



From the console of the Chief Engineer

Capt. Darrell W. Millner

Greetings once again crew and fellow STARFLEET Engineering enthusiast – wow do we have a great deal to cover in this issue so let us jump right in. Our Engineering Departmental Zoom in January was a great success, it became an open house with CO Smith (Command), Johnathan H. (Security), and K. Whately (Communications), Robert W. (TBD), joining Zak, Jody and I for a very vigorous session. It was the first time sharing the Shuttle Bay project with other departments (resulting in some excellent feedback), discussions regarding the Engineering Link's evolution, recent promotions, and much more. ENG also hosted two zoom sessions for the Interdepartmental Role Play and also hosted the Heimdal's monthly Zoom session with an excellent guest, from one of the leaders from Mysticon-VA – oh the stories we told.

As I was wrapping up my illness during the month, I'm amazed I can remember it all. Thus this publication is a wee bit behind its normal schedule. On that note, it's an exciting time when you wake up, air in the lungs, coffee in the mug, and people that you care about. Though recently I find myself thinking about Highlander 2 – The Quickening – with the newsman stating, "welcome to another day under the shield". With so much going on its easy to forget the sun is actually shining above it all. I'm aware there are a number of members on our crew, in the region, and across fleet with a "variety" of health challenges and I want to take a moment to let them know they are in our thoughts, and we wish them a speedy recovery.

Where to next Engineers? I'm not 100% but it will sure be one heck of a ride, so hang tight.



On a personal note, My wife Barbara and I celebrate our 37th Anniversary this month, I know without her encouragement I would still be an Ensign, she's my imzadi.

Here we go folks, "Warp Four" into our next issue....

- Good Health & Adventures,
Capt. Darrell Millner, CEO
USS Heimdal, R1,
Gamma-Sector
"It's no Tribble at all"



Congratulations to CO Linda and XO Willy Smith - 25th Anniversary

STARFLEET BY THE NUMBERS

As of SD 202202.06

STARFLEET

- Data not available

REGION 01

- Data not available

USS HEIMDAL

- 64

HEIMDAL ENGINEERING

- 08



Online Resources

Heimdal's Home Page

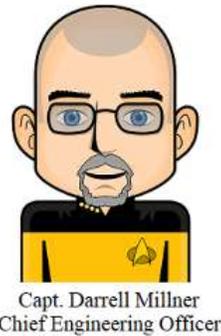
<https://www.ussheimdal.com/>

Engineering Portal

<https://trek.millnernet.com/>

<https://R1.SFI.org>

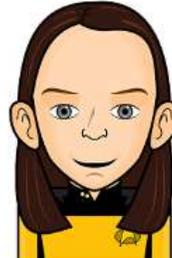
"I'm enormously proud of the fact that STAR TREK has really not just sparked an interest, but encouraged, a few generations of people to go into the sciences."- LeVar Burton



Cmdr. Dennis Henderson
Sr. Engineering Officer
Shuttle Bay Officer
Matter/Anti-matter Specialist



Capt. Lem Campbell
Sr. Engineering Officer
Flight Deck Officer
Transporter Chief



Lt. Cmdr. Larry Rowland
Sr. Engineering Officer
Shuttlecraft Pilot
Transporter Specialist



