Land Surveyors Association of Jamaica

"MISCLOSURES"
NEWSLETTER

Website: www.lsaj.com

Land Surveyor's Association of Jamaica Newsletter January, 2023

Celebrating UTech, Jamaica Alumni: Delano Thompson, from UTech, Ja to a Registered Professional Land Surveyor in Texas, USA

Mr. Delano Thompson PLS

Let me firstly say, that the education and experience I gained from the Bachelors of Science in Surveying (Land) and Geographic Information Sciences (SGIS) program at the University of Technology, Jamaica (UTech, Jamaica), is a huge part of why I was able to gain US licensure. The other big part was not taking no for answer. Transitioning to a commonwealth country would've been a smoother process but being a permanent resident (green card holder) I was determined to make the United States, Texas in particular work for me. The SGIS program sets a foundation that is very solid and I can't emphasize this enough. Since becoming a Registered Professional Land Surveyor (RPLS) I have done a few job interviews and there have been moments when I could tell that I was being drilled a little bit harder by the survey department manager (usually someone with anywhere from 15-30 years or more experience than myself) to make sure I actually understood how to use the equipment and what to check and look out for when managing field crews.

But with the experience gained from Field Practicum modules, having a real understanding of the fundamentals of Surveying, and being able to draw on knowledge from using the Wild T1a theodolite, stretching the tape, and the importance of taking good field notes etc. it is so much easier for me distinguish myself as someone who is not just a "button pusher" that can only execute a survey when its smooth sailing. So yes the marketing material for the surveying profession will show all the fancy 3d scanners, drones, lidar etc. and we do need to learn all that stuff as the technology progresses but the foundation and principles governing surveying remains the same worldwide.

Continued on Pg. 10

In This Issue

Contact the LSAJ:

The Trade Centre
The Harry G. Armstrong Suite
Unit #9A
30-32 Red Hills Road, Kingston 10, Jamaica
Tel.: 876-754-6912-3
Fax: 876-920-3650
Website: http://www.lsaj.com
E-mail: lsaj.jam@gmail.com

Editor's Notes

Timothy A. Thwaites BA, MSc., CLS

Dear readers, I'm sure you would all agree that 95 years of doing anything is no mean feat, so it is with a special sense of pride and achievement that I welcome you to share in the first edition of our Misclosures newsletter in this special anniversary year.

The peculiar task we have in front of us at this juncture is, on the one hand, how to appropriately celebrate achieving this enviable milestone, and on the other, how to harness the wisdom and lessons of years-gone to continue the evolution of our noble vocation.

The wisdom of the Association's founders in creating a structure through which Surveyors could order and regulate themselves has endured the tests of time, and has created a space for fellowship and growth as surveyors' work underpinned every stage of our development as a nation. Largely unheralded, Surveyors have given yeoman's service to countless people and causes throughout the decades; this year we should give special effort to turning our proverbial faces forward and sharing our talents with the world.

We must simultaneously guard against the lethargy that could easily accompany our vintage. Our rock solid principles must now coexist in a world of rapid technological and social change. The governance, practices, training, and education of Surveyors are competing with expectations of immediate gratification and shortened attention spans; how do we find the agility to be responsive without bending ourselves out of shape?

With the frenetic advance of a new digital age of surveying in the form of advanced algorithms, artificial intelligence (AI), and 'deep learning', it is, paradoxically, the strict adherence to the foundational principles of organization, structure and discipline that will allow us to reap the greatest benefits from these changes, while also protecting ourselves and the public from the many known and unknown challenges that will accompany them.

Congratulations to all who have shared in our history; and for those who are here for the future, let's strap in and make the best of the opportunities ahead. Happy 95th Anniversary LSAJ!

Timothy A. Thwaites, Newsletter Editor

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Charles Johnson

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The LSAJ continues to be more environmentally responsible! Our Misclosures newsletter will now only be circulated in electronic format.
This will increase our reach through e-transmission to a wider readership, and also drastically reduce our collective carbon footprint!

