Chapter 2 - ArtifactFinder

Professor ArtifactFinder was fixated on the perspiration running down his face as the first warning bell sounded. True, it was hot. At 33 fB it was damn hot. However, he was happy this was about 2 fB cooler than the projections his friend Professor BluestoneCutter had sent before their departure. He would have to give his friend some good academic ribbing when he got back for being 2 fB off, but since no known person had lived any closer than about 40,000 kL to the north of this place, he couldn't hold him too accountable.

Professor ArtifactFinder was also grateful that, in this part of Necedah, it was now the coolest part of the day in the coolest part of the year. In 1.5 dD it would be an incapacitating 50 fB. In 5 dY it would be almost an uninhabitable 60. Which all begged the question why this place even existed.

Thinking of all this gave him the sensation that it was getting hotter, at which he was immediately annoyed that he would allow his mind to play such tricks on him. While he knew the sun would soon be coming up, and with its pending arrival the temperature would be going up quickly outside, the building he was in had thick stone walls, and it would be at least 4 mD¹⁶ before they would notice any increased temperatures inside.

The profession then snapped his focus back to his surroundings, again annoyed, but this time at himself for dwelling on such trivial matters. This was the last dD of the last day of the most important archeological find in recorded history, and he had just spent precious moments thinking about the sweat on his face, and how fast the acknowledged uncomfortable heat was increasing.

His mind snapped back to his surroundings. He was currently standing at the doorway on the far end of the room they had come to call The Mess Hall. It was about 30 L wide by about 100 L long and comprised about 25% of the entire building. To the untrained eye, the sole contents of the room looked like 4 parallel rows of neatly arranged piles of dust and wood chunks, peppered with reddish vains of rust. It was as if an ore car with a trough had precisely and neatly poured 4 parallel rows of dust and wood chunks in a very smooth and regular pattern. However, Associate Professor HouseFramer who, as Professor of Historical Lifestyle Studies at SouthEast University, was doubling as their "expert" on furnishings and personal effects, said these used to be rows of wooden tables and benches, probably used for eating and other gatherings. The reddish vains of rust were what was left of low-grade iron

¹⁶ 4 mD = ~17 minutes (1 mD =~ 4.35 minutes)

joints and nails, similar to what was in wide spread use about 500 years ago. Yet, the decomposition of the wood in this extremely hot and arid environment, indicated the site was much older – although admittedly their models were theoretical for climates such as these, as no known person had lived within 40,000 kL of this site.

Professor ArtifactFinder was glad they were able to document all the sites here through the new technology of photography. While the photos were crude and in black and white, the still were a vast improvement over writing description and hand drawings of findings. Even more so in a place like this that others couldn't visit and verify. Making photographs of this room was especially challenging. Being indoors, they needed flash to get photographs. Yet the flash power they had to use let off sparks in all directions. If any of those sparks touched this wood dust it would have instantly started a fire that would have consumed the entire contents of the room. So they had constructed a strange custom contraption of tin shielding that kept the sparks from going in the direction of the wood dust while also creating enough general light to make the photographs take. The complexities of using the tin shielding and the flash power to take photos of the room meant that it took them almost a full day to take just a few photos; but those photos were priceless and well worth the effort. Scholars back home would analyze them for years.

Having taken in The Mess Hall for a ceremonial last time the Professor made his way through the middle of the room towards the double doorway at the other end. As he made his way, he imagined large gatherings of 800 people sitting in here, having a meal and discussing whatever happened in their daily lives. But he was at a loss of what those daily lives could have consisted. Other than fish, there was no food source around here, no wood to build furnishings, and no game to hunt. Where would those 800 have gotten their food and supplies? And what was the purpose of living in such an inhospitable area, and how did it provide benefit to others? They had few answers and many questions.