Ens. Larry Whately
Duty Engineering
Quartermaster

YOU ?
➔



Heimdall Engineering
SD: 202202.01



PO3 Gary Burley
Maintenance Engineer
Ship Fitter



Lt. Cmdr. Zak Lyon
Helm Officer
Technology Specialist



ENS. Jody Lyon
Dilithium Maintenance
Recreation Officer

WE HAVE ROOM FOR YOU - A SAMPLE OF FICTIONAL DUTY POSITIONS HERE IN ENGINEERING -

- Chief Engineer** - Heads department. Oversees running of all engineering systems and divisions. Accountable for the overall performance of the vessel. (A Miracle Worker).
- Assistant Chief Engineer** - Primary assistant or backup to the chief engineer. In situations when the chief engineer is away from the engine room, the assistant chief engineer is responsible/in charge.
- Shuttle Bay Officer - (SBO)** Coordinates with Operations manager on Main Bridge for shuttle launch and landing clearance. Directly oversees FDO's.
- Helm Officer** - Responsible for ship's maneuverability & sometimes weapons control.
- Navigator** - Plot the ship's course; responsible for safely getting the ship from point A to point B.
- Transporter Chief** - Oversees the operation of ship's transporters.
- Transporter Specialist** - Maintain & operate the transporters. Work with the Transporter Chief.
- Duty Engineer** - Engineering officer acting as the duty officer when the chief or assistant chief engineer is off-duty.
- Engineering Specialist** - All-purpose engineers. Environmental controls, replicators, holodecks, and more.
- Flight Deck Officer** - (FDO) Responsible for all operations within their particular shuttle bay (3), reports directly to SBO for launch and landing clearance. Primary station - Operations Control Booth.
- Shuttlecraft Pilots** - Pilot shuttlecraft on missions that require use of shuttlecraft.
- Technology Specialist** - Experts with all machines & technological contrivances.
- Matter / Anti-matter Specialist** - Monitor the intermix process.
- Dilithium Crystal Specialist** - Responsible for monitoring the dilithium crystal converter assembly.
- Damage Control Specialist** - Evaluate & control the amount of damage a starship sustains to the best of their abilities. Also effect ship's repairs.
- Deflector Systems Specialist** - Monitor & provide data on the ship's deflectors / shields.
- Quartermaster** - Assign quarters, handle equipment & supplies & the distribution of same.
- Maintenance Engineer** - Specializes in repairing damaged systems.
- Ship Fitter** - Fabricate, assemble, and build structural parts of/for the ship.
- Recreation Officer** - Activities director. Maintains morale. Maintains the Recreation Deck. Coordinates off duty crew activities.

Engineering Reports

SD: 202201.27 – Monthly Engineering Report – Ensign Jody Lyon

Sir, I am excited to assume my new post on Deck 36 and the Dilithium chamber. I am sure I will benefit from the experience and mentoring of my superior officers as I become more skilled in an arena that I have dreamed of. I am fascinated by these crystals. Something so beautiful and fragile which commands such extraordinary power. Perhaps there is a lesson there.

I am still working on the Academy course I reported last month. It's a doozy of a course. I am being challenged, for sure.

This week I finished compiling my personal tool kit with all the handheld tools that I have been using the last few months. I appreciated my initial assignment to the recreational and food services areas. You have such great insight. As a result I have become acquainted with crew from all over the ship and from multiple departments. I am much more at ease and ready to get down to work in an area that does not afford that opportunity. Now that I think about it, with this new assignment, I may have to revisit my tool kit...



Ensign Jody Lyon
USS Heimdal NCC-1793
Engineering Dept

SD: 202202.00 – Monthly Engineering Report

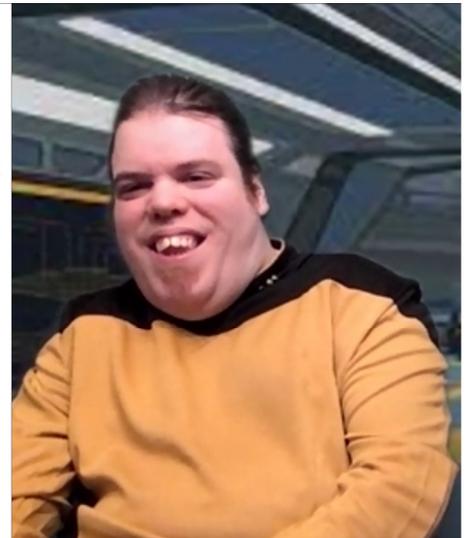
We have an excellent series of reports coming from Lt.Cmdr. Rowland Unfortunately Captain Millner has misplaced the initial story line. Stay tuned for next month.



