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Subject: Geodetic Survey Squadron/Group, Newsletter #63, 14 June 2017, Distribution 8
Date: June 14, 2017 at 10:59 PM
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Greetings, Fellow Veterans of the Geodetic Survey Squadron and Geodetic Survey Group!

And Happy Flag Day! It's also the 242nd birthday of the US Army---"HOO-aaahhh!"

Here's a link to let you know more about both events:

[https://en.wikipedia.org/wiki/Flag_Day_\(United_States\)](https://en.wikipedia.org/wiki/Flag_Day_(United_States))

This will be a short one for a change, as I am just back from a week in California and anxious to get this newsletter out on Flag Day...

GSS/GSG Computing History

If you have been paying attention, you are well aware that we have been pushing a new project to document the history and evolution of geodetic computing technology and capabilities in our old Squadron/Group for the past several newsletters. It runs in parallel with a similar action going on with a few veterans of DMA's Aerospace Center, as well as another one suggested by 'Boe' Borchardt for geodetic surveyors to document their most interesting or challenging survey projects.

I am pleased to report that I received another response after the May newsletter with regard to the computing project, again, with considerably more detail nicely outlined by decade, and it also includes the technological upgrades to the surveying equipment as well. This one, submitted by someone who wishes to remain anonymous, is currently undergoing some edits and checks, but will eventually be included in the final summary, which will be posted on our GSS/GSG website in the near future. We also have a Squadron 96-2 manual on its way to me, which could have some images of old logarithmic forms and procedures for doing geodetic calculations using the hand-cranked Monroe calculators.

If you have been sitting on the fence about making your own contribution to this effort, let me urge you again to submit your own recollections of your personal experiences in GSS/GSG with regard to the evolving computing capabilities of our unit between 1959-1993, especially if you were a geodetic computer or geodetic surveyor. Officer and civilian inputs are highly welcome, especially if you managed or advised the Data Reduction or computer sections or any of the branches or divisions involved in field operations. What kinds of field calculations did you do when deployed on TDYs, whether in the field, in the truck or at the hotel?

We would like to hear from anyone and everyone who has been associated with Data Reduction/Computing and field operations, especially if you carried the Geodetic Computing and Geodetic Surveying AFSCs. We are also interested in any field or office computations carried out by Gravity, Stellar Camera, Doppler Satellite, Inertial or any other type of geodetic survey.

Here's a suggestion---if you don't like to write, but you still have retained copies of the Squadron's internal field manuals, for example, the 96-1 (Astro) or any other manuals for gravity or satellite surveys. Just scan or convert to '.pdf' any pages related to computing, including the forms used for computations and send them to me as e-mail attachments.

See images of some of the computer technology used by the Squadron at:

http://geodeticsurvey.mysite.com/external_links.html and also here:

<http://www.oldcalculatormuseum.com/fridenstw.html>

Messages from the Field

The NGA Alumni Association East held its spring meeting at NGA-Campus East (NCE) on May 22nd. As reported by Joe Steel:

"Forty-six (46) members of the NGAA-E Chapter gathered at the NCE on May 22, 2017 for a series of briefings provided by NGA, a Chapter meeting with lunch, and remarks by the D/NGA Robert Cardillo. Bill Caniano opened the briefings with overall NGA status. Director Cardillo

has briefed congress and President Trump over the past several months. The new NGA campus in St Louis has continued to progress. Currently, they are performing environmental clean up and await approvals prior to building. The GEOINT Conference will be here soon, and NGA members will have a prominent place in briefings. The Hall of Fame selection process is progressing, with 19 individual names and one group as nominees. NGAA expects to participate as an advisor in the evaluations.

NGA briefings included a budget brief on FY17 and FY18, a briefing on producing digital elevation data above 60 degrees north and the Arctic area, a status on Analytic Modernization, and a status of commercial imagery.

At the luncheon, Director Cardillo discussed a new Culture of Respect initiative, his experience in briefing Congress and the President, and progress on cyber activities at NGA. Several NGAA E members made some excellent suggestions for our next meeting, to include having NGA open the NGA store during the meeting, asking NGA to schedule CAC Card renewal during the meeting, and suggesting that the Constellation Federal Credit Union advertise the NGAA..."

In the last newsletter we mentioned an article highlighting the 1956 adventures of A2C **Bob Cunningham**, whose story was picked up by the Malmstrom AFB base newspaper, when Bob was visiting there not too long ago. The article entitled "Castaway Airman Helped Map the World," highlights the HIRAN surveying activities of Cunningham, who spent six months on North Danger Reef in the Spratly Islands Group between the Philippines and Viet Nam. Bob was a HIRAN Ground Station Guy with the 1374th Mapping and Charting Squadron, a sister squadron of ours under the 1370th Photo-Mapping Wing. You may read about his adventure at this link:

<http://1370th.org/1370PMW/1374/1374.htm>

- [Anyway, that story caught the fancy of GSS veteran Troy Carpenter](#) (Survey, FEW, August - December 1982; Survey, Det 1, December 1982 - July 1985), [who sent in his own story about occupying the Spratlies as an astronomic observer for the Army's 29th Engineer](#) Company (survey) at Oji Camp under the Army Map Service, Far East. Years later, Troy became a civilian Survey Technician for the Squadron. Says Troy:

"I believe that Spratly Island was the first astro-position I observed after our 6-month training period there at Oji camp."