The President's Notepad

Charles Johnson, CLS - LSAJ President

Dear Colleagues,

As our Association enters its 95th year of existence, as members, we must take the opportunity to celebrate the rich history of our profession. The vision of our founding members, Arthur Byles, Charles Heming, Alexander Dunn, Septimus Whittingham, Hugh Willoughby, Geffrard Bourke, Herbert D'Aguilar, Aubrey Helwig, Robert Tyndale-Biscoe, Ralph Rickman, Joseph Dodd, Percy Anraham, Herbert Hood-Daniel, Christopher Adams, Thomas Vermont, Egerton Rickard and Robert Byles still holds true almost a century later. Though many of our members may not be familiar with these names, their legacies lives on not only through their contribution to the land record – which invariably lives beyond them and every other Commissioned Land Surveyor, but also through our Association as we continue to build upon the objects which based its foundation.

Our Association is charged with supporting and protecting the character, status and interests of the profession of Land Surveying generally, and particularly of Land Surveyors practicing in Jamaica. We have seen in recent times where our profession has faced criticism regarding the integrity of its professionals and how we manage our own affairs. Though these attacks may be unfounded and unwarranted, it is a stark reminder of the need of our Association to proactively defend the reputation of our profession, while also ensuring that our internal regulation is of the highest standards.

The promotion of honourable practice and the repression of malpractice must be placed high on our agenda as an Association. Our duty to protect the profession and the public from those who operate outside of governing laws, as well as the codes of ethics to which we adhere remains a priority. As we enter our 95th year we will increase our efforts in rooting out and bringing to book those among our ranks who run afoul of our expected standards of operation. We also continue to commit to facilitating our members in settling disputed points of practice and matters of professional courtesy within our ranks.

In our near 95 years as an Association, we have consistently contributed to the interest of the Land Surveying through our participation in initiatives and developments that further all spheres we as Land Surveyors have particular insight and knowledge in. We must continue to identify where there is the need for our expertise and not shy away from making our collective voices heard. Our contribution must be felt in the putting forth of new ideas, but we must also be strident in the defence of our existing practices and methods that have served us well in the past and preserve those that would reap no tangible benefit from wholesale change.

As an Association it is incumbent on us to encourage the study of Land Surveying. This has always been a core tenet of our Association however it is now even more pressing as we observe a decline in the number of new entrants to the study of land surveying. As an association we must seek to attract new entrants, support those who study to become surveyors, play our part in the preparation of candidates for professional qualification while always encouraging and providing paths to continued professional development and career-long education for our members.

As we celebrate this significant milestone of 95 years as an Association, our recognition of surveying's importance and contribution to national development must be highlighted in an effort to advance and promote awareness of our profession generally. Our Association will also continue to keep its members in the know as we see the advancement of surveying methods and technology.

In conclusion therefore colleagues, the core objectives set out at the creation of our Association still hold true today. Our association has the enviable position of a long and eventful history, providing lessons and experiences that can guide our way forward. Let us step into our 95th year with a renewed sense of determination and enthusiasm for the advancement of our profession and Association

Charles Andrew Johnson, President

Three Experts Share Their Thoughts on Attracting Skilled Personnel

There is a shortage of geomatics professionals to meet the ever-growing need for geoinformation. What can the geospatial community do to tackle this challenge? GIM International asked three renowned experts to share their thoughts on how the surveying industry could fill the labour gap.

Hansjörg Kutterer, president of the German National Mapping Agency (DVW):

The number of qualified personnel is becoming increasingly crucial for the further development of the surveying profession. Despite the broad appeal of our professional field and the high number of vacancies, there is still a lack of public visibility and thus limited awareness among potential candidates. For this reason, there have been various activities in Germany over the years aimed at reaching and attracting more young people to the industry. For example, the Instagram campaign #weltvermesserer has been launched in 2021 by a consortium consisting of all national stakeholders, including the private sector, administration, science and all relevant professional organizations. Both the expected impact of this campaign and the increasing interdisciplinary nature of our professional community will provide a good basis for tackling this sizeable challenge successfully.