As he exited The Mess Hall, he entered another room that was large, but not nearly as large as The Mess Hall. It seemed to be more of a junction room. Behind him, to the east, was The Mess Hall. To the south was a hallway that lead down to an area of common rooms and private quarters. To the North was a corridor that lead to functional areas of the complex; kitchen, pantry, meat locker, storage rooms, etc. And to the west was what they called The Map Room. The Map Room was a medium sized room that abutted the entrance foyer to the southwest of the Map Room. In the middle of the Map Room was the remnants of what they believed to be a ceremonial table with statues or ornaments on it, now spewen about the floor. On the north wall was a hieroglyphic map of what looked like a crude drawing

of this building on the middle of a small hill, surrounded by a shallow circular trough and various symbols surrounding it. Professor ArtifactFinder was looking forward to the briefing review by Assistant Professor LandMarker today as to the meaning of the symbols.

Professor ArtifactFinder looked out though the building entrance to the Southwest, taking in the light that was radiating the room, and the heat that was accompanying it. He knew the second warning bell would be ringing soon, and all his associates would be joining him. On most "normal" mornings, there would be just 2 warning bells – one at 7 mD before 47 cD¹⁷ warning them they had 3 mD to get to the debriefing area, and then one at 4 mD before 47 cD telling them they should be in the debriefing now. At each of these debriefings, each of the 12 members of the research team would have about 1/3 mD to review what they had learned that night. This would get them out and in their hammocks to rest just as the sun broke the horizon and the temperature really shot up.

However, today was different. Today was the last day of this incredible research expedition. The first warning went off at 43 ½ cD to tell them the team they had 10 mD to do a final pack up and bring all their equipment to the front. At 44 ½ cD, all the research team members were expected to be up front with everything they had remaining inside, never to enter again – at least not this winter. Then while the ship's crew was loading their belongings for the journey back, each team would each have a full 10 mD to give a summary review of their finding for the entire expedition. Of course, this was just a summary for their onsite colleagues; each would be expected to write a full publishable article on the 3 dY trip back, as well as work with everyone else to do a joint article that was principally authored by Professor ArtifactFinder.

While waiting for the next warning bell, the Professor looked out the entrance. To the right was their rest hammocks, and to the left, in the distance, was the ship that brought them here. They had spent a lot of time in the rest hammocks. Everyday their work shift would end at 47 ½ cD, just a few mD before the sun came up, because the heat would quickly get too oppressive to do anything.

At this far southern latitude of almost 18 degrees below the north pool, the sun would be up for almost a full 44 mD before setting again. In that time, the temperature would come up about 14 fB to about 47 fB. It would still continue to raise another 3ish fB over the next 50 mD, before it would peak and start

¹⁷ In Necedah, cD and dD were often used to tell the time of day, and mD used to describe a time window or how long until some event. 47 cD was .47 of a full day since midnight the previous night.

cooling again. However, the inside of the structure would continue to warm even longer – it was as if it had been built to absorb heat and keep it in as long as possible.

So everyone had to pretty much just lay in the hammocks and endure the heat each day for about 400 mD. The hammock area was shielded by heavy canvas to the south to keep the sun from shining directly on the expedition, and the entire area was fitted with misting tubes that would run for their rest period after being refilled by the ship's crew during the night. During this rest period the members would just drink massive amounts of water, get what cooling they could from the misters, sleep when they could, and maybe write a few notes if they were able.

That would continue until about 87 ½ cD, when the outside temperature had cooled down to about 42 fB, and they would get up to start their research. Soon the heat would be livable inside the complex too, and the teams could start their inside work as well. They would then work all night until the next midday, and the process would start all over again.

It was never cool. It was not even ever warm. It was always hot. The only difference was how hot. This was the depths of Winter. No one could imagine how anyone could possible live here in the summer months when temperatures reached around 60 fB.

