

Investigating eFoil Battery Fires: Facts, Causes, and Brand Impact

How Common Are eFoil Battery Fires?

Reports of electric hydrofoil surfboard (eFoil) battery fires have circulated in recent years. While no formal national statistics exist specifically for eFoil fire incidents, anecdotal evidence from user communities suggests they are **rare but not unheard of** 1. Lithium-ion batteries – like those powering eFoils – are generally very safe; out of countless batteries in use, only a tiny fraction ever malfunction. However, when a failure does occur (e.g. an internal short or "thermal runaway"), the results can be catastrophic 2. In New York City alone, hundreds of fires have been caused by lithium batteries in e-bikes and other devices, underscoring that the risk is real even if the probability is low 3.4.

For eFoils, enthusiasts and safety experts have noted "efoil battery fires happen more often than we'd like to admit" 1 – likely a handful of cases globally – but the *vast majority* of eFoil riders will never experience a battery fire. It's important to understand the context and causes of the incidents that have occurred so we can judge whether these fires were due to product faults, user error/abuse, or even misinformation.

Documented eFoil Battery Fire Incidents (Verified Cases)



Firefighters at the scene of a house fire in Nebraska, December 2020 – an incident where a faulty eFoil battery was officially determined to be the cause 5. The fire, which destroyed the garage and home, was traced to a lithium battery from a Waydoo eFoil that went into thermal runaway.

Waydoo eFoil House Fire (2020): One of the most publicized incidents involved a Waydoo Flyer One eFoil battery. In December 2020, a Nebraska homeowner's *garage caught fire and burned down* while a water-damaged Waydoo battery was stored there. A fire department investigator confirmed the Waydoo lithium battery as the cause of the fire ⁵. The owner had reported that the battery took on saltwater during use; Waydoo support mistakenly told him it was fine to dry out and recharge, which he did. About a week later, the battery ignited in his garage ⁶ ⁷. Thankfully no people were hurt (though the family's pet was lost) ⁸. This case is widely regarded as a legitimate battery failure (not user "gross negligence"), since the user followed the manufacturer's advice and the battery still went critical. In fact, when two Waydoo batteries were examined post-incident, they revealed design flaws – such as pinched seals that could allow water ingress – suggesting the brand had cut corners on safety ⁹. Community experts noted the lack of proper waterproofing, fusing, and venting in the battery pack, calling it "a disastrous battery pack with minimal safety features" ¹⁰. Many in the eFoil community called on Waydoo to recall or redesign these batteries ¹¹, though as of now no official recall has been issued.

Waydoo Board "Flamethrower" Video: In a separate incident, a Waydoo owner captured video of his eFoil shooting flames from the motor compartment immediately after plugging in the battery ¹². This suggests a severe short circuit occurred upon connection (possibly due to water or a wiring fault). It highlights that the **Waydoo had multiple fire-related failures** reported in a short time. (Waydoo did publicly respond to these incidents, initially claiming their battery was *not* proven to be the fire cause ¹³ and expressing skepticism until a full investigation was done ¹⁴. However, the fire marshal's report clearly implicated the battery, undermining Waydoo's denial.)

Lift Foils eFoil Battery Incidents: Lift Foils (a leading US-based eFoil brand) has the largest number of units in the field, and there have been a few reported fire incidents involving Lift eFoil batteries as well. Notably, a **recent safety report from CHIRP Maritime (Jan 2024)** described a Lift eFoil battery that began overheating aboard a yacht. The crew discovered one battery hot to the touch (37 °C and climbing) despite having been charged normally the day before. Suspecting an impending thermal runaway, the captain followed protocol: the battery was moved to an isolated area and ultimately jettisoned overboard before it could ignite ¹⁵ ¹⁶. The investigation found a *faulty cell* likely caused the battery to overheat spontaneously – a manufacturing defect scenario ¹⁷. In this case, a fire was averted by proactive measures, but it validates that even a high-end Lift battery can experience an internal failure under normal use.



Charred remains of an eFoil board after a battery fire on a Barcelona beach (2021). This board was reportedly a Lift eFoil that ignited; fortunately, no one was injured 18 .