Paul Digney, president of Australia's Surveying and Spatial Sciences Institute (SSSI):

In Australia, as in many countries, there is a widespread shortage of skilled personnel in the surveying/ geospatial science professions. This is being acutely felt in sectors such as transport infrastructure and resources which are currently seeing significant investment occurring in many regions of the country. The current capability deficiency is likely to continue until the mid-2020s before starting to swing back towards a surplus. Whilst there is a large demand for geospatial professionals, there have been some welcome developments on the supply side which have helped the profession meet some of the shortages. Notably, enrolments in undergraduate geomatics engineering degrees (incorporating surveying and geospatial science degrees) have been rising steadily over the last ten years. This is one area that SSSI and other associations have worked collaboratively with the broader industry. Initiatives such as 'A Life Without Limits' have helped to foster greater interest in surveying as a career amongst young people and provide clearer guidance regarding pathways into the profession. Diversity remains a challenge for our sector in Australia; studying surveying and geospatial sciences is still very much a male-oriented activity. The increase in enrolments in geomatic engineering courses is almost exclusively male, and the share of women in undergraduate geomatic engineering degrees has actually fallen. So there is much to be done to improve diversity and inclusion within our professions. In this context, SSSI has played a significant role in the Space, Spatial and Surveying Diversity Leadership Network (SSS-DLN): a sector-wide group of businesses, governmental and educational organizations aimed at providing visible advocacy for diversity and inclusion within the profession.

James Kavanagh, director of global land & resources at the Royal Institution of Chartered Surveyors (RICS):

There is a growing professional and technical capacity crisis within surveying across all sectors, from engineering to land management to hydrographic surveying. I believe that the only nation on Earth producing a surplus of surveyors is Poland. There is a need to look at our academic and technical training capacity in a less parochial way and perhaps to better share capabilities. Initiatives like 'Get Kids into Survey' and its use of the GeoSquad comic format might be a solution (certainly in the anglophone world) but it is also important to ensure that young people are able to fulfil their professional, social and economic aspirations.

Source: https://www.gim-international.com/content/news/three-experts-share-their-thoughts-on-attracting-skilled-personnel (accessed 07-01-2023)

New Digital World Needs Data

By: Linda Duffy

Next-generation surveyors require specialized education and training to fill the role of geospatial data specialists

Many emerging geospatial applications, such as digital twins, 3D modeling, monitoring, virtual reality, and autonomous vehicles, are based on big digital datasets. Building a 3D digital world starts with accurate data that ties to a point on the ground, so everything correctly relates to everything else for designs and measurements.

Demand for trained surveyors to obtain that data offers attractive opportunities that go far beyond boundary surveys. Additional training and expertise with advanced surveying technology is needed.

To properly prepare workers, educational curriculum and training programs must be updated to include 3D laser scanning, hydrography, photogrammetry, topographic surveys, remote sensing, geodesy, 3D modeling and monitoring with point clouds, and other topics, in addition to traditional property surveying.

The situation today

Surveyors have utilized the basic principles of measurement for thousands of years; however, new technology has vastly altered the methods used to complete mapping projects. With GPS/GNSS, laser scanners, mobile platforms, drones, etc., the collection process is faster and more accurate than ever before.

Data verification in the field helps ensure quality and completeness, while real-time data transfer to the office avoids delays in processing. Major improvements in software have automated many previously manual tasks and also enable integration of data from a variety of sources. The many changes in technology have led to discussions about the basic skill set that is required for this kind of work, as well as what kinds of additional training are needed in certain specialty areas.

“Our profession needs to take a good hard look at ourselves and separate out the key tasks and identify the expertise needed to complete the job,” says Tim Burch, executive director of the National Society of Professional Surveyors. “We may have to look at surveying like the medical profession. There used to be only general practitioners, but now we have specialists who are experts in their specific fields. Surveying technology has become so complex and varied, defining specialty areas could be the most effective path going forward. One person can’t be expected to know it all.”