Lt. Cmdr. Larry Rowland
USS Heimdal NCC-1793
Engineering Dept

SD: 202202.07 – Monthly Engineering Report – Captain D.Millner

XO Smith. Will I appreciate you taking time to chat with me yesterday, I know your time is limited. Your insight on the cadet advancement project was invaluable, I was unaware of the complexities and far reaching impact the program had on the individuals and on ships operations. It's good to understand the broader picture as I know I can get rather department focused at times. Regarding the Shuttle Bay project I do hope the materials I provided you were sufficient in detailing not only the overview but the long term implications. As you said there are indeed lots of areas for review and adjustment, for example Cmdr Hatters suggestion that the security shuttles all have "flame details" down the side of the fuselage, perhaps we should consider limiting that to one shuttle. Also Lt. Cmdr. Hopkins notes regarding reverting shuttle bay 3 to storage has a level of merit but the long term implications of that restructure would need careful review. Also, please see the attached reports from Lt. Cmdr. Z. Lyon and PO3 G. Burley – I think you will find them informative. Millner Out.



LT. CMDR. ZAK LYONS
SD: 202201.11



Capt. D. Millner
USS Heimdal NCC-1793
Chief Engineer

Well earned sir,
Putting the Heimdal's
Promotion Point System to the
test yet once again.

Engineering Reports

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SD: 202201.25 – Monthly Engineering Report – Lt. Cmdr. Zak Lyon

Sir, This month I encountered some problems, made some progress and helped where I could. Less routine than usual.

First, I offered Lt. Cmdr. Rowland a hand in the shuttlebay with his shuttle reconfiguration into a Security specific shuttle. He indicated Cmdr. Hatter with a nod, then shook his head without speaking. The Cmdr. was working on installing something in a lower panel at the back on the vessel. Rowland thanked me and said “we got it covered.” It must really be top secret. Guess it is “need to know.” I wonder if Hatter will ever let me fly it. Gossip is that he has a pretty cool designation for it.

Ensign Miyazaki finally completed her schematic of the MASU unit. I am passing it on to you for your input and suggestions before we move into the next phase where we will be consulting with sciences and medical. Can't wait to have Vinaya on the bridge.

I have not completed any new courses this month, but the one I completed last month is sure paying off. I would encourage any crew mentoring a younger officer to revisit Academy courses. You might be surprised what a second look can reveal.

Now...the Holodeck. We had a few on and off glitches over the past few months as you know, but nothing major – easily dealt with. But now it is affecting third graders. Ms. Hasmer came to me regarding her student puzzle of the week. This was followed up by other crew whose exercise, training or entertainment programs were altered.,

We all remember those old reasoning puzzles used to teach critical thinking. Our third grade students have a regular Critical Thinking holodeck class each Wednesday at 0900 hours. According to their teacher, the students stepped into the program and were in a field surrounding a pond. As Ms. Hasmer said “No boat. No chicken. No fox. No 15 lb bag of grain.” Of course, the kids just stayed and played for the hour. She is dealing with that but now I hear that the missing elements are showing up in other people's programs. Lt. Cmdr. Bekor expected to spend time with his kids who are back on earth only to find them being chased by a wild fox. “I know they are just holograms” he said when he reported it, “but you don't like to hear your kids screaming and running scared.” You know that great restaurant program – the one with that new place that orbits Saturn that you have to reserve years in advance? Chief Blanks planned a celebration for her department at our holographic recreation of the place. When the meal was delivered and the silver dome raised, she found a live chicken eating her polenta. The Admiral was not amused. Security Chief Davis was not in a great mood either when his historical training exercises were hacked. The Dillinger Gang exercise caused his officers to lose their stoic demeanor when they made their arrests and recovered bags of stolen money only to find they had been replaced with 15 lb bags of grain. Hard to get into character.

As far as I can figure that original program is trying to resolve itself - trying to get all the elements back where they belong and complete the puzzle. But that can't happen until we find the boat. Could someone be pranking Ms. Hasmer with comical results? I am looking into it. I'll advise you if I think security needs to be called in. In the meantime. I posted this to all holodeck users scheduled for this week.