Professor Artifact Finder then scanned over to the left side of the open entrance view and noticed the ship that had brought them here and recounted how they had come to know about this place. The ship itself was an impressive sight to see; a marvel of innovation and science. It was a joint project of South Central University and Power Systems Corporation. While the new solid fuel burning steamships has been dominating new ship building for the last 15 years or so, this ship was based on an entirely new technology – steam turbine engines fueled by a liquid petroleum energy source. Christened *Long Distance Research Ship 1*, or LDRS1, it had been designed strictly for, of course, long distance research. It was of a long, wide and low construction. The front 95% was reserved strictly to store the new fuel. The rear 5% housed the 5 steam turbines and 5 screw drives. With all 5 engines going, it could maintain speeds of almost 20 kL per cD (kLpcD)¹⁸, just slightly faster than clipper ships with the northerly tail wind behind them. The large fuel store meant that it could travel almost 100,000 kL, by design, without refueling, which was about 16 times further than most of the current commercial steamships.

Moreover, the replacement of solid fuels that had to be shoveled, with liquid fuel that could flow in via mechanical pumps, meant a vast reduction in labor and ship's crew. The reduction in crew quarters

¹⁸ 20 kLpcD ~= 28 MPH (1 MPH = .705 kLpcD)

also reduced the weight, wind resistance and needed food stores. In the end, although it was a very large ship, there was only 8 beds available for researchers, and 12 for the ship crew.

But the most distinguishing feature was that while LDRS1 could do a little better than Clipper Ships when going with the Northerly tail wind, when going against the Northerly wind, the clipper ship was doing maybe 7 kLpcD¹⁹, LDRS1 could still do the same 20 kLpcD. This was massively significant for a research ship.

In Necedah, the prevailing winds were from the north-northwest. In the inhabitable region, the effect was fairly light, only about a 1.5 kLpcD average wind speed. But once you passed the End-of-Rain-Line, the average wind increased to about 14 kLpcD. Professor ArtifactFinder had no clue why this was and made a mental note to ask his friend Professor Emeritus BluestoneCutter when he got back to SouthCentral University. But nonetheless, since the considerably warmer temperatures south of the End-of-Rain-Line gave only about 4 dY in the winter months to explore them before it became too hot, this meant that Clipper Ships could only make it about 20,000 kL south in a little over 1 dY before they had to turn around and start making the relatively slow journey back north over the next 3 dY before the weather got inhospitable. However, LDRS1 could make it essentially twice the distance, or just shy of 40,000 kL before having to turn around, since it could go at full speed in both directions.

Last year was the maiden full research voyage of LDRS1. Throughout almost the entire trip, they had seen nothing but a continuous shoreline with an almost imperceptible curve which looked the same, kL after kL. As LDRS1 made its way down the coast, it found that the second 20,000 kL looked almost identical to the first 20,000. It had started to look as if the entire endeavor of building a highly expensive specialized ship as the LDRS1, had been a complete waste of resources with nothing new to discover. Nothing except, of course, to confirm that it did get hotter and hotter as you went further south.

As it was anchored at what was supposed to be its most southern point before it turned around, the morning survey lookout spotted something unusual on the southern horizon through his distance scope. It was a bump on an otherwise monotonously flat and continuous horizon. But there was definitely something there; something different. So being an explorer, the ShipMaster committed a serious breach of protocol and instead of turning around today, as he was instructed, he went another day

Copyright 2019 by Robert Hood, All rights reserved

¹⁹ 7 kLpcD ~= 9 MPH

south to encounter the whatever the bump was. And as he arrived, he felt as if it was entirely worth it, regardless of the consequences.

In the middle of nowhere, after nearly 40,000 kL of the same dune-beach-ocean landscape, kL-after-kL, for thousands and thousands of kL, before them was this large stone structure sitting atop a round knoll. The round knoll was sitting right on the coast. To the west, half of the knoll was facing open ocean. But to the east it was surrounded with what looked like a semi-circular trough or moat around it which was filled with ocean water, giving it an almost storybook look. The trough was wide and appeared deep enough that the ship could have entered the channel.

But the ShipMaster was having none of that. He was going to stay in the safely deep water to the northwest of the knoll. Meanwhile, he was having the photographer take as many pictures of the structure as possible within the hot but short winter day. After a while, the ShipMaster moved the ship to the direct west of the structure, then to the southwest, so that a better set of photos could be taken, but he refused to enter the trough; that would have to wait for a future trip.