Next generation surveyors

Identifying necessary changes in educational and licensing requirements goes hand-in-hand with efforts to attract the next generation of surveyor. Concerns about a shortage of qualified surveyors now and in the future are motivating members of the community to increase outreach to younger people and encourage them to pursue careers in surveying. However, re-writing the job description of a surveyor may be what is really needed.

“To move forward and recruit the next generation of surveyors, we should try to incorporate the things they are interested in and leverage the computer skills they already possess,” says Burch. “There is a lot of value in the expertise required to operate specialized technology, but historically we’ve only emphasized getting the license.”

Labor needs are shifting as advanced digital technology increases the variety of geospatial applications. More diverse kinds of data are being collected and different deliverables are being produced. The role of the technician is becoming more important because the technology allows them to do more with less oversight.

Continued on Pg. 6

New Digital World Needs Data (cont'd from pg. 5)

Flexibility in the training requirements with options to develop specialized expertise could help attract the next generation to an interesting career while fulfilling the need for workers who understand geospatial data.

"We just attended our sixth American School Counselor Association annual conference with 250 other booths talking about occupations, and everyone was telling the same story – that we're running out of people to work," Burch says. "To better promote surveying, we need to communicate to the younger generation that the equipment and technology that surveyors use every day is actually building digital worlds, and they can contribute to that meaningful effort right now."

Teaching the surveyor of the future

Survey programs at four-year academic institutions are at a crossroads. Interest among young people is waning and traditional courses do not reflect rapidly changing technology, while at the same time the industry is short-staffed and demanding more graduates. At Penn State Wilkes-Barre (Pennsylvania), one of only six accredited surveying/geomatics/geospatial engineering degree programs in the United States, program coordinator Dr. Dimitrios Bolkas recognizes the need for modernizing the curriculum.

"Over the past 20 to 30 years, the industry has been changing faster than academia could adapt. Updating courses can take a few years and bringing in new technology and instruments requires additional funding," says Bolkas. "Currently, many programs focus on traditional land surveying, and it is challenging to integrate the new technology into the existing curriculum."

Instead of trying to add a course here and there, the administration at Penn State Wilkes-Barre supported a full update of the four-year program. The process is time consuming, including preparing course descriptions, discussing each course with a professional advisory council, and consulting with other departments before the new courses are voted on by the university faculty senate. Staff with the necessary expertise in photogrammetry, point clouds, feature extraction, and other topics will also be added. Bolkas hopes the new curriculum will be ready by fall 2024.

Curriculum highlights

To prepare future surveyors, the revamped curriculum will include courses on laser scanning (terrestrial, airborne, and mobile), structure for motion, point cloud generation and processing, 3D modeling from the point cloud, monitoring applications with point clouds, feature detection and extraction from different platforms (terrestrial, airborne, and satellite), inertial navigation, and simultaneous localization and mapping (SLAM).

Although it is necessary to retain the most important parts of traditional surveying (i.e., boundary surveying, land development, geodesy), some of this content is being pared down to make room for the new material. In addition, virtual reality training is being added to develop skills needed to perform surveys in the outside world.

"From an educational perspective, we always want to know how something works, how the algorithms affect the quality of what we're doing, so it's important to understand the basics," says Bolkas. "It is very challenging for the surveyor to

Continued on Pg. 7

New Digital World Needs Data (cont'd from pg. 6)

learn all of these different tools and integrate them into their workflows. We emphasize the sound background of skills such as geodesy, property law, and least squares, but also bring in the new."

With a limited budget, gaining access to cutting-edge hardware and software is one of the hurdles faced by the academic team. The department owns a drone but would like to upgrade in the next few years. Leica Geosystems made a large donation a few years ago, which helped with access to robotic total stations and GNSS, as well as cutting-edge laser scanner technology and software, and partnerships with local companies provide other resources.