Beyond that near-miss, **at least a few actual Lift battery fires** have occurred. In mid-2021, an incident in Barcelona made the rounds on social media: a Lift eFoil burst into flames (video footage shows the board burning on a beach promenade) ¹⁸. The charred hull and foil were left blackened (see image above). No official report was published for that case, but it was widely acknowledged in the community. Users have informally tallied *around five* separate Lift eFoil fire incidents shared online (often via Facebook or Reddit) over the past few years – including house/garage fires and boards igniting during transport or charging. For example, one Lift distributor noted that out of over 100 Lift eFoils he sold, **five batteries had failed in some way** (several apparently leading to thermal events) ¹⁹. Unlike the Waydoo cases, Lift's incidents have generally been attributed to **individual battery defects or damage** rather than a systemic design flaw. There was an early anecdote (circa 2018–19) of a Lift battery fire in a storage warehouse, which prompted Lift to improve their battery casing and advise customers on safe storage (Lift later even sold a fire-resistant aluminum battery case for storing/transporting batteries) ²⁰. However, details on that warehouse story remain scant (it may have been a private incident). What's clear is that **Lift's batteries are not immune to thermal runaway**, though the company has taken steps to mitigate risks (robust casing, battery management system updates, and user education on handling).

Fliteboard (Flite) Batteries: Fliteboard, an Australian eFoil brand and one of Lift's top competitors, appears to have a **clean track record so far in terms of battery fires.** Despite thousands of Fliteboards in use, there have been *no publicly reported* battery fires or meltdowns with Fliteboard's "FliteCell" batteries. In fact, Fliteboard's founder, David Trewern, stated in mid-2022: "We have now shipped over 10,000 Fliteboard batteries and have **never had a fire or other safety issue reported** from one of our customers." ²¹ . This suggests Fliteboard put a strong emphasis on battery safety design (their battery packs include multiple safety features, such as thermal monitoring and phase-change cooling material to prevent runaway ²¹). Of course, it's always possible a Flite battery could fail someday (all lithium batteries carry some risk), but as of now Flite has **no known incidents** – a point often noted in eFoil safety discussions. For example, in online forums, users have commented that they "haven't heard of any Fliteboard (or FOIL Inc) fires," whereas Lift

and others have had a few ²² . This strong safety record is a **competitive differentiator** for Fliteboard in the eyes of consumers concerned about fire risk.

Other Brands and DIY Boards: Besides the "big two" (Lift and Flite) and Waydoo, there are smaller eFoil and electric surfboard makers – e.g. SiFly, PWR Foil, Takuma, Foil (GetFoil Inc), Onean – as well as many DIY builders. Few fire incidents have been documented among these, but they are not completely exempt. Early-generation Onean electric surfboards (not exactly an eFoil, but a similar device) had at least one battery fire: a Onean battery with a weak housing took on water, leading to internal corrosion and a fire while the battery was at rest after a ride ²³. DIY eFoil projects have also experienced battery fires, usually due to homemade battery packs with inadequate battery management or physical protection – one user's custom battery ignited inside his van, destroying all his foiling gear ²⁴. FOIL Inc (GetFoil), a newer American eFoil startup, did not have known fire incidents, but in 2021 they proactively recalled their first batch of batteries due to a defect that caused the battery to become unusable if left idle too long ²⁵. (While not a fire hazard, it was a battery quality issue – the company had to repair/replace many customer packs, indicating some early design bugs.)

In summary, the **verified fires are real** – multiple independent incidents across different brands prove that lithium battery fires in eFoils are not hoaxes. Houses, garages, cars, and even a few boats have been damaged or destroyed. For instance, in the boating world, there were several high-profile yacht fires (the **134-ft yacht** *Kanga*, the **115-ft** *Siempre*, and the **88-ft** *Pesa* in recent years) that were *blamed on lithium-ion batteries from electric surfboards/eFoils and other water toys on board ²⁶*. In the *Kanga* case, crew members observed a Fliteboard or similar e-surf battery "leaking a brown liquid" (electrolyte) shortly before a fire erupted; they had been arranging a replacement for that battery, but **thermal runaway occurred first**, igniting a massive blaze on the yacht ²⁷. These are real events reported in marine safety publications, underscoring that the danger is taken seriously in the industry.

