INTEL 2 COURSE OR THE IN-FLIGHT ICING PROBLEMS! pdf

1: Intel's Core 2 Duo and Extreme processors - The Tech Report - Page 2

raised the possibility of in-flight icing.) The Mitsubishi MU-2 suffered four fatal in-flight icing accidents, although a fifth accident in Pittsfield, Mass., on March 25, , could have been icing-related. The majority of Part 25 jet icing accidents occurred during takeoff with contaminated wings.

That original design has undergone some serious evolutionary changes, plus a few radical mutations, along the way, and the Core microarchitecture may be the most sweeping set of changes yet. Even compared to its direct forebear, the Core Duo, the Core design can be considered substantially new. When power and heat became problems for Netburst-based desktop and server processors, Intel turned to Merom as the source of a new, common microarchitecture for its mobile, desktop, and server CPUs. Because of its orientation toward power efficiency, the Core architecture is a very different design from Netburst. From the very first Pentium 4, Netburst was a "speed demon" type of architecture, a chip designed not for clock-for-clock performance, but to be comfortable running at high clock frequencies. To this end, the original Netburst processors had a relatively long stage main pipeline. For a time, this design achieved good results at the nm process node, but all of that changed when Intel introduced a vastly reworked Netburst at 90nm. With its pipeline stretched to 31 stages and its transistor count up significantly, the Pentium 4 "Prescott" still had trouble delivering high clock speeds without getting too hot, and performance suffered as a result. Core is unique among xcompatible processors in its ability to fetch, decode, issue and retire up to four instructions in a single clock cycle. Core can even execute bit SSE instructions in a single clock cycle, rather than the two cycles required by previous architectures. In order to keep all of its out-of-order execution resources occupied, Core has deeper buffers and more slots for instructions in flight. A block diagram of one Core execution, err, core. Like other contemporary PC processors, Core translates x86 instructions into a different set of instructions that its internal, RISC-like core can execute. Intel calls these internal instructions micro-ops. To this ability, Core adds the capability to fuse some pairs of x86 "macro-ops," such as compare and jump, that tend to occur together commonly. Not only can these provisions enhance performance, but they can also reduce the amount of energy expended in order to execute an instruction sequence. Another innovation in Core is a feature Intel has somewhat cryptically named memory disambiguation. Most modern CPUs speculatively execute instructions out of order and then reorder them later to create the illusion of sequential execution. Memory disambiguation extends out-of-order principles to the memory system, allowing for loads to be moved ahead of stores in certain situations. The memory system uses an algorithm to predict which loads are to move ahead of stores, removing the ambiguity. This optimization can pay big performance dividends. A picture of the Core 2 die. In contrast to the various "dual-core" implementations of Netburst, the Core microarchitecture is a natively dual-core design. The execution trace cache from Netburst is not carried over here. The chip can allocate space in this L2 cache dynamically on an as-needed basis, dedicating more space to one core than the other in periods of asymmetrical activity. In order to make its way into desktops and servers, Core needed to be a bit capable processor, and so it is. The scope and depth of the changes to the Core microarchitecture simply from its direct "Yonah" Core Duo ancestor are too much to cover in a review like this one, but hopefully you have a sense of things. Much like the Turion 64 mobile processor and the HE versions of the Opteron server chips, these Energy Efficient Athlon 64s have been manufactured using a tweaked fabrication process intended to produce chips capable of operating at lower voltages. AMD rates its max thermal power at 65 W, down from 89W in the stock version. The processor on the left above may have the longest product name of any desktop CPU ever: By the way, you may be tempted to compare the TDP numbers for the Core 2 Duo with these processors, but there is some risk in doing so. For all intents and purposes beyond power consumption and the related heat production, the EE versions of the Athlon 64 X2 ought to be identical to the originals. They run at the same clock speeds, have the same feature sets, and should deliver equivalent performance.

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2: icing conditions in flight

Icing is most frequent when the static air temperature (SAT) is between +2Â°C and Â°C, although ice can accrete outside this range. The more hazardous ice shapes tend to form at temperatures closer to freezing. Warmer conditions support the mechanism whereby the supercooled water droplet impacts, then flows aft before freezing.