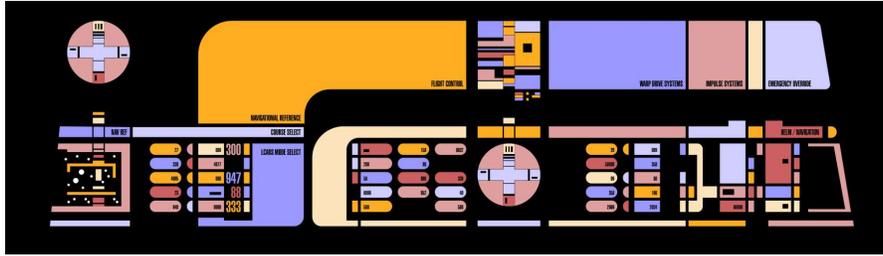
If you see a chicken, a fox or a bag of grain in your program make sure you keep the chicken away from the grain, the fox away from the chicken. If you see a random rowboat in your program notify holodeck maintenance. Thank you for your understanding.

Don't know when I will get used to signing off this way,



Lt. Cmdr. Zak Lyon
USS Heimdal NCC-1793
Engineering Dept

An Engineer's Thoughts on Mentoring, Console Design, and Expanding Perspectives



SD: 202202.00 – Engineering Link Article - Lt. Cmdr. Zak Lyon

One of the truest things in the Universe: You gain more by teaching a subject to someone else than you did when you initially learned the information.

I have known how to pilot a starship for years now. I think I just memorized a lot of it at first without thinking about it (of course a good deal of memorizing is important) and I may have been doing more of it by rote than I am now comfortable with. But being in a position to explain guidance and navigation operations to Ensign Kalyan really made me have to feel it in my bones in a totally new way. He had a lot of questions I never thought about before. He challenged me with new ideas. So glad I just took that Academy refresher course.

For example: There are several different ways bridge operations consoles can be configured. Not just the way I memorized and now use them. The ensign pointed out, and quite rightly, that some console designs look as if they were designed to be intuitive for people from the 1990's! Touch pads. Left to right orientation. Fonts that are hard for some to read. It always takes young eyes to let us know how we can update and improve. We get so used to doing things the way we always have done them and then use that as an argument to justify never changing. My initial reaction was to defend. Why fix something when it is not broken?, but Kaylan's enthusiasm peaked my interest.

So, I asked him how he would configure the guidance and navigation controls. He said "why can't we just make the pad appear in front of us – holographically? We wouldn't be tied to a physical console and we could call up the controls in all kinds of configurations – whatever functions best for the officer." We discussed holograms used this way in other applications - cargo ships, educational settings, museums... Seems to me I have even heard about holographic interfaces on the old Crossfields. That class was destroyed during the Klingon War and I really don't know much about those science vessels. Then I tried to remember if the Walker-Class used them. I never wondered why before. Something tugged at the back of my memory – could it be as simple as Captain Pike of the original Enterprise was hologram averse and everyone just followed his lead?

This young Ensign is so thoughtful and creative. He is not satisfied with simply knowing how to operate the equipment. I suspect he is a designer at heart. Needless to say, his way of approaching technology is going to affect my way of thinking going forward. To leave my comfort zone. To innovate. To ask why? and even why not?

I am so grateful for my opportunity to pilot these ships perhaps I have not been as forward thinking as Kaylan. Just because sentient species can travel to the stars and have the opportunity to stand in awe of space, doesn't mean the process couldn't be improved a little bit.

Like the best teachers that I have had, I find myself inspired and challenged by my student and, now, my friend. When this kid gets going, the sky will be no limit. Utopia Planetia and beyond! It is a good reminder to us that we all benefit from the insight of youth and to paraphrase a wise man – there are always new possibilities.