Given the above, we can conclude **these fires are not staged hoaxes** to smear brands – the stakes (homes lost, yachts burned) are far too high for that – but each incident needs to be understood in context of *why* it happened. Are some brands "more volatile" than others? Let's examine causes and whether user misuse played a role.

Why Do These Fires Happen? (Common Causes)

All the available evidence indicates that eFoil battery fires arise from the same root causes as other lithiumion battery fires. In general, most lithium battery fires result from one (or a combination) of a few factors:

- Manufacturing Defects: An internal flaw in a cell can lead to failure even under normal use. For example, the Lift eFoil battery in the yacht incident likely had a *faulty cell* that triggered thermal runaway on its own ¹⁷. Statistically, even high-quality cells have a small failure rate (on the order of 1 in millions ²⁸), and if you have hundreds or thousands of cells in circulation, a few bad ones can slip through. A defect might not show up immediately but can cause a short or instability after some cycles.
- Physical Damage or Trauma: Lithium batteries can be physically damaged by impacts, punctures, or deformation, which can break the thin separators inside and cause a short. Crashes or drops are a known fire risk eFoil makers warn that if a battery is ever dropped or involved in a hard crash, it should be treated with caution (monitored closely and removed from service if any sign of damage)

- ²⁹ . The question about boards burning "on the side of roads" is telling: many of those viral photos likely show eFoils that **fell off a vehicle during transport at high speed** or were in an auto accident, which can absolutely rupture cells and start a fire. At 60 mph, a heavy eFoil battery pack tumbling on pavement could easily go into runaway. In such cases, the fire is real but it's not a spontaneous product failure it's essentially an accident (akin to a car gas tank rupturing and igniting due to a crash). Unfortunately, a passerby's photo of a flaming eFoil on a road doesn't come with that explanatory caption, so it's easy for viewers to assume "it just blew up on its own." **Impact-induced fires** fall under "abnormal use" (more on that distinction below).
- Water Intrusion and Internal Shorting: EFoils operate around water, and if water (especially saltwater) breaches the battery's waterproof casing, it can lead to shorts and corrosion inside the pack. Saltwater is highly conductive and also corrosive. The Waydoo case is a prime example saltwater leaked into the battery (due to imperfect seals) and remained trapped inside, slowly causing corrosion and short-circuits in the days after the last use 6 30. Once enough corrosion occurred, a short triggered a delayed fire (the battery wasn't being used or charged at the moment of ignition it literally self-ignited in storage once the internal short reached critical heat) 31. Another example cited in forums was an early Onean surfboard battery that got water inside and caught fire while sitting after a session 23. Water ingress is an avoidable cause if the battery is well-sealed and if any water exposure (even a few drops inside) is taken seriously. All major eFoil brands design their battery enclosures to be waterproof, but as we saw, execution matters (Waydoo's design had a weakness in the seal alignment 9). Users are now cautioned that if a battery is suspected to have taken on water, do not continue using or charging it store it outside in a safe area and contact the manufacturer. Waydoo's initial advice to "drain and continue use" was absolutely wrong and dangerous 6 7.
- Overcharging / Charger Malfunction: Using an improper charger or overcharging a lithium battery can lead to fire. In the eFoil context, this is less common because eFoil batteries come with dedicated chargers and BMS (battery management systems) to prevent overcharge. There haven't been reports of eFoil fires caused by someone using the wrong charger (unlike some e-bike incidents). However, a faulty BMS could conceivably allow an overcharge. No clear evidence of this exists in the known cases they're more about physical faults but it's a theoretical cause to note. Proper chargers and BMS are why high-quality batteries matter; cheap or bootleg batteries with sub-par BMS/chargers have a much higher fire risk ² ³².
- Thermal Overheating: If a battery is pushed beyond its thermal limits (for instance, rapid discharge or charge without adequate cooling), it could overheat to the point of failure. EFoil batteries are generally designed for high discharge rates, but things like a motor/controller short (as happened in that Waydoo "flamethrower" video) can effectively dump energy rapidly and overheat components. Also, if a battery is stored or charged in very hot conditions (inside a hot car in summer, for example), that stress could contribute to failure. Again, none of the confirmed fires were simply "left in the sun" I mention this as a general lithium battery caveat.