Thunderstorms have three stages: Cumulus Stage This stage lasts on average about 20 minutes. Numerous small convective clouds merge and rapidly grow into a very large convective cell. Only updrafts are present as air is drawn into the cell from the sides and the base. As the cloud mass extends above the freezing level, ice crystals form and give rise to rain. Because of the predominance of updrafts, rain droplets become very large and are projected upward to great heights. When the raindrops become sufficiently large so that they can no longer be suspended, they begin to fall, marking the end of the cumulus stage. The mature stage is the most violent stage, and usually lasts for between 20 and 30 minutes. The cloud height may build until it reaches the tropopause, and with high-energy cells, the updrafts may penetrate up to five or ten thousand feet into the stable air of the stratosphere. The strong winds associated with the tropopause carry the cloud ahead of the storm, forming what appears as an anvil shape. The temperature inversion that occurs above the tropopause acts like a lid, holding the anvil beneath. The falling volume of rains acts to simultaneously pull the air downward; the descent of air is accelerated by cooling derived from the evaporation of raindrops in the middle portion of the cloud. The cold downdrafts pour out of the bottom of the cloud, and in striking the ground are forced horizontally outward in a radial direction. If the downdraft from the cloud mass is strong enough, the damaging winds that are produced are referred to as a microburst; these are exceptionally violent winds that last for only a few minutes and in a concentrated area of only a mile or so across. The horizontal outflow is strongest ahead of the cloud mass in the direction of its movement; the outflow produces strong and gusty surface winds referred to as a gust-front , which appears as a sharp drop in temperature, and an abrupt rise in pressure. As hail falls, other raindrops coalesce and freeze on the hail stones, enabling them to grow in size; if the hail stones encounter a strong updraft, they are carried again aloft, repeating a cycle that will produce even larger hail stones. As hail stones descend below the freezing level, they will begin to melt, and depending on their exposure to heated air, will appear on the surface as either rain or hail; hail is most commonly encountered above the freezing level. On occasion, hail is tossed out the side of the cloud mass, and with large storms can appear in clear air several miles downwind of the storm. Areas of negative and positive change develop in the cloud mass and may grow until the electrical potential reaches a critical level; this results in a lighting discharge, sometimes between areas within the cloud mass, sometimes between cloud masses, and sometimes between the cloud mass and the ground. Because the cloud is tilted by windshear increased winds aloft , the downdrafts associated with precipitation no longer inhibit the flow of updrafts; the tilted updraft becomes a part of an overturning of the air that extends several thousand feet into the stratosphere before settling back into the anvil to become a descending air column; the cloud structure therefore assumes a continuous flow quality that is both persistent and self-propagating; this category of storms may give rise to tornadoes. A tornado vortex is several hundred yards in diameter with the wind rotating rapidly around it with extremely low pressure in the centre. Either can extend upward into the cloud for over feet. They are most common in the south and southwest parts of the thunderstorm and may enter the cloud in a line of innocent looking cumulus in a rain-free area extending several miles from the parent storm. They tend to occur as families so if one is seen others are probably occurring. The downdrafts begin to grow in size, and the updrafts begin to weaken. The lift mechanism that produced the lightening, rain, hail and turbulence becomes undermined. The lower levels of the cloud structure appear stratiform, and then dissipate; the anvil aloft may remain for considerable time. Thunderstorm Classifications The classification of thunderstorms is based on the type of trigger that generates them and sets off the instability. Some of the triggersâ€”mountainous terrain, convective currents, or convergenceâ€”can occur anywhere in an air mass, and tend to produce widely scattered or isolated thunderstorms. Triggers that produce more organized thunderstorms are frontal systems; here the thunderstorms tend to appear in a line, and they are more numerous. Frontal Thunderstorms

