Step3HaveAPlan/Evacuation> Generally the barrier island chain (City of Cape Canaveral, Cocoa Beach, Satellite Beach, Indian Shores, Indian Harbor Beach and even Merritt Island) are evacuation zones. Also personnel who live in a manufactured house (mobile home) and personnel who have special needs (such as an uninterrupted electric for medical reasons) will also have to evacuate.

You should consider making plans if you are subject to evacuation. Hotels will fill very fast, sometimes a week or more ahead of the storm arrival. Generally you will be more comfortable if you evacuate to an inland home. If you have no other options you can shelter in a Brevard County shelter which will be announced one at a time (Brevard shelters open based on demand). There are various categories of shelters to include pet friendly, special needs and general population. You will be very safe at a Brevard shelter but you must bring your own sleeping supplies (cots, air mattresses, bedding, etc.), and you will be living in a communal environment with potentially hundreds of new roommates.

If you are not subject to evacuation (as described above) you should not evacuate. If too many people try to evacuate it takes hotel rooms, shelter spaces, fuel and supplies from those who do need to evacuate. If every Florida resident who lives inland in a sturdy home tried to evacuate a gridlock of all highways would occur. You risk the possibility of being in your car as a hurricane passes over you.

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Do I need a generator?

Having a generator after a hurricane is a personal decision. After a severe hurricane there may be widespread power outages. After Hurricane Irma (2017) over 80% of Brevard County had power outages. Some of the power outages only lasted a few hours however other communities did not have power for a couple weeks. You risk losing everything in your refrigerator and freezer after a hurricane, you will not have air conditioning and will not have several comforts we expect in the 21st century such as television and air conditioning.

However having a generator will leave you with several responsibilities. If you don't know what you are doing you could injure or even kill yourself! Of course a generator comes with an owner's manual, please read it completely. Some of the major hazards include carbon monoxide poisoning from running a generator in a confined space. Running a generator in a garage, even with the door open can be considered a confined space. You should consider grounding your generator with a commercially available grounding rod of approximately 4 foot. Before hammering in your grounding rod be sure you know the location of underground utilities by calling 811 or visiting: <https://call811.com/>). Refueling a gasoline generator also presents unique hazards (however propane generators are available). You also need to do frequent operational checks on your generator (starting it at least monthly), oil, air filter and spark plug changes, etc. Fuel storage is also an issue. If you are storing gasoline for long periods you will need to consider a fuel additive (Stabil, Sea Foam, etc.). Generally ethanol free gasoline will last longer than gasoline branded as "E10" (up to 10% corn based alcohol).

Selecting a generator capacity is also a concern. Read the owner's manual for every device you plan to run on generator to determine how many watts are needed, add the total load (in watts) and make certain your generator exceeds that capacity.

Some generators are very affordable (some coming in at roughly one dollar per watt, so a 3.5 kilowatt (KW) generator would be \$350). A generator this size should be able to run your refrigerator and a television, but adding much more such as a window air conditioner would likely overload a 3.5 KW generator. Generators at this price point will likely be very loud and the power may fluctuate which can be hard on some electric equipment. A quality generator of the same KW rating that also is quiet would likely cost over \$ 1,000.

There are alternatives to having a generator. As a hurricane approaches you should set your refrigerator and freezer to their lowest settings. You can also purchase emergency batteries which are charged by USB cables. Some of these batteries are high capacity; strong enough to even jumpstart a car (consider a search for "emergency battery jump starter").

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What supplies do I need in advance of a hurricane?

As a named hurricane approaches certain business will not be business as usual. These businesses will be crowded and certain supplies will be sold out quickly. Some examples include:

Home improvement stores (Home Depot, Lowes, etc.)

Hardware stores (Ace, True Value, etc.)

Gasoline stations

Grocery Stores

Banks

Bottom line up front, you need to be prepared to survive at least a week with supplies on hand without visiting any of the businesses mentioned above.

Certain supplies last forever such as items to mitigate your home from the effects of a hurricane (plywood, tapcon screws, sandbags, etc.). Other supplies will need to be changed out annually (batteries). Some items need regular rotation (food supplies). Plan ahead.

Just a quick search on the internet will inform you of several lists of things to have on hand. I have always recommended the USAF Be Ready site (link below) but please feel free to search other worthy sites such as

[Preparing for an Emergency in Brevard Step 2 - Build a Kit \(brevardfl.gov\)](https://www.brevardfl.gov/Preparing-for-an-Emergency-in-Brevard-Step-2-Build-a-Kit)

[Disaster Supply Kit Checklist | Florida Disaster](#)

Other supply considerations include:

1. ATM machines will run out of money quickly; always keep emergency cash (generally a couple hundred dollars per person).
2. Prescription medicines; never let your supply get below a couple weeks. Also recommend you have a list (or picture on your phone) of your prescriptions.
3. Florida has a disaster supplies tax holiday every year. Generally this late May-early June (so you can plan next year). Only certain items fall under the tax holiday as determine by Florida government. However this might include items as expensive as a generator (quick math fact: 6% tax free on a \$1,000 generator would save you \$60).

