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The Scratching Post



VT-10 Spring Heritage Edition



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Words from the SkipperCDR Brian "Baja" SolanoVT-10 Comr

VT-10 Commanding Officer



Heritage defined is the "property that is or may be inherited-an inheritance". That is exactly what we have gained from previous mistakes and lessons learned in Naval Aviation. We have inherited the responsibility to learn and adapt our operations to ensure the safest training environment possible. The Wildcats have been training NFO's from many branches of service since 1962. 54 years of excellence and many countless lessons learned have contributed to our heritage.

My primary goal as Commanding Officer is to train

the finest Naval Flight Officers the fleet and the world has ever seen and train them SAFELY. To accomplish this requires discipline! "Plan your brief, brief your plan, fly your brief." Know NATOPS and the FTI, know aircraft limitations, know your personal limitations. Sometimes these might not be the same. I am proud to say that each member of VT-10 has greatly contributed in the accomplishment of this goal each and every day we walk to the flight line. We have a professional, dynamic, and pro-active Safety Department that has set the expectations high and have contributed greatly to the Safety Culture of VT-10.

As you read the Scratching Post relate some of the current ASAPs and HAZREPS to the ancient articles submitted, when Safety-O was still enlisted. Many items and lessons learned are as relevant today as they were two decades ago. I thank each and every Wildcat for their daily dedication to conducting our mission safely and effectively both on and off duty!

Fly and stay safe, Skipper Solano

The XO Snarl

CDR Ken "Lurch" Froberg

VT-10 Executive Officer



Wildcats, as we embark on the Heritage Edition of the Scratching Post, take a moment to appreciate your heritage! Naval Aviation turned 100 years young in 2011. On January 15, 1968, the Basic Naval Aviation Officer (BNAO) school was redesignated as Training Squadron TEN. Focus and discipline has served past and present Wildcats for half a century of Training Command flight operations.

To stay on your game requires a marathon pace, not a sprint. One step after another, deliberately executed to minimize your risk in a robust flight area with varying degrees of experience. Arm yourself against mishaps by striving for consistent standard practices. This is why we have NATOPS, SOP, preflights, checklists, and procedures. Consider two questions:

Am I focusing on each checklist item?

Strive for perfect *Challenge-Action-Response* execution. Anything less, invites greater error either today or tomorrow, now or down range. Be precise in as many things as you can, and you will be that formidable Naval Aviator or Naval Flight Officer your country needs you to be.

Are you disciplined in honoring the flight "bubble" from brief to debrief?

The "bubble" is a mental discipline to focus on the task at hand, while resisting temptation to check email, make errands, or lose general mission focus. Plan the brief, brief the plan, and fly the plan. Focus and discipline has enabled 5 decades of Wildcat operations. When you are in that bubble, focus on your mission, aircraft, crew, and environmentals, *each* and *every* mission. That is how you become the best of the best. Our nation needs the best!

Set the example, don't be the example.

Fly, Fight, Lead! WILDCAT TWO SENDS

Aviation Milestones

The following professional aviation milestones were recently reached:

2000 Total Flight Hours LCDR Petermann LT Viernes LT Miller

3000 Total Flight Hours LCDR Smith

Congratulations Wildcats, these milestones were accumulated with tremendous preparation and vigilance that all started on deck!

> Well Done! Safety O Sends



ASAP Summary

Purpose of the ASAP Program:

ASAP is a self-evaluation and improvement program used to prevent aviation mishaps and improve agency safety procedures. Participation of ASAP is required by reference (a), NATOPS General Flight and Operating Instructions, paragraph 3.15.1.

3.15.1.1 ASAP Submission Requirements

a. ASAP is a complement to existing programs. There is no change

to established processes for time critical or safety related issues.

b. For commands that have had ASAP training:

 (1) Each flight crew member that manipulates flight controls or is responsible for safety of flight shall input data after each flight.
(2) All crew members should submit additional reports as safety of flight issues dictate.

Students please log an ASAP after every flight!! *Instructors please make sure this is done!!* *Please make brief professional comments remitting names.*

Information Removed For Public Distribution

Information Removed For Public Distribution

HAZREP Summary

Below is a brief description of recent HAZREPS. You can read the full report in the HAZREP binder located in the duty office or please stop by the Safety Department if you would like additional information.