Thunderstorms associated with warm fronts tend to be the least severe of all frontal thunderstorms. This is owing to the shallowness of the frontal slope, which results in a more abrupt lifting. The hazard for warm-front thunderstormsâ€"related especially to IFR flightâ€"is that they tend to be invisible during IMC flight. Only if flight is conducted above the tops of stratiform clouds will the cloud structures of thunderstorms be visible. In contrast, thunderstorms associated with cold fronts tend to be the most severe; here the lifting action tends to be move aggressive and concentrated locally, forming a more discernable single line of cells. They are known to form rapidly, and their tops are typically higher, and their bases lower, than normal thunderstorms. As a rule, squall-line thunderstorms have the highest likelihood of developing into severe thunderstorms. Thunderstorm Hazards Turbulence The two hazards associated with thunderstorm turbulence are loss of control and overstressing of the airframe. The most extreme turbulence is found where updrafts and downdrafts are adjacent to one anotherâ€"referred to as shear zones. Here, the aircraft will encounter drafts moving in opposite directions. Since downdrafts are associated with little or no rain, and updrafts associated with heavy rain, proximity to a shear zone will be indicated by rapid changes in the rainfall gradient over a very short distance flown. As a rule, updrafts are normally stronger and are also larger both vertically and horizontally. It is important to understand that the cloud structure is only the visible portion of turbulence of a thunderstorm. As expected the severity of turbulence decreases with the distance from the storm centre. Turbulence can be expected within a mile radius of the thunderstorm, and up to 30 miles downwind within the anvil structure of severe storms. As well, severe or extreme turbulence can be expected in areas where strong weather radar echoes are separated by less than 30 miles. Hail The risks associated with encountering hail are comparable to those of encountering turbulenceâ€" severe airframe damage can occur from hail on all leading-edge surfaces, including the windshields. All thunderstorms have hail in their interior at some point in their stages of development; commonly, however, the hail melts before reaching the ground. Icing Clear icing can rapidly accumulate in cumulus clouds and thunderstorms, with the heaviest icing appearing just above the freezing level where the highest concentration of super-cooled water droplets exist. The sequence typically followed is for there to be an abrupt fall in pressure as the storm approaches; as rain showers appear typically with the first gust , and as the storm passes overhead, there is an abrupt rise in pressure; the pressure gradually returns to normal pressure as the thunderstorm moves on. As the static electricity builds, there is a buildup of static noise in the communications equipment; at night a corona may become visible across the windshield or at the extremities of the aircraft. The buildup will continue for several seconds, until there is a discharge in the form of lightning. In contrast, when natural lightning occurs, it is simply a matter of the aircraft being in proximity at the time of discharge. The voltages and current flow associated with natural lightning is far greater than that associated with triggered lighting. Typically, natural lightning enters the aircraft at one extremity, such as the wing tip or nose, and exits at the other extremityâ€"the other wing tip or tail, and then continues to the ground or to another cloud. The lightning flash is typically composed of several strokes, each following the same path through the aircraft. The path followed by the lightning is marked by a trail of small burn or pit marks called swept strokes. The entry and exit points are usually where physical damage occurs to the airframe. Indirectly, damage to lighting, magnetic compasses, and all electrical equipment can occur. There have been instances of catastrophic fuel explosions. Thunderstorm Flight Procedures The rule is avoid flight in thunderstorms, and to avoid flying in layered cloud without radar when embedded thunderstorms are present or are forecasted. Early detours around cloud structures are preferred to late detours. The following rules are published in Air Command Weather Manual: Tighten your safety belt, put on your shoulder harness if you have one, and secure all loose objects. Plan your course to take you through the storm in a minimum time and hold that course. Turn on pitot heat and carburetor or jet inlet heat. Icing can be rapid at any altitude and can cause almost instantaneous power failure or loss of airspeed indication. Establish power setting for reduced turbulence penetration airspeed recommended in your aircraft manual. Reduced airspeed lessens the structural stresses on the aircraft. Turn up cockpit lights to highest intensity to lessen danger of temporary blindness from lightning. Disengage altitude hold mode and speed hold mode. The automatic altitude and speed controls will increase manoeuvres of the aircraft, thus increasing structural stresses in using automatic pilot. Tilt the radar antenna up and down occasionally. Tilting it up might detect a hail shaft that will reach a point on your course by the time you do. Tilting it down might detect a growing thunderstorm cell that might reach your altitude. Do keep your eyes on your instruments. Looking outside the cockpit can increase danger of temporary blindness from lightning. Maintain settings for reduced airspeed. If in radio contact, advise ATC of your inability to maintain a constant altitude. A straight course through the storm most likely will get you out of the hazards quickest. In addition, turning manoeuvres increase stress on the aircraft. You could encounter the downburst and shear area. Do stay clear of very heavy rain shafts. They could cause loss of power and loss of lift. Points regarding visual flight through thunderstorm areas: The storm cloud is the only visible portion of a turbulent system that often extends outside of the storm cloud into clear air. Overfly by feet for every 10 knots of wind speed at top level. The horizontal mass of cloud is greatest near mid- and low-levels and least at high levels so there is more clear air at high levels in which to circumnavigate. Hail can be thrown out of the anvil into the clear air downwind of the storm. Circumnavigate the storm by 10 miles on the downwind side and 3 miles on the upwind side. If you are caught under a storm, be prepared for strong updrafts in rain-free areas and strong downdrafts in rain areas. Watch for swirls of dust or debris on the ground or the appearance of hanging cloud elements in the base of the cloud: The rain-free southwest portion of a storm is particularly prone to tornado development. If one tornado is seen, expect others, since they tend to occur in groups. Hail cannot be differentiated from rain visually. Turbulence under the storm could be disastrous. The appearance of virga falling and evaporating from high-based storms can indicate violent downdrafts. Thunderstorm Wind Shear Most accidents related to wind shear are thunderstorm related. An increased-performance shear occurs when the aircraft abruptly encounters an increased headwind component or a decreased tailwind component; it is indicated to the pilot in the form of an increase in indicated airspeed.