4. Important records; as the 21st century marches on paper based records are less common, while electronic files (generally Adobe documents) become more common. Consider scanning (or at least taking photos of) your paper based records. Then do file backups. I recommend the 3-2-1 approach.
 - a. Back up your computer files at least three times
 - b. Using at least two different backup methods (hard drive, the cloud, USB drive, DVDs, etc.)
 - c. One back up method needs to be off site (combination of home, work, cloud, etc.)

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What is Home mitigation?

Will your home survive a hurricane? The answer to that question is something you can control. Some of your efforts are free except for your time and hard work. Look around your yard for loose items and bring them indoors or in your garage. What does your trees look like? If you have a tree that looks like it is dying you should remove it regardless what time of year. Waiting until a named storm is headed your way will mean you might have yard waste on the curb which will in turn be blown into your home (also it will take several weeks after a hurricane before all yard waste is picked up; therefore this is a year round responsibility).

On the subject of trees, consider wisely if you are prepared for removal. An inexperienced person can hurt themselves with the equipment (chain saws, axes, etc.) hurt yourself with falling branches and if there are above ground power lines in your neighborhood you can shock yourself and if you survive a tree falling on power lines you might become very unpopular with your neighbors.

Next item to address is your windows. There are few ways to cover your windows; some are inexpensive, while others are quite costly. The most important thing to remember is that you can't just go to a home improvement store as a named storm is headed your direction to buy some supplies; the store will be crowded and out of stock. The most common methods to protect your windows include:

1. Impact resistant windows: It's possible your home already has these so you should check before choosing a different method to protect your windows. The advantage of impact resistant windows is that they also are theft resistant and

you don't have anything to do regarding your windows as a storm approaches. The disadvantage is that impact resistant windows are very costly; outfitting most homes would be substantial five digit price tag.

2. **Accordion shutters:** Named after the musical instrument, these are seen on many homes in Florida. Having accordion shutters allows you to easily cover your windows very quickly by simply pulling the shutters together and locking them, so your window can be protected in a matter of a few minutes. However, having shutters requires maintenance of drawing them shut, lubricating the locking mechanism a couple times a year. From personal experience I can say that wasps like to make their hives in the shutters. Some people also don't like the look of permanently installed accordion shutters. Accordion shutters tend to make noise during high winds, however this serves to remind you that you are protected.
3. **Bahama Shutters:** This is also a very quick option to protect your windows as a storm approaches. Some Bahama shutters can be removed while the mounting hardware stays on your outside wall (however you will then have to find a place to store them). Some just leave the Bahama shutters up all the time. The advantage of Bahama shutters is that when in place, even with the shutters open it will limit the amount of natural light coming in your home and your views outside will also be limited.
4. **Roll down shutters:** These can be costly and will require maintenance a couple times a year. Roll down shutters are very quick to put in place. Some models are electric, thus all you have to do is press a switch, other models have to be cranked down manually.
5. **Corrugated panels:** These are generally made of stainless steel or clear Plexiglas (some homeowners choose to mix these two materials so they can have natural light). This option takes a long time to install as a storm approaches (most house would take at least two hours). Also using corrugated panels requires a significant amount of storage. Also, don't forget your hardware! Most corrugated panels are secured with wing nuts. Helpful hint, most hardware stores have wing nut drivers that will save some time and your hands won't be hurting after installing the corrugated panels. Be careful with metal corrugated panels, the edges are sharp and these panels are heavy.
6. **Plywood:** This is the least expensive option. Plywood will take the most space in your garage, shed or other storage location. Some people leave Tap Con bolts on their walls and have pre-drilled holes on plywood marked with "living room", "master bedroom", etc.) Over time plywood will warp so I don't recommend this approach. Be sure you have mounting hardware (tap con screws, masonry drill bits and a drill).

Is your home subject to flooding? Just because you live inland doesn't protect you from flooding. You can check for flood maps here: <https://www.fema.gov/flood-maps> or you can also ask neighbors who have lived in the neighborhood for years. Many people have not read their insurance policy and assume their policy covers rising water flooding. The typical homeowners policy covers water damage from fall water (roof leaks) but not rising water (flooding) and the insurance agents can tell the difference. Take the time to read your policy and ask questions to your agent. All flood insurance falls under the National Flood Insurance Program.

It is also wise to have flood supplies such as sand bags, tarps, extra shingles, roofing nails, waterproof tape, caulk and a wet vacuum (often called a shop vacuum).

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