Borton-Lawson, a full-service architecture and engineering firm headquartered in Wilkes-Barre, has loaned equipment for research projects and teaching. To gain additional experience, students do internships during the summer and part-time internships during the academic year. The student chapter attends conferences of the Pennsylvania Society of Land Surveyors for networking and educational opportunities.

"There are early industry adopters who have already expanded their service portfolios by adding laser scanning, drones, and other new technology, while others are holding on to the familiar methodologies," says Bolkas. "Although there is a slight lag in widespread adoption, the industry usually does a good job of modernizing its workflows to gain a competitive advantage. With demand for expertise in these areas increasing, our graduates hopefully will have multiple job offers when they graduate."

Demand for geospatialists

High-accuracy mapping today provides the basis for future advanced geospatial applications, such as autonomous cars and deliveries. The surveying profession is evolving as the world becomes increasingly interconnected, and new requirements demand up-to-date skills and expertise.

The next generation of surveyors will leverage the high-speed, high-volume tools being developed, and use the data in unique ways. To keep up, academic institutions are in the process of updating their survey curriculum to incorporate advanced technology and workflows.

"I believe future surveyors will be expected to be expert geospatialists. They will be collecting and analyzing geospatial data, and making decisions based on geospatial information," says Burch. "NSPS supports developing certification programs in many areas, such as hydrography and photogrammetry, while continuing to require professional licensing for projects involving legal boundaries and land transfers."

Source: https://www.xyht.com/surveying/new-digital-world-needs-data/ (Accessed 07-01-2023)

Marketing surveying for professionals and pupils

One woman has used her knowledge of surveying to create a geospatial marketing company, as well as an initiative to promote understanding of the profession as a career option in schools

Land Journal: What was your route into geospatial marketing?

Elaine Ball: I always wanted to work with horses. So my dad sent me to America to train racehorses but I decided to keep it as a hobby. After this, I ended up in the family business. In the 1970s and early 1980s my dad, Steve Ball, a hydrographer and mine surveyor, ran a hydrography and seismic control firm called Oil Field Hydrographic.

He started his next business, Measurement Devices Ltd, in 1984 and I began working in the business around 1997. We didn't work with land or building surveyors, but we manufactured laser survey equipment for dirty environments such as mining, oil and gas.

When I got to 27, dad said to me: 'You're in your comfort zone, Elaine. You'll be joint MD with me for a year before I move up to chair the board, and then you'll be MD.'

In preparation, I did my Institute of Directors (IOD) exams. From then on I was always going on courses. I also worked in every department in the company. It was a struggle to find marketing and salespeople on the geospatial side. So I ended up having to teach everyone we hired about the industry.

Then in 2007, my first year in the role, the global economy crashed.

LJ: What happened next?

EB: We survived, but we wanted to grow the business, and the company secretary at the time suggested we contact our shareholders because they might wEventually, we sold the business off to Renishaw, which was a great exit strategy allowing my dad to retire. I thought, 'I know the industry like the back of my hand, I've heaps of experience in sales and marketing, plus there's such a gap in the market for a geospatial marketing consultancy to help surveyors/manufacturers with marketing and sales.' ant to put some more money in. One of them was John Deere of Renishaw.

So in 2013, I set up Elaine Ball Ltd. We started off doing workshops, and last year we launched the Geospatial Marketing Academy because I knew there was a need. You pay a fee for lifetime membership of the academy and you have access to lessons on market segmentation, content marketing and sales funnels, for instance.

LJ: How did you get into marketing the profession for children?

EB: In 2017, the Survey Association asked whether I would like to put some materials into the packs given to delegates at its annual general meeting. We made a poster for attendees to take home and show their children what mummy or daddy does.

There's some quirky stuff in the posters: we devised the character of Simon the alien, who appears throughout what became a set of different materials. This was the beginning of the Get Kids into Survey (GKiS) campaign.

Other surveying companies soon followed suit: Nick Blakeway of Jacobs took some boxes of posters to careers fairs, for instance. They were never meant to make a profit, they were simply to test our marketing skills. Then I asked the MD of Topcon Positioning Systems, Dave Bennett, whether we could liaise on an Antarctic-themed poster, because his company had been there.