They made anchor there that night. The full moon that night made for an eerie sight of the silhouette of the structure against an otherwise two-tone background of the desert and ocean.

The next morning, they steamed north as they were supposed to 2 days before, and with the day given up going south rather than north, they were a full 3 days behind schedule, or almost a 1/3 dY. For the next 1 ½ dY they continued north a full speed. During the journey everyone documented what they had seen, in as much detail as possible. The photographer developed his photos in an improvised dark room and shared them with the rest of the crew to discuss what they had discovered. Nothing like this had ever been found before. Sure, there were small trinkets and plates and pottery that had been found in the deserts near SouthEast City over the years and sold to certain museums and important families, but nothing even close to this. Everyone looked forward to discussing this will the rest of the history facility when they returned to SouthEast University and making sense of what they came upon.

Before they made it back to port, they were intercepted by some merchant steam ships that had been dispatched to find them, seeing as how they were more than 2 days late returning. So by the time they made it back to SouthEast City, they had a small caravan escorting them, making it almost a parade like scene, with a small crowd welcoming them back.

As soon as they made it to port and starting sharing their stories and photos with the press, the mystery structure 40,000 kL below the End-of-Rain-Line quickly became the talk of the town, with all sorts of

theories and conjecture of how it came to be, but the history department of SouthEast University was largely silent, because they had no plausible theory for why a large stone building, that was miserably hot in the winter, and unlivably hot in the summer, would exist there, especially since before the last year people couldn't even make it there from the inhabitable area.

Based on all the academic and public interest, in a matter of days it was announced the ship would make a second journey again next year, but this time leaving a full 7 days earlier and returning 8 days later, which would give it an extra 1.5 dY of research time. The specifics of the journey were light, but the eyes of the entire SouthEast region, and soon to be all of Necedah, would be on them to come up with answers. And so was borne the expedition Professor ArtifactFinder now found himself immersed in.

Returning to the present, Professor ArtifactFinder lost focus on LDRS1 and widened his peripheral vision, only to notice Nart ShipMaster standing outside the entrance at a distance and smoking a pipe. The professor had not had high hopes for Nart when he had first met him. Much the opposite.

Professor ArtifactFinder's first impression of Nart ShipMaster preceded even meeting him. For years Professor ArtifactFinder, while both teaching History at SouthCentral University and heading the department, had been courted by SouthEast University to do a 2-year professor exchange program where he would teach a special Artifact History course. There was no doubt that Professor ArtifactFinder was attracted to the offer. He had grown up in the SouthEast City region, and his family name came from there as well. His ancestors, or course, found artifacts and sold them to the university and important families. In fact, most of the artifacts he would be lecturing about would have been collected by his father, grandfather, and great grandfathers.

Last year he had agreed to do the exchange and had been excited about it. He was treated very well by the University. He was given a place normally used by an Emeritus Professors, and the department pretty much let him handle his class as he saw fit, including any excursions he wanted to do. He was also allocated about 30% of his time to research, and he could do whatever research he wanted to do (or, quite honestly, do none at all, should he so choose). They never made any demands on him or supervised his class work. They treated him with deference and respect.

That is why he was so taken aback when last summer he was unceremonially summoned to the chancellor's office without warning. When he arrived, he found there, besides the chancellor, the Chief Servant of the SouthEast City, as well as someone from the local office of the Necedah Interior Ministry.

Without any fanfare, they immediately got to the point. Even though he was a visiting professor, this was bigger than just their university, and based on his experience, skills, and discipline, they wanted him to head up the research expedition – his knowledge of historical artifacts and heading the history department at SouthCentral University made him the most logical choice. Moreover, he would be able to pick his team. However, this all came with one non-negotiable condition: while he would be in charge of the research team, the ShipMaster would be in charge of the overall mission, and that ShipMaster would have complete control over all safety concerns, when they got there, and when they left. In fact, to underscore how core this was, they made it clear that if he so much as suggested to the ShipMaster they lengthen the trip, he would void his tenure, and he would be immediately released. This was a highly unusual trip, with many, many unknown risks, and the safety of the entire party was paramount, and the ShipMaster would be charged with the responsibility for that.