Shuttle Bay Project : Status Update

Notes from Chief Engineer Millner, USS Heimdal NCC-1793

A while back the wheels started turning, discussions with the CO, R1 RDC Engineering, other like minded SFI people, studying the books, videos, and online resources. I like to think of myself walking down the corridor, walking into Shuttle Bay 3 and going "What the heck" as I see a dusty chamber, work benches, panels and tools but no shuttles. I trot over to Bay 2 to find more of the same. In almost a panic I find myself in the main Shuttle Bay observation deck where I spend many a Sunday mornings having my Raktajino and scone looking out over the active shuttle bay and realize the windows are actually a hollow projection. No activity, a few work pods, unfinished projects, the burnt out remains of the shuttle Frontier and our own Asgard shuttle, covered with a tarp, dust, and cobb webs. Shuttle slips with the markings of successfully launch craft over the years such as the Nimitz, Glamorous Glennis, Molokai, Midgard, the list and the fond memories go on.

In addition to details from : *Star Trek – The Next Generation Technical Manual*: the standard complement of shuttlecraft includes ten standard personnel shuttles, ten cargo shuttles, and five special purpose craft. ... The "Heimdal" also carries twelve two-person shuttlepods for extravehicular and short-range use. ... Additional special-purpose shuttles can be provided to a starship as necessary ... And of course the Captains Yacht – "Phoebe's Folly".

So allow me to explore this area first, what you are about to read does in no way conflict with or challenge the standard STARFLEET – SFI.org – Region 01 – or other process of launching, numbering, assigning official vessels in the region. It is intended to enhance the storytelling, reporting, artwork and more that is the Heimdal. We have therefore created vessels (and still work in progress) to develop these areas. Note the registry numbers begin at /21 leaving plenty of room for actual, official shuttle in the future.

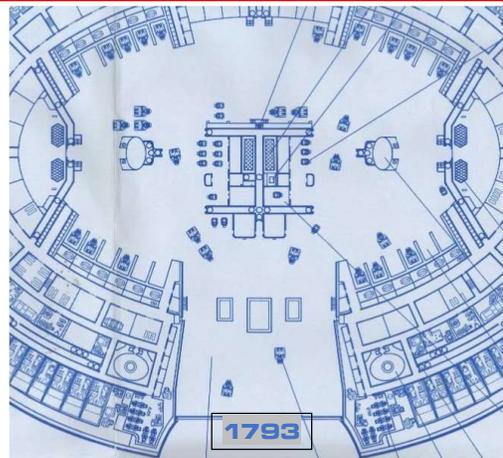
Shuttle Name	Reg. Number	Shuttle Class	Shuttle Name	Reg. Number	Shuttle Class
Half Moon	1793/21	Danube Class	Chesapeake	1793/23	Type-9A Cargo
Gjallarhorn	1793/24	Danube Class	Little Opossum	1793/25	Type-9A Cargo
Mattaponi	1793/28	Danube Class	Peddler Spring	1793/27	Type-9A Cargo
Nottoway	1793/26	Modified	Rappahannock	1793/29	Type-9A Cargo
Stravinsky	1793/22	Type -6/7 TBD	Roanoke	1793/31	Type-9A Cargo
Echeconnee	1793/30	Type -6/7 TBD	Shenandoah	1793/32	Type-9A Cargo
Occoquan	1793/34	Type -6/7 TBD	Wilson	1793/42-A	Type-M1 "Sphinx" Workpod
Resolute	1793/35	Type -6/7 TBD	Klingler	1793/42-B	Type-M1 "Sphinx" Workpod
Quantico	1793/37	Type -6/7 TBD	Lindsay	1793/42-C	Type-M1 "Sphinx" Workpod
Kalabala	1793/39	Type -6/7 TBD	Sprinkle	1793/42-D	Type-M1 "Sphinx" Workpod
Ratatoskr	1793/40	Type -6/7 TBD	Carrico	1793/42-E	Type-M1 "Sphinx" Workpod
Simonson	1793/41	Type -6/7 TBD	Austin	1793/42-F	Type-M1 "Sphinx" Workpod
Volsung	1793/43	Type -6/7 TBD	White	1793/42-G	Type-M1 "Sphinx" Workpod
Edda	1793/33	Type-16 Shuttlepod	Pritchett	1793/42-H	Type-M1 "Sphinx" Workpod
Gaiman	1793/36	Type-16 Shuttlepod	Bryant	1793/42-I	Type-M1 "Sphinx" Workpod
Rockbridge	1793/38	Type-16 Shuttlepod	Stimpson	1793/42-J	Type-M1 "Sphinx" Workpod
Asgard	1793/01		Schreck	1793/42-K	Type-M1 "Sphinx" Workpod