Continued on Pg. 9

Marketing surveying for professionals and pupils (cont'd from pg. 8)

I put that on the website so people could order a poster. But then my postage bill was £1,500 because I was giving the posters themselves away free of charge.

And I thought 'I can't keep doing this, I'll have no money left.' So I had a moral dilemma: 'Do I make this a business?' Because the whole point was not to do that but to give back to the industry.

I decided that Elaine Ball Ltd is the profit-making side of the operation because that's the consultancy, but money for GKiS would be put back into creating new lesson plans, posters and developing the website. The money came from donations, for instance from FIG.

We've designed 20 different posters now, and the website resources page includes lesson plans and other materials that complement these. I think we have now shipped 80,000 posters, and I would say a good 60% have gone to the US.

My sister Elly's a partner in the business, and the latest project we devised is the comic book. It launched a couple of years back. It's set in Middletown and imagines a future without surveyors and my dad features in it as the Last Surveyor. In the future, he's got a robot leg and a cybernetic eye and lives in a sanctuary like the Batcave. We've had some brilliant feedback from children, teachers and people in the industry.

GKiS builds awareness of the work of surveyors and surveying, and the wider geospatial industry, by making the terminology more accessible and commonplace in the minds of children, teachers and parents. We focus on children around eight to 12 years.

At that stage, we don't have to talk specifically about surveying, but it's easy to talk about what's happening in the pictures, which accounts for our international success.

We also work with Alison Watson, whose website Class of Your Own targets 15–17-year-olds and teaches them how to perform basic surveys.

We've plugged a gap in surveying education by catching them young, so that when pupils have to make their GCSE, A level and degree choices, they already understand what a fascinating career surveying is and the qualifications that will get them there.

So that's my story.

LJ: How can surveyors help spread the word about what a great career this is for young people?

EB: We have around 120 brand ambassadors worldwide. So if RICS members want to get involved to inspire children, we'd love to welcome you into the GKiS family. All we request is that you are willing to go into schools and be a role model for the geospatial industry. We supply a presentation and other resources, also included is our branding so you can add it to your personal profiles.

We also welcome those who would like to help us create more educational resources. From re-printing of our geospatial exploration posters to keep stock levels topped up to our current campaign of sponsoring a homework project. Do look at our website to see how your company could get involved.

Source: https://ww3.rics.org/uk/en/journals/land-journal/Surveying_as_a_career_early_years.html

(Accessed 08-01-2023)

Celebrating UTech, Jamaica Alumni: Delano Thompson, from UTech, Ja to a Registered Professional Land Surveyor in Texas, USA (cont'd from pg. 1)

General Comparison of Surveying in USA & Jamaica

Each of the America's States really could be individual countries when you consider their size and population. So each State has specific laws governing their land, and slight variations in the processes and requirements to become licensed. Being a Professional Licensed Surveyor (PLS) in Florida for example, does NOT qualify you to sign and seal a survey done California. Whereas a Commissioned Land Surveyor (CLS) in Jamaica can survey in any parish of the country. In Jamaica we use the metes and bounds system influenced by the British, and the metric system for measurements. The majority of the US actually doesn't use metes and bounds, they use an American system called the Public Land System (PLS). In short, they devised a system to subdivide land using "squares", think of the grid layout used for downtown Kingston but on a much bigger scale, where each square is one mile by one mile, and each corner is marked with a durable survey marker such as concrete monument with brass disks containing its information.

Texas is a unique state in that it uses metes and bounds, but there is a heavy influence from the Spanish and Mexican laws and a substantial amount of river boundary law involved in determining the boundaries of the state. Texas uses old Spanish units in combination with the imperial system for their measurements. It took me a few months recalibrate my paces in the field and how to interpret the distances and areas called for in documents. So the two main takeaways here are when doing surveying in the US, measurements will not be metric. And the property recording system will be either PLS or metes and bounds.