In summary, **every eFoil fire to date has had an identifiable trigger**: either a defect or damage or misuse was present, even if not immediately obvious. As one marine industry safety article put it, lithium battery fires on boats tended to come from "**poor**, **damaged or cheap** lithium batteries... which suffered thermal runaway. No boat owner is considering [using such batteries] for their house system" – drawing a line between well-engineered battery systems and the smaller "consumer toy" batteries that might be more

failure-prone ³² . This suggests that high-end eFoil batteries (Lift, Flite) with proper engineering and quality control are less likely to fail, whereas lower-cost or poorly designed packs (or any pack that's been compromised by damage) are the typical culprits.

Crucially, "thermal runaway" fires are an inherent phenomenon of lithium-ion chemistry, not a quirk of any one brand. Once a single cell in the pack goes into runaway (burns), it can cascade to the rest. These fires burn extremely hot (upwards of 1000°F/538°C) and are very difficult to extinguish ³³. Standard fire extinguishers often cannot put out a lithium battery fire; firefighters instead focus on cooling and containment (or flooding with water to cool, despite the reaction – water is actually recommended by some eFoil makers for an eFoil battery fire, to cool the cells and prevent spread). Knowing this, prevention is key – which is why companies like Fliteboard build in multiple safety layers to *avoid* thermal runaway starting in the first place.

Normal-Use Failures vs. Misuse/Accident-Induced Failures

One of your questions is about separating fires that occur under "normal use" from those caused by abuse or gross negligence (situations *outside* intended use). This is an important distinction:

- Failures Under Normal or Intended Use: These are incidents where the battery was being used, charged, or stored according to the manufacturer's guidelines, yet it still failed. The Lift yacht case falls here - the battery was charged normally and stored in a proper battery box, but a hidden cell defect led to overheating 17. Another example is if a battery ignites while being charged with the correct charger in a normal environment (no water, no damage) – that would indicate an internal fault. So far, some Lift batteries that caught fire were reportedly just sitting or charging when they went off (no user error involved) ² . The Nebraska Waydoo fire is a slight gray area: the user did ride in saltwater (expected use) and simply stored the battery after attempting to dry it - arguably normal behavior for someone who was told the battery was fine. One could argue the battery was already damaged (water inside) which isn't normal, but the user had no way to fully fix that. Generally, when a battery with no apparent external damage goes into runaway, that's a normal-use failure attributable to the product. These are the most concerning incidents because they suggest a spontaneous hazard. Fortunately, they are quite rare. When they do happen, it often prompts either a design change or at least a warning from the manufacturer. (E.g., after early Lift batteries had issues, Lift introduced a tougher battery case and began recommending customers store batteries in fireproof cases – treating it as a known risk that needed managing.)
- Failures Caused by Abnormal Use or External Factors: These are fires where the battery's failure can be traced to something outside the design operating conditions essentially "user error" or accidents. The clearest examples are physical trauma: a battery that has been in a serious crash, been dropped from height, or (as speculated) fallen off a moving car. If such a battery ignites, it's not a design flaw so much as the kind of outcome you'd expect when any high-energy device is violently damaged. Another example is water ingress causing a fire one might debate this, because an eFoil battery should be waterproof, but if a user neglects to latch the battery box properly or uses a battery that was known to have leaked, and then it catches fire, that leans toward user negligence. In the Waydoo scenario, the user did notice water and sought guidance (so not negligence on his part), but if someone ignored obvious signs of water inside a battery and kept charging it, that would be gross misuse. Improper maintenance or modifications could also lead to fires (for instance, if a user tried to open their battery and accidentally pinched a cell, or bypassed the BMS to get more

power – these would be misuse). As of now, we don't have reports of eFoil fires caused by, say, third-party chargers or deliberate modifications, but it's a possibility in the DIY realm.