Professor ArtifactFinder was astonished that he would be given this opportunity, while at the same apprehensive of the directness of the offer and sternness of their non-negotiable condition. Still, this was likely the most important research mission in known history, and he was almost in disbelief that they had offered the job to him. So, he gladly accepted and asked when he could meet the ShipMaster.

Knowing that as soon as it was released that Professor ArtifactFinder was going to lead the research teams he would become an instant celebrity whom the press would hound, they had already setup a meeting for this evening at a relatively small and obscure pub in a residential neighborhood near the South Ocean. He was given the time, address and directions, and politely asked not to be late. They also let him know that the person selected to be the ship ShipMaster was a certain Nart ShipMaster.

The ShipMaster professional family was once a noble, respected, almost autocratic professional class. A couple hundred years earlier, they were almost a separate political structure upon themselves, ruling the seas and all that happened there. In port, they would routinely be invited to high-raking social events and often be a powerful voice in political issues that involved the ports or sea commerce.

But since then, with the advent of a better highway system, and increased cargo hauling capabilities, their status had waned. Sea commerce was still very important but was now more of a commodity with a viable substitute available, especially with the advent of steamships which could be operated with a much less skilled crew. As such, when in port, ShipMaster members were now much more likely to be seen in a dark pub drunkenly boasting about their exploits, then at a society event discussing politics with the local power players.

Later that evening, Professor ArtifactFinder made it a point to be 10 mD early to their scheduled meeting spot. When he got there, he made his way to a back table and asked for a hot tea. While waiting, he noticed a group of about 15 sailors sitting at the bar, carrying on somewhat noisily about the journey that was in front of them. In between talking about the challenging tasks on this new ship, they could be heard giving salty barbs and insults to each other in a way that only close shipmates would do.

One of them in particular seemed to be the butt of many of their jokes, and he'd just laugh it off, look down, and take another drink as if he was not worthy of respected enough to even return their fire.

Professor ArtifactFinder assumed from the interaction that he was a lowly deck hand, the unfortunate person whose gifts had left him at the bottom of the social pecking order.

As soon as he saw the Chancellor and the Chief Servant walk in with a couple administrative staff, he joined them and set down with them in a private room. When he saw the person who had been the butt of those jokes join them at the table and be introduced as Nart ShipMaster, he hoped no one saw the disappointment, shock and dismay on his face. As the meeting went on, the ShipMaster was quiet, largely speaking only when asked a question. His answers were always professional and to the point. A few times he did interject when an idea or plan was being discussed that had a flaw or unforeseen consequence. These interjections clearly showed a keen grasp of his knowledge of the seas, but his lack of general interaction seemed to be a sign of his lack of confidence or the fact that he may have been drinking too much. To Professor ArtifactFinder, Nart seemed demur, weak, disrespected, and possibly a drunk, certainly no one to be in overall control of such a vital scientific mission.

Professor ArtifactFinder never saw Nart in a social setting again, but at the many planning meetings they had before the trip Nart did nothing to assuage his fears. Professor ArtifactFinder had voiced concerns to the Chancellor but was succinctly told he should focus on the research team planning and not the ShipMaster.

So Professor ArtifactFinder was understandably concerned when sailing day came, and Nart ShipMaster showed up with his crew of 11 hands. But as soon as they were underway, it was as if Nart became a completely different person. He stood up straighter, walked more purposefully, never lowered his eyes when talking to someone, and spoke forcefully to all his crew with the undertone that if you did not fully and completely implement his instructions, there would be a big price to pay.