Based on my experience Land Surveying within and around say a 2 hour radius of the bigger cities is very streamlined, and done at scale. Streamlined meaning the office employees only do office work: record research, drafting in AutoCAD, data analysis etc. and field crews only do field work: Topo, Boundary Engineering Surveys etc. What do I mean by scale? Well I previously worked for a Surveying company with 30 branches across the US, 7 of them being in Texas. They have a company board with a CEO, Chairman etc. and representatives from their venture capital investors. They had 1,200 employees, the branch in Dallas where I worked had around 90 employees and 15-20 field crews. A field crew is a 2 man team, a crew chief and an instrument operator. Each of the field crews had their own Chevy Silverado 2500HD truck and at bare minimum 2 GPS units and a robotic total station. Since Surveying and Engineering go hand in hand it is fairly common to see big engineering firms with multiple thousands of employees just establish their own survey department instead of contracting out their work to a survey only company.

Survey only companies do exist, but usually in much smaller markets and towns away from the big cities. These are small business owners, where the company size is anywhere from 2 to 20 people. In these companies each employee wears multiple hats. So it's very similar to Jamaica where you become a well-rounded Surveyor because you leave the office early in the morning to hit the job site, and head back to the office with enough time so you can import the points from the day and get started on your data analysis or continue the drawing in AutoCAD.

Certification Process

Initially I wanted to be closer to my family in New York or Georgia and when applying for jobs in those states a question that often came up was, is your degree accredited by the ABET (Accreditation Board for Engineering and Technology) the answer at the time was no. So I decided to throw a wider net and look at other states, Texas ended up being the most receptive. In 2015 I started as an instrument man in the field, to learn the ropes and then got promoted to crew chief. During those 2 years of constantly traveling across the US, living in a hotel and out of my suitcase I did two things that would significantly boost my resume and career:

Continued on Pg. 11

Celebrating UTech, Jamaica Alumni: Delano Thompson, from UTech, Ja to a Registered Professional Land Surveyor in Texas, USA (cont'd from pg. 10)

Certified Survey Technician – This program was developed to encourage and promote those without formal training (or that didn't complete it) in the profession to have their competency in Surveying evaluated and certified by the National Society of Professional Surveyors (NSPS). You submit an application detailing your experience and based on that experience you are eligible to take one of the four levels of the exam. The exams are split by Field Technician and Office Technician.

Foreign Credentials Service of America – Determined to avoid enrolling in surveying classes in the US, this is the agency I used to evaluate the UTECH SGIS Degree. Upon providing them a copy of the transcript (sent directly from UTech) they evaluated it and awarded it the equivalency of a 4 year Surveying degree from an ABET accredited program in the US.

With those two out the way, hiring managers were much more receptive when I did interviews. In 2017 I changed paths and went inside to learn more of the office aspect. It is certainly possible to become licensed while working in the field but its far more common to transition to an office only role in the US.

Fundamentals of Surveying Exam to be a Surveyor in Training (SIT)

This is a 6 hour exam with a 30 minute lunch break that is multiple choice and is done all on computer. Persons can go to the exam center closest to them. This exam is heavy on field calculations, levels, traverse, areas, curves etc. are the norm. There are also some office specific questions on data analysis, photogrammetry, project management etc. To take this exam in Texas one must have a Bachelor's degree and apply to the State Land Surveying Board. Becoming an SIT indicates that you are on the path to getting your State License.

State License Exam to be a Registered Professional Land Surveyor (RPLS)

To be eligible for the RPLS exam there is a 2 year minimum as a SIT. One must keep a detailed breakdown of the hours spent working on various aspects of Surveying, the RPLS who supervised the work being done has to sign off on the hours log, and you need a character reference from 3 RPLS's. Fortunately I didn't have any issue finding RPLS's to do my reference because of the size of the company I worked for. For those at smaller companies that's where going to the City and State Surveying meetings come in handy to network with RPLS's outside of their company. I did 3 years as a SIT before attempting the RPLS exam, and I was not successful on that first attempt, the sample past papers can only prepare you so much, so I took really detailed notes of where I fell short and how to better prepare for my next time.