[Here's the rest of Troy's story from 1961 \[edited for brevity\]:](#)

"I enjoyed the article [about Airman Cunningham] of the 1370th PMW. I was actually on North Danger in the Spratly Islands, as well as a sand spit called Spratly in 1961. I was on one of two astronomic observing teams out of the Army Map Service Far East in Tokyo, Japan. The second astronomic observing team occupied two other islands in the Spratly Island group.

The description of Danger Island is just as it was when I was there. We where supported by a US Army FS ship and landed all our equipment and supplies onto the island beaches via assault type boats. I do remember the old well, but believe by then it was dry.

Then, throughout 1962, I was again on an astronomic observing team supporting the Southwest Pacific HIRAN project. I was on three of the islands simultaneously with Air Force HIRAN teams, Nukuro, Mussau and New Britain. We where supported by US Navy LST's, US Navy helicopters, and at times an US Army FS ship. Our team assisted from time to time in loading the HIRAN equipment onto the helicopter from the ship's flight deck. In addition, our astronomic team occupied other points on the project's triangulation scheme. I do remember that the Air Force teams were on site for six months, then rotated out. The HIRAN Air Force teams also had manned weather stations at selected points across the project, and I remember staying at their camp on the beach for a couple of nights.

At the station on New Britain, the HIRAN Air Force crew had been taken up to the point via helicopter, which had been prepared by the Air Force reconnaissance team. Our astronomic team was tasked with loading and unloading both the HIRAN and our astronomic equipment

team was tasked with loading and sending up both the HIRAN and our astronomical equipment on the Navy helicopter. Sometime about midway, our NCO decided that I and another man should go up to assist on the unloading. However, the helicopter pilot said there were enough personnel on site at that time, so they departed with another load. Then, a short time later, a message was received on a radio that the helicopter had crashed. The Navy sent a rescue team up and later returned with the three-man crew who were injured. Unfortunately, the pilot later succumbed to his injuries at a hospital. Once we occupied the point, we could see almost nothing left of the helicopter, as it burned completely into ashes. I believe that the HIRAN Air Force team assisted in pulling the Navy personnel from the burning wreckage.”

[Thanks for sharing, Troy! Your guardian angel must have been working overtime for you!](#)

[Dick Winslow, our Webmaster, and I recently received this unusual request from Myke Dodge Weiskopf, a radio Producer/Reporter from KCRW in Santa Monica, CA.](#)

“Hi Garrett and Dick:

I'm a producer/reporter based out of KCRW in Santa Monica, CA, writing with a curious (and highly obscure) question.

I'm working on radio story on the U.S. Air Force photo resolution targets located in the Mojave Desert:

<http://www.clui.org/newsletter/winter-2013/photo-calibration-targets>

About a month ago, I drove out to the three remaining targets at Cuddeback Lake to check them out for myself. In the corner of each target, I noticed a circular **1381 GSS** marker embedded in the concrete, dated 1965.

Naturally, that led me to your site!

I'm unfamiliar with the particulars of discussing military history, particularly for a project which has long since survived its intended purpose (and is, in fact, decaying out in the elements). But I would love to find any members of the 1381st who were (presumably) based in California and may have been involved in painting and setting these targets back in 1965.

Do you have any suggestions on finding emeritus members in your ranks who may have been involved in this project? I realize we're talking about 52 years ago, so the odds are slim, but I felt compelled to write and make an inquiry.

Thanks for humoring me ... and let me know if you have any thoughts!

Best, Myke”

I replied quickly, and with the help of **Bob Tyszka** of NGA's Geodetic Support Team at Edwards AFB and **Brad Beal** of NGA's team at Vandenberg AFB, we are trying to narrow down the details. **Gordon Barnes** also provided some perspective on the targets, but there will be more details in a future newsletter.

If you were involved in geodetic surveys to install Photo Calibration Targets and Terrestrial Test Patterns for Aerial Imaging in the southwest desert during the mid-1960s, please reply to me as soon as possible! <garrettmoore@verizon.net>

Final Notes:

Bonnie and I are just back from a week in California greeting our newest grandchild and our very first granddaughter, Lucelia Addison Moore! Little Lucy is doing just fine and passed her two-week check-up with flying colors. She even gained a pound on our watch!

Happy 60th birthday to Chuck Fisher this month!

Happy 90th birthday to Chuck Finley this month!

If you attended the 2015 reunion, you may recall that we honored Chuck and his family as our special guests at the festivities. Chuck was “present at the creation” of the original 1381st GSS in Orlando, one of the original officers, who helped establish the astronomy and gravity operations there.

If you are on Facebook, I invite you to be my Facebook friend.

Find me at <https://www.facebook.com/profile.php?id=100009342009837>

We also have a Facebook page for the Squadron/Group at

<https://www.facebook.com/1381GeodeticSurveySquadron?fref=ts>.

Garrett

Field Survey Branch & Astronomic Positioning Branch

GSS/Cheyenne

April 1967 - May 1970 and January - December 1972

Nothing makes the Earth seem so spacious as to have friends at a distance—they make the latitudes and longitudes. – Henry David Thoreau, Surveyor and Philosopher