The IntegrITS Weekly Digest

Operational Excellence

Welcome to this week's edition of *The IntegrITS Weekly Digest*.

Our final Operational Excellence feature of 2022 takes us to the beautiful state of Hawaii. We often share how impressed we are by the skill set and dedication to excellence demonstrated across the IntegrITS Team. The individual we are featuring today is no exception. Harry Beatty is a Principal Software Systems Engineer at our IntegrITS location on the "Big Island", HI.
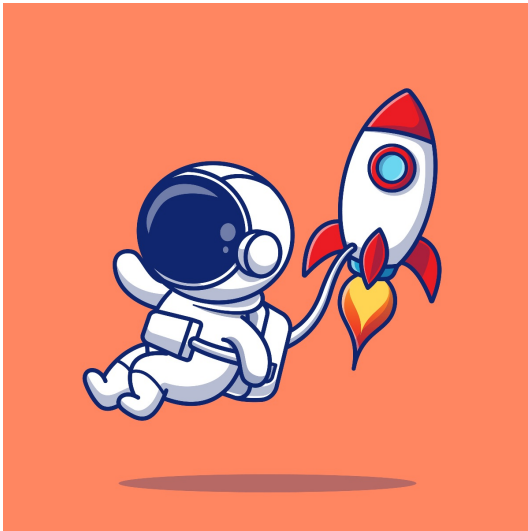

The Big Island, HI

From left to right: Harry, Ka`imilani (Harry's daughter), Jill (Harry's wife), Stanley

Have you ever met someone who was extremely intelligent, yet down to earth? Someone who will explain a highly complex concept and crack a joke in the same sentence? This is what it was like for us when we sat down to interview Harry. Our interview was a hybrid mini masterclass in software engineering and what felt like a simple conversation with a friend. For those of you who haven't had the pleasure of meeting Harry, we hope today's feature will leave you feeling like we did after our interview: grateful that we get to work alongside such kind, capable, and talented individuals.

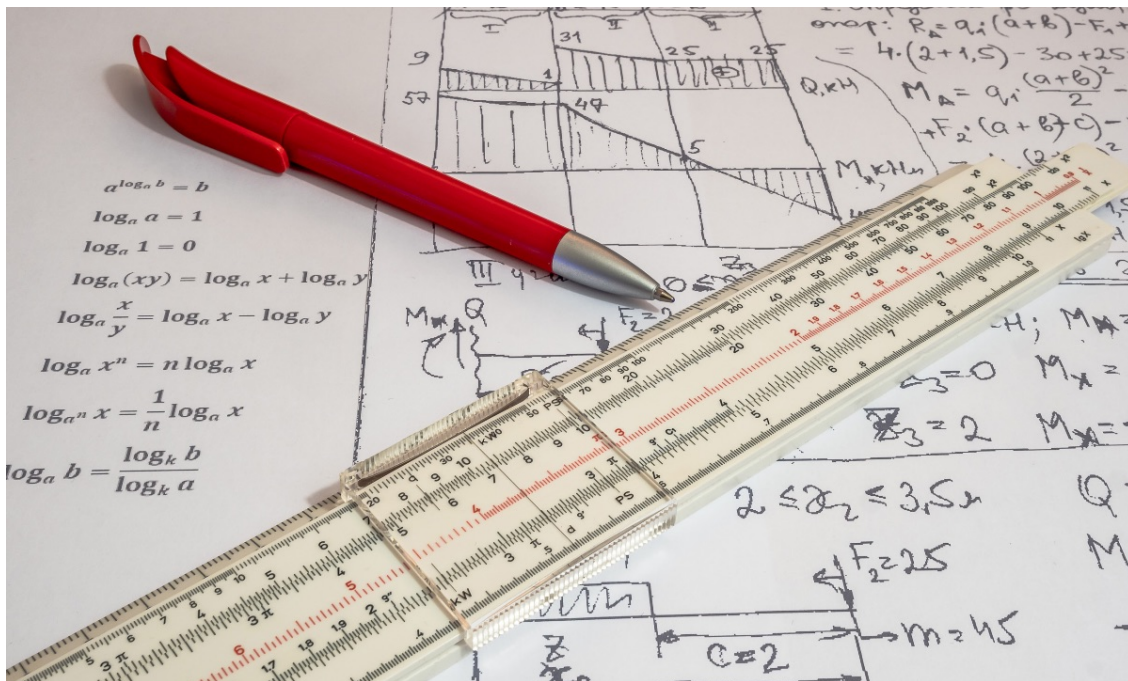## An aspiring astronaut who landed in computers.

Harry has been a member of the IntegrITS Family for nine years, and overall, in his 30 years working in the field he has built a diverse and impressive skill set. When asked how his background has prepared him for the work he is doing now, Harry shares how his childhood dream was to be an astronaut and how in many ways his work today brings that dream full circle: "I studied Aerospace Engineering as an undergrad…then never used it because manned spaceflight was essentially not a thing by the time I was ready to start work. So, my first job out of college was in the Engineering Department at Sprint. I more or less discovered computers and software in general because I was the only guy that could program AT ALL. I was terrible at it, but nobody could tell because they were all still doing everything on a slide rule (my slide rule skills were nonexistent)."

The slide rule is a "mechanical analog computer which is used primarily for multiplication and division, and for functions such as exponents, roots, logarithms, and trigonometry" (Source: Wikipedia).

"From there I bounced around to several Silicon Valley startups; some known, mostly unknown, then did grad school in Computer Science*, concentrating on

Software Engineering. Eventually I would end up working at the Pacific Missile Range Facility (PMRF). Nowadays I get to play around rockets (although not WITH rockets) while I design software, program some stuff, generally try (and often fail) to be useful." So, although Harry is not a passenger on the rocket ships he dreamed of as a child, his work around rockets and ships feels like he's come full circle.