Once when the ShipMaster came on the deck and barked out an order to one of the younger crew – a member who Professor ArtifactFinder remembered from the bar on the night he first met Nart but was

reportedly new to Nart's crew – as the ShipMaster turned to walk away, the young crewmember muddled under his breath something about that being a waste of time. The ShipMaster flew around to the young crewmember and gave him a backhand that sent him halfway across the width of the ship. The ShipMaster quickly went over to the downed crewman. At first Professor ArtifactFinder thought he was going to check on his welfare, but instead the ShipMaster grabbed him by the shirt with one hand and lifted him off the deck, and then quietly said "If you ever question or delay my orders again I will throw you overboard like the others." He then turned and headed back towards the stairs. The rest of the crew waited as the ShipMaster walked back. It first appeared to Professor ArtifactFinder that they were doing this out of shock at what they saw; but then realized it was out of deference for his command.

As soon as the ShipMaster disappeared, the rest of the crew rushed to the young crewmember's aid, and after making sure nothing was broken, gave him a stern warning as well. Not only was the ShipMaster's order correct, but if not done properly, it could have easily lead to someone being injured or killed. They also told him that no one wanted the ShipMaster to "start throwing people overboard, because once he starts, he can get carried away".

Professor ArtifactFinder didn't know if that was a true statement, or if the ShipMaster had even ever thrown a single person overboard. But he did know that no one else ever again objected to the ShipMaster's orders, and the entire voyage was one of the smoothest operations he had ever seen. Even the drills and training the ShipMaster insisted upon throughout the trip, instilled confidence in all the research team that they were in the hands of a highly skilled, highly effective sailing crew, all directed by a seasoned professional ShipMaster.

Returning to the present, Professor ArtifactFinder then noticed Nart starting to come inside the building. In all the time they had been here, Nart had never ventured into their morning debriefings. He hoped that the ShipMaster might actually be showing a little interest in what they were here to accomplish.

"Good Morning Professor," Nart said as he came closer to Professor ArtifactFinder. "Good Morning ShipMaster" the professor returned.

"Professor, I'm been meaning to ask you. I understand your family line is from the SouthEast City region. That's more or less been my home port for most of my life, yet I've never heard of that profession line before."

"Completely understandable ShipMaster," the professor retorted. "The market for artifacts is very small. The SouthEast City region is the only place that there is any market at all, and then only enough for 1 or 2 sellers. I had heard stories that some of my ancestors would go as far as moving to falsifying a new family name and learn a new trade rather than compete in such a sparse market. In fact, I was the last one who made a full time living at doing that, until I gave it up when I was still fairly young to become a full time academic."

Nart shook his head in agreement as the Professors words trailed off.

The other members of his research teams were now streaming back into The Map Room - 3 teams each with 3 members - all of them carrying some gear with them and placing it near the door for the ship crew to load onto the ship. As the last of the team members were coming in, Nart said something to the professor that caught him off guard.

"Professor, I'm sorry I'm making us leave 3 days early, especially after getting here 2 days late. But getting here earlier in the season caused it to be too hot to run all 5 engines, and I had to cut it down to 3 the last bit of the leg down here. The temperatures are going to start rising each day soon, and I can't count on using all 5 engines until it gets cooler. Should I only be able to use 2 engines, the temperature will rise faster than we can make it north to cooler weather. And in that case, we all die, and no one will know what you have learned."

Nart concluded the sentence as if he had told him he wanted more sweetener in his tea. Very matter-of-fact and without inflections to match the gravity of what he was saying. But the professor accepted that Nart knew exactly what he was talking about, and trusted that he was making the right decision.

Professor ArtifactFinder noticed the groups had informally gathered now and were more or less looking at him to start the expanded briefing. As he normally did, he made his way to the far side of the map room and stood in front of the Map as he prepared to address the group. He heard the second warning bell go off, just as he turned around, only to notice that Nart was still standing there, apparently with the intent of listening in. The professor couldn't help but crack a little smile that the ShipMaster showed some interest in their research.