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3: Icing and Failed Equipment: Pilot Pushes Weather and Rules | BCA content from Aviation Week

As well as surges and mechanical problems, the previously unrecognized form of icing inside engines causes thrust loss, or power "roll-backs," with virtually no warning.

Ice can build up on the wings of a plane like it did in when a plane trying to land at the Detroit airport lost speed and plummeted to the ground, killing all 29 on board. Sometimes the hazard is on the runway, as when a Comair flight made a wrong turn onto a short runway in Lexington, Ky. The problem might be a poor repair job. Two crew members and all 18 passengers died. And then there are the times when a pilot is just too exhausted to fly and does so anyway. That is what investigators believe happened in when a Corporate Airlines plane crashed short of the runway in Kirksville, Mo. The two pilots had been working for nearly 15 hours and were on their sixth flight of the day. The Federal Aviation Administration lists pilot error as the leading cause of plane accidents, but pilot error is almost always part of a chain of events that starts with something like an iced-up wing, a piece of equipment that fails or a close encounter on a runway. An analysis of accident data by the News21 reporting project and the Center for Public Integrity shows that the major causes of air accidents include ice buildup on aircraft, problems on runways, faulty aircraft maintenance and repairs and overtired pilots. The National Transportation Safety Board has issued more than recommendations related to icing, runways, repairs and fatigue. But in many cases those recommendations have languished, even while accidents continue to happen and people continue to die, according to a review of accident data and government documents and interviews with dozens of industry and safety specialists. Among the NewsCenter for Public Integrity findings: These accidents have killed and injured people since , when the FAA started keeping records. Planes are still a comparatively safe way for Americans to travel. People are about six times more likely to die in car crashes than plane crashes, according to Bureau of Transportation Statistics data from
Recommendations languish for many reasons: The process of changing rules is long and complex; industries resist expensive fixes; unions fight changes in work requirements; and sometimes years of research and product development are needed. But many believe that the biggest cause of delay lies with the FAA itself. But there is no excuse to have issues like fatigue and icing take more than a decade. We rarely disagree that some safety action is warranted.

4: Remedies to Prevent Plane Crashes Languish | News21 â€“ National

icing conditions in flight "When ice is encountered, immediately start working to get out of it. Unless the condition is freezing rain, or freezing drizzle, it rarely requires fast action and certainly never panic action, but it does call for positive action.".