Information Removed For Public Distribution

Article originally published- Spring 1993

SPRING IS IN THE AIR

by CAPT K. L. Smith VT-10 Asst Safety Officer

On February 2, 1993, Gomer, the Pensacolian groundhog, saw his shadow, indicating another six weeks of winter. Most of us didn't appreciate the news since a delayed spring means a delay for beaches, golfing in shorts, and lawncare. Whether we believe Gomer or not, Pensacola offers quite a variety of weather phenomena during the early spring season.

Historically, March is a month that experiences more rainfall than the previous winter months. The temperatures can still be quite cold and the prevailing north wind can lower the windchill factor to below freezing temperatures. In addition, March has the heaviest amount of fog compared to any other month, so watching dewpoint spreads is critical, especially coming back from "out-and-ins" in the early evening hours.

Even if the Gulf Coast is experiencing mild temperatures, a cross country journey to the north might still encounter cold weather. If you take that cross-country to the north and you encounter ice, snow, or slush, remember to preflight the aircraft surfaces for ice including the landing gear. After takeoff in slush or wet snow, follow the good prudential rule to cycle the gear an extra time to avoid gear freezing up. Inflight, remember that your greatest chance of icing occurs between 2 degrees C. to -10 degrees C. If you encounter icing, follow your NATOPS for icing and keep your speed up.

WARNING

T-6A Texan II NATOPS

Sustained operation in icing conditions is prohibited. The aircraft has been approved only for transit through a 5000-foot band of light rime ice.



On the other end of the spectrum, March and April also mark the start of warmer weather and even those "CBs" can pop up every once in a while. It's time to review inadvertent thunderstorm penetration procedures, including airspeeds specific to each type of aircraft. It still makes sense not to fly through anything that you couldn't't fly over (especially true for the Turbo Weenies.)

As springtime temperatures fluctuate from cold to warm, then back to cold, the body seems more susceptible to colds, sniffles, and flu. If you wake up in the morning congested and achy and you are not 100% up to flying, then DON'T. Ear blocks and exploding sinuses aren't fun. The bottom line is to expect any type of weather in springtime...Pensacola-style.



Spring and Summer weather can be <u>VERY unpredictable.</u> Have a plan and execute your plan early. Leave options for the unknown!



Article originally published- Winter 1991

ANYMOUSE

Use those ANYMOUSE's forms to report dangerous situations and help ANYMOUSE forms prevent an accident! may also be used to submit constructive suggestions and ideas to help improve your safety program. So, how about it? The next time you see that unsafe act or have that brilliant idea, don't keep it under your hat! Submit an ANYMOUSE form (available through your friendly neighborhood Safety Department if you can't find one anywhere else). Your suggestions may prevent an accident and save a life, and "the life you save, may be your own!"

Did you know that we have an ANYMOUSE program? The Drop Box is in the West Ladder next to the CO's Suggestion box. Let us know how we are doing and what we can do to become safer Wildcats!



Article originally published- Spring 1995

Midair Collision Avoidance

by LTJG CHRIS WILLIAMS

In VT-10, with the crowded airspace around Pensacola and a history of near-misses, we must be especially concerned about the possibility of midair collisions and how to avoid them. This requires an understanding of how we see and react to approaching visual stimuli.

According to David O' Hare and Stanly Roscoe in <u>Flight</u> <u>Deck Performance-The Human Factor</u>, 1990:

The human eye is made up of two types of photoreceptors, rods and cones. Rods are much more numerous and more sensitive to light but are colorblind. They are located around the periphery of the eye and are responsible for our night and peripheral vision. Cones are located more centrally and give us our high visual acuity and ability to distinguish colors, but require high light levels.

The rods are able to detect targets peripherally, but only if they are moving, flashing, glinting, or are very large. Unfortunately, aircraft on a collision course have no relative



angular motion and may not exhibit any of the other characteristics. In addition, once detected with our peripheral vision, an aircraft can be difficult to reacquire with our highly acute primary vision.

An object on a collision course will slowly increase in angular size, but not quickly enough to alert our peripheral vision until the last second before collision. This "looming" phenomenon occurs because the increase in visual angle is not linear but positively accelerated. The other aircraft will suddenly "loom" into view with collision imminent and insufficient time for evasive maneuvers. This phenomenon is similar to the "groundrush" experienced by parachutists.

There are a number of things that can be done to help prevent midair collisions:

- Maintain a continuous, systematic scan. Keep the head and eyes moving to
- prevent fixation and increase peripheral awareness.
- Avoid high risk areas of intense VFR operations (i.e., low altitudes around airfields, Area 1, etc.)
- Understand that not all collisions are head on. Be especially aware in the landing
- e **pattern.** Ales ach useen to

- Do not relax your scan when under radar control. It's still your life.