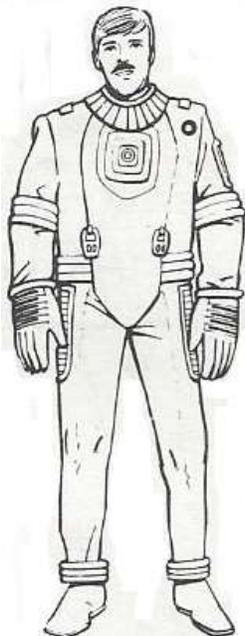
The engineering staff are busy restoring the bays to there previous glory - reorganizing, reworking, and taking ownership to ensure the USS Heimdal shines as she should. You have seen in previous issues of the Engineering Link work that has already begun modifying and upgrading certain shuttles, well be advised – *you haven't seen anything yet* -

It may take us a bit to get things organized but it will be worth it.

Updates to follow,

- Millner Out.





Heimdal Engineers at Starfleet Academy

2022 January Graduate

Lyon, Zak

CSO-104 - **Guidance & Navigation Operations**

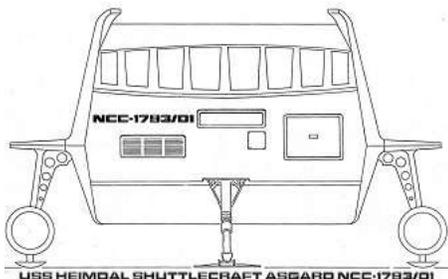
- IOSTS: COSO Honors - 06JAN2022



Region 01

Updates that Impact Engineering

R1 Summit is being rescheduled due to community health concerns. R1 Updates regarding regional positioning are still pending, the link is <https://r1.sfi.org/open-positions/> Additional updates as they become available..
- Millner Out.



Survey Question 202202

Tool Box: You are gifted with one tool / one item from STARFLEET you can place in your bag and take with you, what would you choose?
- Email your answer to Chief Millner -



If the transporter were available

Survey Question 202201

What if the transporter was working properly.... Where would you like to go for your 3 days of leave?

- Lt. Cmdr. Zak Lyon: I would transport myself to the top of Mt. Everest. Kirk climbed a mountain because it was there. As for me, a transporter is there too. It's the view. Why not skip right to it.
- Ens. Jody Lyon: I would transport to the Big Island of Hawaii and explore, collect seeds, & sit by the beach
- Darrell M. - Barbara & I at a quiet resort in the Australian Outback



Heimdal Monthly Engineering Zoom

February - 21 st 7:00 p.m. Monday
Eager to get back on track Engineers.
Let's talk

- game plans for 2022
- status of current projects
- what did you get for the holidays
- what new background image will Zak and Jody choose for February? Stay Tuned -

*** Zoom coordinates will be emailed ***

If you have scheduling or technical challenges, let me know



Eye Candy - USS Enterprise NCC-1701-A , Constitution-Class (refit)



2022 R1 Regional Summit

Postponed, see site for details

<http://www.r1summit.com/>



STAR TREK Trivia Anyone?

“ST TNG: Geordi collects a few bits of metallic ore, sets them into a groove in the mud, and fires his phaser to fuse them into a solid metal spike” - Name the episode

Last Months Question: Roddenberry’s original selected Starship name ? Answer: Cruiser S.S. Yorktown



Special thanks to our contributors this month:

Jody L., Larry R., Zak L., Darrell M.

Please note, corrections and additions are always welcome



STAR FLEET
POSTAL
SERVICE

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