*Harry is very humble and did not mention that this degree was completed at Harvard. :)

The average workday isn't average.

While working at PMRF as a contractor, Harry met Steve Fox (IntegrITS Chief Operating Officer) and ended up joining the IntegrITS Team. When asked about his day-to-day work with IntegrITS, Harry explains, "The average workday is decidedly non-average. I typically work on 2-3 large projects at a time, together with any smaller stuff that gets tossed in. On any given day, I might work on software architecture, draft software blueprints, write technical documentation, write actual code, test and deploy software, bang around on electronic equipment in racks, try to figure out how to interface a radar back-end with an obsolete computer network and then provide real-time status to mission control. There is never a dull moment."

To give you context for his work, Harry is completing all of these tasks in support of major projects at the Missile Range where the DoD conducts testing that is critical to our national defense. The software he mentions pulls information from a range of sources such as radar and optical sensors, as well as telemetry from the missile and targets. It then processes this information and produces detailed displays during major test events and missions. These comprehensive displays of information give PMRF and the Range Users the ability to monitor the systems under test (SUT) and conduct the tests/missions in a completely safe manner. The ultimate results of this testing at PMRF is the delivery of highly capable, state-of-the-art sensor and weapon systems to our Nation's warfighters.

In fact, one of the projects that is most exciting for Harry right now is his work redesigning the core processing software suite of applications being used at the Range. In Harry's words, "The successful end goal is a modernized, efficient software application suite that brings all tracking, flight termination, sensor fusion, and mission control functions together in something that hopefully looks

more like SpaceX and less like vintage 1960s Star Trek. Fingers crossed."

Yes, we discussed quantum computers and artificial intelligence.

As one hears Harry describe his work, it is exciting to know that so much innovation is happening at the Range—and that our Team is at the helm of some of these innovative projects. He shares, "Some of the cool stuff going on at the Range includes testing the latest hypersonic missile technology and testing the Ground-Based Strategic Deterrent (the replacement to the venerated Minuteman III)."

IntegrITS is also playing a key role in the fielding/deployment of the new Maritime Range Safety System (MARSS) in the near future. The new, upgraded technology that IntegrITS is helping implement with MARSS will expand PMRF's capabilities to support some major Navy and DoD planned test events/missions that are on the horizon.

Finally, as Harry considered industry-wide trends that he looks forward to being a part of, he shares: "I keep hoping I get to work on actual quantum computers before I retire (and, yes, technically such things both do and do not exist). I'd also love the opportunity to build some actual AI into some of the stuff we're doing. Hopefully I'll get the chance."

We hope you get the chance too, Harry!

We can't end our feature on Harry without mentioning how much he talks about his Team. He speaks so highly of his teammates Steve Fox and Steve Browning. It was inspiring to hear how these three combine their extensive knowledge, experience, and skill to do such important work in support of the Warfighter. Harry explains, "I'm motivated to stay on the Team because the work is really cool and the people I get to work with are brilliant and come from such interesting backgrounds. It's really a fun place to be."

What a way to close this year's Operational Excellence features! We are grateful for Harry's vision for his current work and his vision for his work with IntegrITS in the future. Thank you for the kindness, skill, genius, and teamwork you bring to the IntegrITS Family. It is truly an honor to have you on our Team, Harry.

Tip of the Week

401(k) limits are increasing in 2023.

Below are the current and prior tax year annual plan limits set by the Internal Revenue Service (IRS). 401(k) plan participant deferrals (contributions) are also subject to the limits and provisions of their respective plan.

	2023	2022
401(k) and 403(b) Contribution Limit*	$22,500	$20,500
401(k) and 403(b) Catch-up Contribution Limit**	$7,500	$6,500
Annual Compensation Limit	$330,000	$305,000
Top-Heavy Plan Key Employee Compensation Limit	$215,000	$200,000
414 Highly Compensated Employee Threshold	$150,000	$135,000
415 Defined Contribution Limit*	$66,000	$61,000

*   For participants who are considered "highly compensated," as defined by the Internal Revenue Code (IRC), this limit may be affected by annual nondiscrimination testing.
** For participants who are age 50 or over at the end of the calendar year.

$$ Employee Referral Bonus Program

At the end of each quarter, we are acknowledging the two people who have referred the most prospective employees who made it to the interview process. These two people will each be given a $500 gift card. We will also enter all employees who refer a job applicant into a raffle, with the winner receiving a $250 gift card. **We will announce the winners next Thursday, so you still have time to refer people this quarter!**

As of today, we have quite a long list of openings across multiple IntegrITS locations (IntegrITS Opportunity Central). **Let's work together to find the best candidates for these open positions!**

San Diego & Chula Vista, CA

Acquisition Specialist

DBM Specialist - Mid

Gun Weapon Technicians

Integrated Master Scheduler – Jr

Logistics Analyst

Program Management Analyst

Program Management Specialist – Jr

Edwards Air Force Base, CA

Infrastructure Engineers Techs II & III

Programmers I, II, III

Systems Administrators I, II, III

Las Vegas, NV

Electronic Maintenance Technician II

Hill Air Force Base, UT

Systems Administrator II

Coming Soon:
5th Thursday Check-In

Every 5th Thursday, we like to add a bit of levity to the Digest. Be on the lookout for some fun next week!

Comments/Questions?

If you have any comments or questions about this week's newsletter, email us at news@integrits.com.

We have also created a website where we are storing the archives of all our newsletters to date: https://integrits.com/digest-archives/.

Have an incredible week, and we'll see you next Thursday!

Warmest Regards,
The IntegrITS Weekly Digest