It's worth noting that many of those dramatic photos of eFoils engulfed in flames on roadsides likely belong in this "external factor" category. A board that fell off a car roof at highway speed and then caught fire **did experience a form of abuse** (even if unintentional). In such a case, *any* brand's battery might have burst into flames – it doesn't indicate the product spontaneously combusts during routine use. Without the backstory, though, a photo of a flaming board on the street can be misleading. Unfortunately, **social media rumors** don't always come with full context, so one brand's fans might circulate a photo of a competitor's charred board as "proof" that Brand X is dangerous, without mentioning it flew off a car or was punctured. This is why focusing on **verified causes** is so important.

To directly answer the question: the legitimate information we have so far indicates that **most eFoil battery fires have an underlying cause that is not simply normal healthy use**. Either the battery was **defective** (which is not the user's fault, of course) or it was **physically compromised** (by water, impact, etc.). We have not seen a case where an eFoil battery in perfect condition just *randomly* erupts without cause. Even the cases that seem spontaneous – e.g. a battery igniting in storage – have traced back to prior damage or an internal cell defect. So, *gross user negligence* is not a common theme in verified incidents (users aren't intentionally shorting their batteries or setting them on fire), but *some incidents do involve improper handling or ignoring known issues* (*like continuing to use a flooded battery*).

On the flip side, **hoaxes** or fake fire reports have little to no presence. The eFoil community is relatively small and active; if someone posted a fake fire picture, it would be quickly scrutinized. In fact, initially after the Waydoo house fire, some skeptics **doubted the story** – one forum user remarked that he "knew instantly that can't be!" because the battery was obliterated in the fire and he thought it was too well-built to burn completely ³⁴. Waydoo's own team seemed to lean into this doubt until the evidence became incontrovertible. So while there was **suspicion and denial** early on, it turned out the fire was very real. This pattern repeated: a few individuals accused others of exaggerating to harm Waydoo's reputation ("a revenge campaign" as one person put it ³⁵, or suggesting Lift's competitors are happy to publicize Waydoo's failures ³⁶), but ultimately the **facts were verified by authorities** in the major cases. We should thus differentiate between *online mud-slinging* and the actual fire incidents. Yes, there is some bias – eFoil brand rivalries exist, and fans sometimes downplay their preferred brand's issues or overplay a competitor's. But **the fires themselves (house fires, etc.) have been real, not conspiracies**. No company wants the bad press or liability of a fire, and no user wants to lose their board or home – so if anything, there's a tendency to hush up incidents rather than fabricate them.

Brand Differences and Recalls

Your question also asks: which brands are most prone to these incidents, and have there been any recalls or official actions?

From the discussion above, **Waydoo** had a notably problematic first-generation battery (launched 2020). The combination of a design that wasn't robustly waterproof and some questionable customer support advice led to at least one catastrophic fire. Community experts tore down Waydoo's battery and identified missing safety features (no proper venting or fuse, cells not well isolated from vibration, etc.) ¹⁰. They deemed "every single Waydoo battery pack is a fire risk" at that time ¹⁰. Waydoo, being a newer low-cost entrant, likely didn't have the refinement that Lift and Flite's packs did. As such, one could argue Waydoo's

early batteries were **more volatile** in the sense of higher risk. Waydoo did *not* issue a recall, but they were under significant pressure to improve. It's known that Waydoo made some updates (they have since released a second-generation battery nicknamed the "Patriot" pack, which supposedly improved sealing and electronics). However, without an official recall or detailed public mea culpa, many users lost trust – some literally sold their Waydoo and bought a Fliteboard after the fire incident ³⁷ ³⁸. As of today, **Waydoo's reputation** in the community is that of a fun product with *mediocre quality control and safety*. If someone owns a Waydoo, extra caution with the battery is advised (store it in a safe place, etc.).