Your browser does not support inline frames or is currently configured not to display inline frames. Unless the condition is freezing rain, or freezing drizzle, it rarely requires fast action and certainly never panic action, but it does call for positive action. It destroys the smooth flow of air, increasing drag while decreasing the ability of the airfoil to create lift. The actual weight of the ice on the airplane is insignificant when compared to the airflow disruption it causes. As power is added to compensate for the additional drag and the nose is lifted to maintain altitude, the angle of attack is increased, allowing the underside of the wings and fuselage to accumulate additional ice. Ice accumulates on every exposed frontal surface of the airplaneâ€”not just on the wings, propeller, and windshield, but also on the antennas, vents, intakes, and cowlings. It builds in flight where no heat or boots can reach it. It can cause antennas to vibrate so severely that they break. In moderate to severe conditions, a light aircraft can become so iced up that continued flight is impossible. The airplane may stall at much higher speeds and lower angles of attack than normal. It can roll or pitch uncontrollably, and recovery may be impossible. Kinds of Ice and Their Effects on Flight Structural ice is the stuff that sticks to the outside of the airplane. It is described as rime, clear sometimes called glaze , or mixed. Rime ice has a rough, milky white appearance, and generally follows the contours of the surface closely. Much of it can be removed by deice systems or prevented by anti-ice. Clear or glaze ice is sometimes clear and smooth, but usually contains some air pockets that result in a lumpy translucent appearance. Mixed ice is a combination of rime and clear ice. Wind tunnel and flight tests have shown that frost, snow, and ice accumulations on the leading edge or upper surface of the wing no thicker or rougher than a piece of coarse sandpaper can reduce lift by 30 percent and increase drag up to 40 percent. Larger accretions can reduce lift even more and can increase drag by 80 percent or more. Even aircraft equipped for flight into icing conditions are significantly affected by ice accumulation on the unprotected areas. Nonprotected surfaces may include antennas, flap hinges, control horns, fuselage frontal area, windshield wipers, wing struts, fixed landing gear, etc. Some unwary pilots have, unfortunately, been caught by surprise with a heavy coating of ice and no plan of action. Many pilots get a weather briefing and have little or no idea how to determine where icing may occur. However, pilots can learn enough basic meteorology to understand where ice will probably be waiting after they get their weather briefing. The pilot can then formulate an ice- voidance flight plan before ever leaving the ground. Ice can form on aircraft surfaces at 0 degrees Celsius 32 degrees Fahrenheit or colder when liquid water is present. Even the best plans have some variables. Although it is fairly easy to predict where the large areas of icing potential exist, the accurate prediction of specific icing areas and altitudes poses more of a quandary. Mountains, bodies of water, wind, temperature, moisture, and atmospheric pressure all play ever-changing roles in weather-making. All clouds are not alike. There are dry clouds and wet clouds. Dry clouds have relatively little moisture and, as a result, the potential for aircraft icing is low. North Dakota, because of its very cold winters, is often home to dry clouds. However, winter in the Appalachians in Pennsylvania and New York often brings a tremendous amount of moisture with the cold air and lots of wet clouds that, when temperatures are freezing or below, are loaded with ice. The Great Lakes are a great moisture source. The origin of a cold air mass is a key to how much supercooled water the clouds will carry. If the prevailing winds carry clouds over water, they will probably be wet. Fronts and low-pressure areas are the biggest ice producers, but isolated air mass instability with plenty of moisture can generate enough ice in clouds to make light aircraft flight inadvisable. Freezing rain and drizzle are the ultimate enemy that can drastically roughen large surface areas or distort airfoil shapes and make flight extremely dangerous or impossible in a matter of a few minutes. Freezing rain occurs when precipitation from warmer air aloft falls through a temperature inversion into below-freezing air underneath. The larger droplets may impact and freeze behind the area protected by surface deicers. Freezing drizzle is commonly formed when droplets collide and coalesce with other droplets. As the droplets grow in size, they begin to fall as drizzle. Both freezing rain and drizzle can fall below a cloud deck to the ground and cause ice to form on aircraft surfaces during ground operations, takeoff, and landing if the surface temperature is below freezing Porter J. Perkins and William J. Along a cold front, the cold air ploughs under the warm air, lifting it more rapidly and resulting in the formation of moist cumulus. Along a warm front, the warmer air tends to slide over the colder air, forming stratus clouds conducive to icing. As you approach the front, the clouds build quickly and the clear air between layers rapidly disappears. Freezing rain and freezing drizzle, including freezing drizzle aloft, are sometimes found in the vicinity of fronts. If you choose to fly through the front, be sure that it does not contain freezing rain or freezing drizzle and other hazardous weather conditions such as embedded thunderstorms. You should plan on flying the shortest route through the front instead of flying the length of the front. Structural Ice How quickly a surface collects ice depends in part on its shape. Thin, modern wings will be more critical with ice on them than thick, older wing sections. The tail surfaces of an airplane will normally ice up much faster