First on the docket was the cultural history team, headed up by Professor HouseFramer, who was assisted by two of his promising graduate students. Professor ArtifactFinder, nodded to Professor HouseFramer, who jumped right in to his summary debriefing.

"Thank you Professor ArtifactFinder. Here's our summary of the furnishing, art work, and cultural architecture of this building. To start off with, the furnishings, while highly degraded now, all appear to be similar to 15th century furnishings. They are made mostly of wood with crude iron junction anchors. The wood appears to be of a very high quality solid hardwood. However, we have not been able to tell the species of the tree. It appears similar to the SouthEast Oceantop, yet has some distinct differences. It is almost as if we are looking at a wood species that is now extinct. I should also mention that, while this place is next to the Ocean, the almost constant North-Northeastern wind keeps it very dry here as the air moves slightly from land to ocean, never allowing the humidity of the ocean to come onshore. This has allowed parts of the wood, while now extremely fragile and weak, to become almost mummified.

"Moreover, our survey of the building suggests that although some of the debris piles look disheveled, in actuality all the furnishings appear to have been very neatly positioned and put in their place, as if a cleaning crew had come through, organizing everything, and was expecting the residents to come back at any time. Yes, when items decayed and fell or created a pile, it looks ransack. But if you trace back to their source, everything was very neatly left when the inhabitants departed.

"The furnishings of the rooms suggested that this was somewhere between an inn and a communal compound. Most of the sleeping quarters had bunk beds, suggesting space was at a premium. Most of these rooms also had a small table and a couple chairs. The disproportion between room residents and chairs suggests that the tables were more utilitarian, than a gathering location; reinforcing that The Mess Hall was the main gathering area.

"After the common sleeping quarters, there were also several rooms that looked to be for couples – a larger bed with a larger table, storage bins, and what appears to be bookshelves, although I'll let Professor BookScribe discuss that. In addition, there were also several smaller rooms that seem as if they were for a single individual. The rooms were the same depth, but about half the width. The marked difference in sleep density between the common sleeping rooms, and the couples/single rooms suggest significant wealth or status variations.

"And then there was what we called the Governor's room. It was unique in the structure, and about the size of 6 couples rooms, with amble tables, chairs, padded benches, cabinets, etc. It was very ornate compared to the other accommodations.

"With regard to the more functional areas, The Mess Hall is the most significant. However, we have not found anything that suggests it was anything more than a common gathering and eating area. The kitchen, pantry and storage areas to its north also support that conclusion.

"What we found in the Kitchen and Pantry, were also what one would expect to find in a 15th century communal dwelling. The odd thing here is that while everything looks 15th Century, from our models of the decay of wood in these type of conditions, we estimate that this place was abandoned not 400 years ago, but about 5000 years ago."

Professor HouseFramer attempted a dramatic pause at this point to see if anyone was impacted by this dichotomy. But at this point most of the team had seen similar discrepancies, and he couldn't make out any real reaction from the audience, so he continued.

"Art wise, we really didn't have much to work with. There were some signs of artwork around the complex, but all of it was almost completely disintegrated. You can make out a little of the wood artwork in this room, but there was no metal or stone artwork. So, while very regrettably, we can tell almost nothing of what these people expressed via their art.

"There is also one last item of interest. While sand has somewhat built up around the structure, it appears that if you take the sand away, the original walkway was almost 2 Ls below the bottom of the door. So, something should have been filling up that space much/most/all of the year or the doorway would have been usable.

"Of course, we will write up all of this in much more detail and give you all a chance to review it as we make our way back home."

With that, Professor HouseFramer was essentially turning the floor back over to Professor ArtifactFinder, who then called on the historical engineering group.

"Professor YatzshoeMaker, can you give us your debriefing?"

Professor YatzshoeMaker was fanning himself and looking around. Everyone could now clearly feel the imposing heat flooding in from the outside through the entrance as the support crew was carrying out the crates of equipment. He both felt sorry for them having to work in this heat as well as grateful it was not him having to do it.