Lift Foils, on the other hand, is a premium brand and has iterated its battery design through several generations (currently Gen4 for Lift eFoils). Early on, after a few fire scares, Lift took steps like offering a fire-resistant battery storage case (an optional accessory Zarges aluminum case with fire-retardant lining) and emphasizing proper handling (they even have a battery safety guide for users). No recall was issued for Lift batteries either – the approach was more about education and continuous improvement. By Gen4, Lift's battery includes a number of safety features: internal compartmentalization, advanced BMS, and (according to Lift) improved cell chemistry for better thermal stability. Nonetheless, as noted, a few have still failed; Lift's stance (publicly) has been relatively quiet on fires – they often investigate case-by-case and, if anything, might replace the battery for the customer under warranty. It's a bit opaque, but no widespread defect that required a recall has come to light. The small number of incidents relative to the large user base suggests that Lift's failure rate is low, but not zero. It's also worth mentioning that Lift's warranty explicitly does not cover damage from misuse or "fire resulting from non-manufacturing factors" 40, implying that if a fire was due to something like a crash or user modification, they won't cover it – but if it was a manufacturing issue, they likely would.

Fliteboard so far hasn't had any incidents necessitating a recall or public safety bulletin. In the marine industry press, Fliteboard actually pushed back against generalized fear of lithium batteries – when an article lumped Fliteboards in with other risky devices, Flite's CEO responded that associating Fliteboard with fire issues was "misleading and slanderous" given their perfect safety record ²¹. He highlighted Flite's extensive safety mechanisms (e.g. each cell in a Flite battery is individually monitored for temperature, and they use chemical heat absorption to prevent chain reactions) ²¹. Fliteboard's confidence is reflected in some insurers' stance: we see that *marine insurance companies* have begun to ask questions about lithium-powered toys on yachts. Some yachts have even faced **insurance refusals or requirements** if they carry eFoils. Fliteboard's data (zero fires in 10k packs) certainly helps reassure insurers that not all devices are equal. One insurer was quoted as saying the majority of fires came from "cheap lithium-cobalt or polymer batteries that were damaged or mistreated," not from well-engineered systems ³² – again indirectly praising brands like Flite.

SiFly eFoils (a newer European brand) and other smaller brands haven't had known fire episodes in public forums, which could mean they haven't had any, or simply that the volume in use is smaller so the odds haven't caught up. It's worth noting that some of these newer brands or DIY packs might use safer chemistries. One contributor on a forum mentioned that **LiFePO₄** (**Lithium Iron Phosphate**) batteries are inherently more stable and do not go into violent fire as easily ⁴¹. LiFePO₄ cells don't store as much energy per weight, so they're not commonly used in eFoils yet (due to weight and size constraints), but if any eFoil did use them, it would be much less likely to burn. Most use Li-ion NMC chemistry which has higher energy density but is more flammable. So chemistry choice matters too.

Finally, regarding **recalls**: As of mid-2025, **no government agency recall has been announced for any eFoil batteries**. The U.S. Consumer Product Safety Commission (CPSC) has issued recalls for many

hoverboards, e-bikes, and electric scooters with fire-prone batteries, but eFoils have not appeared on their recall list. The likely reason is that the number of units out there is relatively small (tens of thousands, not millions like hoverboards) and the incidents have been isolated. That said, the eFoil community itself effectively self-polices by broadcasting warnings. The closest thing to a recall was the Foil Inc case, which was a voluntary company-led fix (and it wasn't about fire) ²⁵. If a pattern of fires were linked to a specific defect in a major brand, we could expect a recall or at least a formal bulletin. For example, if Waydoo hadn't improved their design after 2020, pressure from consumers or even authorities might have forced action.

In summary: Lift and Fliteboard are the market leaders and generally have good safety records, with Fliteboard notably claiming zero fires. Waydoo's first-generation battery had the most serious safety lapses resulting in a verified fire. Smaller or generic boards should be evaluated on a case-by-case basis – sometimes a "no-name" board you see burned up could be a cheap DIY or prototype pack (which might fail more easily). It's always wise to identify the brand in any fire report; for instance, a "Lift eFoil on fire" carries a different weight than a "random homemade e-surf on fire," but an uninformed observer might not know the difference from a photo alone. We've tried here to label incidents by brand where known, and if unknown, treat them as one-off events.