 Understand that a target with changing angular bearing will not kill you (unless one of the aircraft turns). However, constant bearing and decreasing range will make for a very bad day.

Midair collision avoidance is the responsibility of <u>ALL</u> crewmembers. Instructors and students should ALWAYS communicate traffic calls using the clock method. When in doubt, training time out, and build SA, before it becomes more severe!



The Not-So-Great One

Ens Jay P. Aldea VT-10 SNFO

Article originally published- Spring 2000



NOTE: The following incident resulted in a hairline fracture of the radial head of the right arm (i.e. a broken elbow). As a result, the writer as of this article has been MED DOWN since mid-April 1999, and still suffers from a decreased range of motion, swelling, and pain (a condition that may last for up to six months after the incident). Writer was in a splint for approximately two weeks and in a sling for nearly five weeks. It is unknown whether any permanent injury exists (e.g. any permanent loss in range of motion) due to this incident.

The popularity of in-line skating and its associated activities has exploded in recent years as its utility for fitness and recreation has been fully realized by the general public. In the areas such as Pensacola and other Gulf Coast cities, the hospitable and warm climate makes such activities a year-round affair. Both experienced and novice rollerbladers can fully enjoy the workout that sports as in-line skating and roller hockey has to offer; however, as the following incident will show, fitness and fun can take a backseat very quickly to pain and injury.

Here's a little background: I had just entered Intermediate phase of training at VT-10, and was still basking in my post-Primary bliss when this little incident occurred. Being a recent newcomer to the phenomenon known as hockey, I went out to Perdido Key to meet an Air Force 2Lt buddy of mine from the Great White North (who shall remain anonymous) who was going to show me some basic hockey moves. Now mind you, I hadn't been skating all that long, which was mistake numero uno. I had only bought my K2 skates back in October. But being the headstrong guy and huge hockey fan that I am, I went right out after VNAV prep class to the mall and bought me a brand spankin' new stick and a puck. Later that afternoon I met the aforementioned 2Lt in a parking lot behind a shopping center out on the Key, and we proceeded to bang around the puck with gusto.

Now, I must say that for an absolute beginner, I'm was doing pretty well. I mean, I'm not going to get drafted by the Blackhawks anytime soon, but for just starting out I was satisfied. So my confidence in my skating was running high, so I started whizzing around with little concern. No big deal, right? This was mistake number two.

We skated around for a good two hours, shooting the puck everywhere except where we wanted it to go. Finally my legs were getting a bit tired, so I said it was about time for me to pull chocks and head for home. Catching my breath, I leaned forward to suck down some O2 when Newton's Law of Gravity suddenly kicked in and I fell backwards to the deck. Oh, did I mention that I wasn't wearing wrist guards (because they impeded stick handling) or any other padding? Mistake number three.

The next thing I know, a sharp pain shoots up my right arm. Apparently when I fell, I planted my wrist on the deck, not an uncommon reflex. What was uncommon was that my elbow twisted all the way around, and I swear I heard something go pop. Later that night in the Naval Hospital ER I learned that the extreme motion caused a hairline fracture in the elbow joint, for which the only treatment was a splint, a sling, and lots of Motrin and other pain killers. Not to mention three weeks of torture...I mean occupational therapy. And lots of SDO and ACDO watches.

So you ask, why the story? Well, this story is played out in some form every day somewhere. However, for those of us who aspire to fly, such an injury as mine could sideline anyone for weeks, months, or even forever. I have to take another flight physical because of this little stunt, and even though it's a remote possibility, the specter of being NPQ'ed this far into the program is something I don't even want to think about. So before the dog days of summer come, let's review some basic in-line safety tips.

First, know your equipment and use it. Preflight your skates for worn wheels, bearings or brakes. Also, while they look kind of silly, wear protective gear (if looks is your hang-up, the hockey stuff looks pretty swift). These include wrist guards, elbow and knee guards, and a helmet. For us wanna-be Gretzkys, a pair of hockey gloves can also protect your wrists not only from falls but also from errant stick slashes (but make sure you drop them before you punch the guy who slashed you).

Second, when you first skate, remember you are not Wayne Gretzky and you are not in the X-Games. You will not be able to do hockey stops, jump half-pipes, etc. Standing will be a major accomplishment your first time out. Be patient, and the skills will come. Stopping without succumbing to gravity is a good first lesson. Make sure you go out with someone who knows what they're doing (that way, you have someone to drive you to the ER when you do screw up).