than the wing. If the tail stalls due to ice and the airflow disruption it causes, recovery is unlikely at low altitudes. Several air carrier aircraft have been lost due to tail stalls. Since tail stall is less familiar to many pilots, it is emphasized in this advisor, but wing stall is the much more common threat, and it is very important to correctly distinguish between the two, since the required actions are roughly opposite. Wing Stall The wing will ordinarily stall at a lower angle of attack, and thus a higher airspeed, when contaminated with ice. Even small amounts of ice will have an effect, and if the ice is rough, it can be a large effect. Thus an increase in approach speed is advisable if ice remains on the wings. How much of an increase depends on both the aircraft type and amount of ice. Stall characteristics of an aircraft with ice-contaminated wings will be degraded, and serious roll control problems are not unusual. The ice accretion may be asymmetric between the two wings. Also, the outer part of a wing, which is ordinarily thinner and thus a better collector of ice, may stall first rather than last. Effects of Icing on Roll Control Ice on the wings forward of the ailerons can affect roll control. Wings on GA aircraft are designed so that stall starts near the root of the wing and progresses outward, so the stall does not interfere with roll control of the ailerons. However, the tips are usually thinner than the rest of the wing, so they are the part of the wing that most efficiently collects ice. This can lead to a partial stall of the wings at the tips, which can affect the ailerons and thus roll control. If ice accumulates in a ridge aft of the boots but forward of the ailerons, this can affect the airflow and interfere with proper functioning of the ailerons. If aileron function is impaired due to ice, slight forward pressure on the elevator may help to reattach airflow to the aileron. What Is a Tail Stall? The horizontal stabilizer balances the tendency of the nose to pitch down by generating downward lift on the tail of the aircraft. When the tail stalls, this downward force is lessened or removed, and the nose of the airplane can severely pitch down. Because the tail has a smaller leading edge radius and chord length than the wings, it can collect proportionately two to three times more ice than the wings and, often, the ice accumulation is not seen by the pilot. Recognizing and Recovering from a Tail Stall You are likely experiencing a tail stall if: When flaps are extended to any setting, the pitch control forces become abnormal or erratic. There is buffet in the control column not the airframe. Recovery from a tail stall is exactly opposite the traditionally taught wing stall recovery. Here is how to recover from a tail stall: Immediately raise flaps to the previous setting. Pull aft on the yoke. Copilot assistance may be required. Reduce power if altitude permits; otherwise maintain power. Do not increase airspeed unless it is necessary to avoid a wing stall. Is Your Aircraft Approved? There are two kinds of aircraftâ€”those that are FAA approved for flight in icing conditions and those that are not. Icing approval involves a rigorous testing program, and relatively few light aircraft carry this approval. From a legal perspective, aircraft that do not have all required ice protection equipment installed and functional are prohibited from venturing into an area where icing conditions are known. There are some legal issues beyond the scope of this publication regarding what constitutes "known" ice. We will focus on the operational and safety issues. Partial equipage, such as a heated propeller or windshield, does not prepare an aircraft for flight in icing conditions; it only makes the escape a little easier. Most light aircraft have only a heated pitot tube, and without full approval for flight in icing, their crosscountry capability in cooler climates during late fall, winter, and early spring is limited. In addition to the wings, other parts of the aircraft can ice up quickly. A completely blocked pitot tube due to an inoperative heater will cause the airspeed indicator to function like an altimeter. As the aircraft climbs, so does the airspeed. As the aircraft descends, so does the airspeed indication. A Boeing crew neglected to turn on pitot anti-ice, stalled, and crashed the jet when they thought it was going into an overspeed condition because of the high indicated airspeed during climbout. In certain icing conditions, control surfaces may bind or jam when the pilot really needs full control authority. Ice-approved aircraft have been tested with significant ice accumulations on all control surfaces to ensure no binding occurs.

5: Commmercial Pilot Meteorology, Part 2, Langley Flying School

Detecting ice at night poses special problems. The first aircraft components to accrete ice may not be lit by the inspection lights, and ice may look different at night. Clear ice may be especially difficult to detect at night.

6: How to: increase FPS with Intel HD graphics : GlobalOffensive

For ice to accumulate on an aircraft in flight, there must be sufficient liquid water in the air. Water vapor, snow, or ice will generally not stick to a flying airplane's external surfaces. Water vapor, snow, or ice will generally not stick to a flying airplane's external surfaces.

7: Your support documentation outright lies |Intel Communities

The probable cause, said the Safety Board, was "the airplane's encounter with severe icing conditions, which resulted in structural icing, and the pilot's increased workload and subsequent.

8: Intelâ€™s Unveils 7th Gen Intel Core Processor | [H]ard|Forum

in flight: (1) the aircraft must be flying through engineering and operating problem rather than horizontal extent of icing conditions. An exception, of.

9: Core Engine Icing Strikes Russian F | [primary-term] content from Aviation Week

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