Conclusion and Safety Takeaways

All evidence indicates that **eFoil battery fires, while rare, are very real** and usually caused by specific factors like manufacturing defects or damage from water or impacts. There is no indication that the spate of fire reports is a hoax or coordinated smear campaign – **each major reported fire has been investigated or corroborated by multiple sources** (firefighters, engineers, or videos) and has a plausible technical explanation. However, it is true that online discussions can be biased: fans of one brand might highlight competitors' failures. So, one should rely on verified data (fire marshal reports, etc.) over rumors. In cases where claims seemed exaggerated, the truth usually lay in between (e.g. a battery did burn, but perhaps it wasn't under completely normal conditions, or vice versa).

For consumers and riders, the key is to **mitigate the already-small risk**. Here are a few final safety pointers based on known incidents and expert advice:

- **Handle batteries with care:** Avoid dropping your eFoil battery or subjecting it to severe jolts. If it does take a hit (or you have a hard wipeout where the board slams something), inspect it thoroughly. When in doubt, isolate it and contact the manufacturer. Physical damage can cause hidden internal short circuits ⁴².
- **Keep batteries dry and sealed:** Always ensure the battery compartment is clean and the seals/ gaskets are intact. If a battery is suspected to have gotten water inside, *do not continue using it or charging it* store it in a safe place (preferably outdoors, away from flammable surroundings) and seek professional guidance ⁴³ ³⁰ . Water inside a battery is a ticking time bomb for fire ⁴⁴ .
- **Use proper chargers and never bypass safety systems:** Only charge with the charger provided or recommended by the manufacturer. Do not try to "speed charge" or use incompatible adapters. The battery's BMS should prevent overcharge don't try to modify or circumvent it. Also, never leave a charging battery unattended for long periods. While no eFoil fires have been directly linked to charging malpractice yet, it's a leading cause of other lithium battery fires 2.

- **Store batteries in a safe environment:** Ideally, store your eFoil battery in a cool, dry place away from combustible materials. Many eFoilers now use fireproof battery bags or cases for storage and transport (such as the metal lined cases sold by Lift or third-party fire-safe boxes) ³⁹. This can contain a fire if one ever occurs. Definitely avoid storing a lithium battery inside living quarters if possible; a garage or shed is better and as the eFoilSolutions safety brief bluntly put it, "NEVER store your battery in your home or vehicle" when not necessary ⁴⁵.
- **Stay within design limits:** Do not operate or store the battery in extreme heat. After a ride, let the battery cool down before recharging (most manuals recommend at least 30 minutes). Likewise, don't charge a battery that's very cold or very hot to the touch.
- **Monitor for warning signs:** Lithium batteries often give some warning before failure. Swelling of the pack, hissing sounds, a strange odor, or excessive heat during/after use are all red flags. If your battery ever shows these, disconnect it and move it to a safe area. In the Lift yacht case, the crew noticed one battery was much warmer than normal that observation allowed them to act before disaster 15 16.

In closing, the **eFoil community and manufacturers are learning from these incidents**. It's a young industry, somewhat akin to the early days of hoverboards or e-bikes, but with far fewer players. The leading companies (Lift, Flite) have strong incentives to prevent fires – not only for customer safety but to avoid the kind of public relations nightmare that befell hoverboards (which were banned from flights and saw mass recalls in 2015–2016 due to fire issues). So far, eFoils have avoided that fate by addressing problems proactively and maintaining transparency when issues arise. As a result, we're seeing safer designs (e.g. better sealed and managed batteries) and better user education.

Bottom line: eFoil battery fires *can* happen, but they are **unlikely if you use the device as intended and take proper precautions**. The confirmed fires were *real* events, not fake news – but usually there was an underlying cause (like a damaged or defective battery) rather than random spontaneous combustion. By recognizing those causes and handling eFoil batteries with respect, riders can greatly minimize their risk. Meanwhile, it's wise to stay informed: if you hear of a fire incident, note the brand and circumstances – it could be a one-off or something that prompts a product improvement. Being aware of the history (as we've outlined above) helps cut through any hype or bias and focus on factual risk factors.