Finally, exercise some common sense when you skate. Know your limits and stay within them. Skating for fun versus skating with a puck are totally different skills. Again, practice with someone who you can learn a great deal from. Also remember like any other activity, warm up and stretch; this should lessen one's susceptibility to injury. Stay hydrated always (especially in the summer). At night, wear light colored clothing or a reflective vest, and only skate in well-lighted areas (because potholes are hazardous to your health).

To close, here's one last nugget of hard-earned advice. When you skate, *you inevitably will bust*! When this happens, always remember: grass is a lot more forgiving than gravel. The second you feel like falling find the closest patch of turf and roll. I'll take grass stains over road rash hands down every time.

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Article originally published- Spring 1998



Are You Getting Enough Sleep?

At a 5:30 am brief a couple of weeks ago, I asked my FAM 1 student the customary, "How are you this morning?" The answer I received was less than positive, so I inquired further. It turned out that he went to bed at 1:00 am and got up at 4:30 am for an intentionally deficient three and a half hours of sleep! This is obviously not acceptable for any aircrew, regardless of experience. It *should* be common sense, but we do have written guidlines. So here's a quick review:

Break open the OPNAV 3710.7Q to page 8-6 and find the "Rest and Sleep" paragraph. It says that "8 hours for sleep time" should be made available every 24 hours, and that time between flight operations should allow for this 8 hours and time to eat. We here at VT-10 ensure that you have this time to rest - check out the "Aircrew Limitations" section of our Standard Operating Procedures. Students shall get a minimum of 12 hours crew rest. Tell the CDO if your next event will need to be moved later to accomodate crew rest and <u>do not</u> come in any earlier than 12 hours after you leave. Instructors should get 12 hours, but in no case less than the OPNAV requirement.



These regulations exist because fatigue, a hazard to flight safety, is completely within our control. (Editor's note: and because common-sense isn't common.) We may not even realize that our lack of adequate rest is taking us down the path to an incident until serious errors are made. Imagine landing with the gear up (it's happened!). The dangers of fatigue do not just apply to aviation - ever doze off at the wheel, only to wake up with half of your car off of the road? Impairment of coordination and concentration (a direct result of fatigue) continues to be a contributing factor in aviation and ground accidents.

Bottom line: This is not college. Discipline yourself against cramming for your next flight at the expense of crew rest. Treat every flight as if an emergency was waiting to happen. Finally, be as physically and mentally prepared as your other crewmember (or mother!) would want you to be.

SNFO training is designed to be a challenging, dynamic, & educational experience. It is CRITICAL that you develop some time management skills to succeed. Stay a couple flights ahead, prepare early, and stay flexible. If you need some assistance stop by Safety!



DECOMPRESSION SICKNESS

Decompression Sickness (DCS) is normally associated with diving and compressed gas operations. Altitude DCS is somewhat rarer and certainly less understood and encountered, but when it does occur, you are likely to miss it after a decompression malfunction at altitude.

There are two types of DCS:

Type 1 DCS cases are associated with NON-NEUROLOGICAL Symptoms, such as joint pain, skin symptoms and are not fatal but can be certainly painful and cause disability.

Type 2 DCS is the bad actor here. Type 2 involves neurological signs and symptoms. A bubble is pressing on a nerve or on brain tissue and taking up space that can block blood flow. In effect the bubble can have the same space occupying effect of a tumor. Brain Tumor = BAD. Neurological signs can be extremely variable. I have seen presentations that range from frank incapacitation to so subtle that they are easily missed. In 100% of the cases the person affected cannot judge the severity of their signs and symptoms, and in at least three cases said they were "fine" and weren't sure why everyone else was so spooled up. The most subtle case I saw was one of inappropriate post flight hunger...the Pilot ate and was unable to be satiated with his food intake. Since he was having lunch with a fellow crewmember of the flight it was recognized that something was wrong and 1+1 was calculated as "a problem". Medical Exam showed extremely subtle changes in his personality and was otherwise normal. He ended up with a bubble lodged deep in his brain pressing on/irritating the area that controls food intake and the sensation of hunger. The flight profile was such that they experienced a Cabin Alt of 24,000 feet. Recompression in a chamber gave 100% resolution within 10 minutes. After the event the pilot was able to realize there was a deficit, but not pre-recompression.

Myths:

If I pre-breathe OBOGS I am protected, that's why we have the chock to chock rule for Oxygen mask use. **FALSE...** OBOGS provides for an increased concentration of oxygen, not the total elimination of nitrogen from the breathable air.