The RPLS exam is paper based and only done twice annually. It is 8 hours long and there is a 30 minute lunch break at midday. It is all multiple choice, and everyone in the state of TX taking the exam has to go to the same exam room in Austin, TX. There are two main aspects: the Legal (mostly theoretical and tests knowledge and application of state specific laws), and the Analytical (this tests hands on knowledge and your understanding of the TX recognized best practices of Surveying, you are given a stack of documents to read, analyze, sketch the deeds by hand and then resolve the issues with the boundary). A programmable HP35 calculator is crucial in this exam. One must pass both parts of the exam at the same sitting to pass overall. I was successful on my 2nd attempt.

And that pretty much covers my 7.5 year journey to becoming an RPLS in the State of Texas. Keep in mind the specifics will vary from state to state but the basic steps will be the same, one must take and pass the FS (Fundamental of Surveying) exam, and then take a State Specific Exam to transition to an office only role in the US.

Source: https://www.https://utechalumni.wordpress.com/2023/01/04/celebrating-utech-jamaica-alumni-delano-thompson-from-utech-ja-to-a-registered-professional-land-surveyor-in-texas-usa/ (accessed 07-01-2023)

Photo Collage of LSAJ 3rd Quarter 2022

Philip Lawrence, son of Keith Lawrence (NLA), receiving his father's post-humous award

It was a Surveyor's Christmas at the President's cocktails

Past President Horace Manderson CLS receiving his award from the LSAJ at the President's cocktails

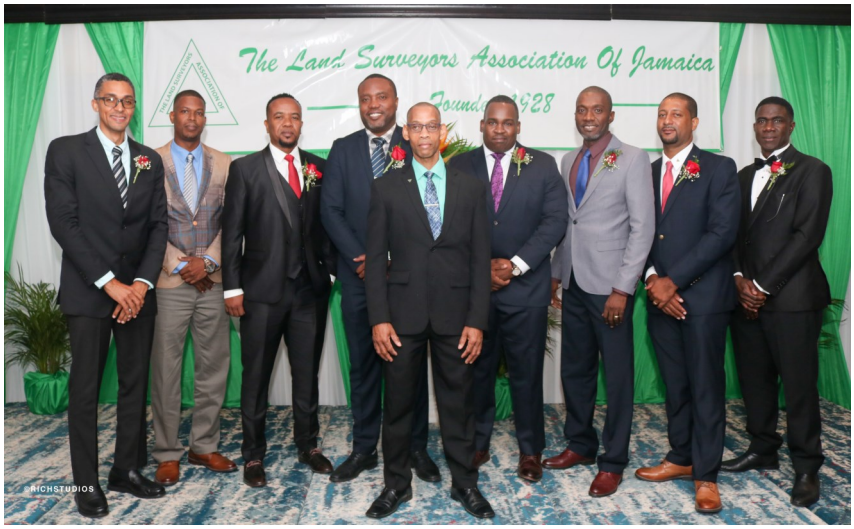
The Presidents Photo—LSAJ President Charles Johnson, flanked left by Marvin Campbell (JIE) & right Jermaine Williamson (ALEVS)

Faculty and students of the Utech Ja. LSGIS sharing at the LSAJ Annual Dinner & Awards Function

Photo Collage of LSAJ 3rd Quarter 2022

The President's address at the Annual Dinner & Awards Function

Guest speaker Prof. Emeritus Trevor Munroe C.D., D.Phil (Oxon) delivering his address to the Annual Dinner & Awards Function



The Council of the LSAJ gathered at the Annual Dinner & Awards Function (Gary Wright CLS absent)

Awardee Past President Horace Manderson CLS addressing the gathering at the Annual Dinner & Awards Function

Some of the ladies who graced the LSAJ Annual Dinner & Awards Function