Sources:

- Incident report from *SuperyachtNews/CHIRP Maritime* on a Lift eFoil battery thermal runaway (2024)
- Forum posts summarizing the Nebraska house fire investigation fire inspector confirmed the Waydoo eFoil battery as the cause (2020) 5.
- EfoilSolutions safety article on lithium battery fire risks and prevention (2025) 46 47 .
- FOIL.zone forum discussions of Waydoo battery design flaws and call for recall (2021) 9 11.
- FOIL.zone and social media reports of Lift eFoil fire incidents (2021) 18.
- **Power & Motoryacht** magazine on lithium battery fire cases (2023) includes yacht fires from e-surf batteries ²⁶ ²⁷ and analysis of causes ² .
- Marine Industry News quote from Fliteboard CEO re: 10,000 batteries with zero fires (2022) 21.
- FOIL.zone forum posts describing Waydoo board fire video and other failures (2020)

- Facebook post comment (via FOIL.zone) from a Lift dealer noting 5 battery failures out of 100 eFoils sold ¹⁹ . (Indicative of failure rate.)
- Federal Aviation Admin / FEMA NFIRS guidelines (general lithium fire coding) for context on how serious authorities treat Li-ion fires 48 2 . (Many NYC fires from e-bikes, analogous risks.)



https://efoilsolutions.com/blogs/news/lithium-battery-fires-a-wakeup-call?srsltid=AfmBOoploaQMIC2s0v7l1GIeV_pPKzi_C95bZWi2sNtCKmn3BH7iP7hM

2 3 4 26 27 42 48 Lithium Batteries: Are They Safe?

https://www.powerandmotoryacht.com/maintenance/lithium-batteries-are-they-safe

⁵ ⁹ ¹⁰ ¹¹ Waydoo Battery Safety Concerns - efoils – Electric Hydrofoil Surfboards - FOIL.zone https://foil.zone/t/waydoo-battery-safety-concerns/11498

6 7 23 24 28 30 31 41 43 44 Can an efoil battery catch on fire by itself? - Electronics (ESC, remote, batteries) - FOIL.zone

https://foil.zone/t/can-an-efoil-battery-catch-on-fire-by-itself/11285

- 12 20 35 36 Waydoo is going to kill someone and ruin this sport for everybody Products FOIL.zone https://foil.zone/t/waydoo-is-going-to-kill-someone-and-ruin-this-sport-for-everybody/11305
- 13 14 37 38 Waydoo Battery Safety Concerns efoils Electric Hydrofoil Surfboards FOIL.zone https://foil.zone/t/waydoo-battery-safety-concerns/11498?page=2
- 15 16 17 29 SuperyachtNews.com Operations CHIRP Report: Lift E-Foil Battery Thermal Run-away https://www.superyachtnews.com/operations/chirp-report-lift-e-foil-battery-thermal-run-away
- 18 Liftfoil battery catching fire in Barcelona efoils Electric Hydrofoil Surfboards FOIL.zone https://foil.zone/t/liftfoil-battery-catching-fire-in-barcelona/13165
- 19 Lift, It's Time to Stand Up for Your Riders It's hard watching so many ... https://www.facebook.com/groups/130792084215214/posts/1698968874064186/

21 32 Insurance refusals on lithium-ion boats

https://marine industrynews.co.uk/insurance-refusals-on-lithium-ion-boats/

22 Lift board fire concerns and safety risks - Facebook

https://www.facebook.com/groups/130792084215214/posts/1335946850366392/

²⁵ Foil (www.getfoil.com) Battery Recall : r/eFoil

https://www.reddit.com/r/eFoil/comments/rdr3v0/foil_wwwgetfoilcom_battery_recall/

34 Waydoo Battery Safety Concerns - efoils – Electric Hydrofoil Surfboards - FOIL.zone

https://foil.zone/t/waydoo-battery-safety-concerns/11498?page=5

39 Lift eFoil Battery Case – 3 Batteries - Electric Surf Sports

https://electricsurfsports.com/shop/lift-efoil-battery-case-3-batteries/?srsltid=AfmBOooFZftfp9JHNCnjQne1iqLkTbWh-ukCNRxzHkihf-WCqPnpdflq

40 Warranty - Lift Foils

https://liftfoils.com/pages/warranty?srsltid=AfmBOoow-Mcn70F2Ua6n4Zk2CaOGKjK4_9tdsAAGQrLd6z7NuBxIx9On