I can't get DCS if my cabin pressure is below 18,000. FALSE... You are unlikely to get DCS and the current CONOPs and ORM dictates the 98% solution is an acceptable risk/loss rate.

If I am exposed to a cabin alt of 25,000 I will get DCS. **FALSE...** You are at a greater likelihood yes, exact numbers cannot be determined unless we do some unethical experiments to get numbers/percentages like that.

My crewmember with me in the cabin didn't have any symptoms so my symptoms can't be DCS. **FALSE...** Everyone is different, frequently the entire crew IS NOT affected the same way.

If I go to medical they can diagnose DCS easily:

FALSE... Most non-aviation medical personnel know of diving and DCS but an embarrassingly few know anything about altitude DCS and you are guaranteed to get it overlooked. Typically in subtle cases with personality changes as the presenting complaint, it is a family member that insists that something is wrong, not the affected aviator. **See a Flight Surgeon!**

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If I have DCS I will get grounded for a long time and have to go through a painful waiver process. **FALSE...** Type 1 DCS results in a 3 day grounding period (after symptoms resolve) and no waiver required. Type 2 DCS requires 2 weeks after symptoms resolve because it is so much more serious of an issue, and even then waivers are not required if the signs and symptoms resolve.

I can just wait out the signs and symptoms and they will get better:

MAYBE... how good is your life insurance? If you have TYPE 1 or TYPE 2 you need to get recompressed IMMEDIATELY to ensure there is no brain or nerve damage. If you have Type 1 signs and symptoms there is a huge potential for Type 2...yes, even if there are no signs or symptoms of Type 2, your self-assessment of your condition may not/likely is not accurate. Ask a family member or friend, or better yet have them accompany you to the ER/Flight Doc. A recent USAF Study of High Altitude pilots in the SR71/U2 program showed significant brain lesions in pilots that never presented for any signs and symptoms. Pilots get DCS hits frequently and either "tough it out" or are unaware, especially high altitude pilots.

I can only get DCS if I have explosive decompression at altitude:

FALSE... Really...you've read this far and still think that? Exposure no matter how slight/subtle or for a short period still can result in DCS. It's a pressure thing not a dramatic event thing.

So I think I have DCS, WHAT DO I DO?

Seek immediate EMERGENT medical attention, have a family member take you so that they can describe what they see as changes. INSIST on an immediate PHONCON with a flight surgeon/hyperbaric medicine specialist and that they call the USN Dive Hotline at:(850)293-5516, or the Diver Alert network (DAN) at (919)684-9111. Unless they are trained in DCS and altitude DCS they are guaranteed to miss it unless you look like a stroke victim, and then they are going to treat you for stroke (wrong treatment) instead of recompress you. Insist they start you on 100% Oxygen in the ER (helps decrease the partial pressure of nitrogen you are breathing).

You need a recompression chamber NOW or you may end up with permanent deficits that will affect your future flying and future civilian employability.

If you or anyone you know should experience symptoms of DCS, please notify me immediately. If you are at the duty desk and the call comes in, I will want to know the following:

- 1. Who was in the aircraft?
- 2. How quickly did it occur?
- 3. What was the aircraft altitude (MSL/PA)?
- 4. What was the cabin altitude before depressurization?
- 5. What altitude did the cabin reach?
- 6. How long was the cabin altitude above 18k PA?

Your friendly Doc Reynolds

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WILDCATS Submit your Safety oriented articles now! If published you'll receive a "24 Hour" Some special terms and conditions apply. Blackout dates apply. Not valid in all contiguous states. See Safety for details.

CO's Safety Policy

- 1. I will push students hard to achieve the confidence and qualifications needed to serve as a Naval Flight Officer, but injured or dead wildcats add zero value to the squadron, the fleet, or the nation. Therefore, we are committed to safety, both on and off duty, 24/7/365. There is NOTHING in our mission set on or off-duty that exceeds the value of YOU.
- 2. By the mere fact that you are here, you are a PROFESSIONAL. Professionals do not gamble with safety. We all shall adhere to published guidance including, Standard Operating Procedures (SOPs), NATOPS and directives governing the execution of our mission.
- 3. THE FOCUS of our safety efforts in VT-10 is increasing individual awareness, proficiency and standardization, as we grow professional Officers and aviators.
- 4. THE GOAL is zero injuries, incidents, and mishaps, on or off-duty.
- 5. The safety department has the lead, but we are all committed and responsible as professionals. Safety is truly a team effort. We must constantly look out for each other, both on and off duty. If you identify a situation, I expect you to speak up. Every Wildcat is charged with making our squadron mishap free.

B. J. Solano