Professor YatzshoeMaker slowly started. "We, the engineering department team, the three of us, well, we've seen lots of odd stuff here. Of course, like all of you, we'll write it all up on the way back. There's much too much to go over all here. But let me share with you some of the highlights, if you can call them highlights. Maybe it's better to call them significant findings. Yes, let me share with you the Significant findings.

"I remember the first thing we found unusual was that the water cistern – the circular recess in the northeast of the building near the northeast door – or what appears to be a door – we actually never opened it. Anyway, the water cistern. It seemed strangely small, only about some 800 mQ²⁰. Maybe enough for a day or two when they were at full capacity – or what we think was full capacity. In an arid, hot place like this, you would expect them to be putting much more emphasize on a large fresh water supply. It was as if they were not concerned about replenishing their supply, nor with having to resupply so often. It would cause you to believe – or should I say lead you to hypothesis – that the supply was close by. But we haven't seen any fresh water reserves since before we crossed the End-of-Rain-Line.

"Next, in investigating the cistern – we went inside and looked around – where the stone cracked in almost a helix fashion – going round and round the cistern but in a constant increasing up/down fashion. We made a small hole and found that just an inch or so behind the wall was circular hole inside the stone wall, coursing through the stone – but much closer to the interior than the exterior of the stone walls.

"We were then able to trace it back through the floors and walls to the bellow hearth near the ovens. When we first saw those bellows, we thought 'of course, they are just part of the oven'. But they weren't. No, the four bellows feed four duct systems through the walls. That is, when the hearth was going and the bellows pumping, they would have been pushing hot air through the boundary walls of almost the entire complex. And the Cistern of course. It was as if they were trying to warm the inside of the building – and the water. And why would anyone ever want to do that here?

"So that was mystery number 2. Well it wasn't actually number two – we found a lot of mysteries, but in the order I'm describing them, that's the second significant finding I'll mention.

 20 800 mQ = ~1000 Gallons (1 mQ = 1/1000 cubic L = ~ 1.977 Gallons)

"The one place we didn't find the heating ducts was in the pantry, food storage, and meat locker section. That all seemed to use some sort of natural exchange system. This was just the most bizarre – well, not actually the most, as I said there was a lot of bizarre stuff; maybe just very. Yes, it was very bizarre. As you've seen, this was in the northwest part of the building – at the other end of the building from the ovens/hearth – and the cistern, of course. Here, we found 4 rooms behind rooms. The stone walls between these rooms were relatively thin – only about 2 dL – much less than the 6 dL thick stone walls in most of the building. And between each row was an equally thick door with some writings on them - which I'll leave to Professor LandMarker to tell you about. Anyway, based on what we found in each of the rooms, working with Professor Houseframer to help understand what they were, each of the rooms were used for separate functions.

"The most inner room was a pantry – dried goods, spices, non-perishable canned goods. Stuff that can last for long times at room temperature. The next layer room was large containers of what looks like seed and plant pods that can be using in making bread and other staples. These usually hold up better in dry cooler environments. The next room had things like containers of milk, fruit, vegetables, etc. The type of foods that do best in a cold – but not freezing - environment.

"But if that wasn't enough to blow your mind – the next one is a dozy. First let me tell you that this room is next to the outside – on the other side of the wall is the outdoors. Second, this wall was only about 6 cL thick. These are by far the thinnest walls in the entire complex – so they provided almost no protection from the outside elements. So what did we find in there? Hooks and animal bones. You got it? Yeah. This appears to have been a 15th century meat locker – although it's hard to tell that as categorically true – I guess you could come up with other theories. But the hooks combined with the large animal bone – and we're talking almost full or half skeletons – made a compelling case.

"But why the heck would they be putting their meat right next to outside temperatures of 35 to 60 fB? Did they have some special treatment that preserved the meat better in hotter weather? And what about the milk and other foods in the next room? Could they have had some mystery way of pulling heat out of the room? If so, maybe they used it on the entire complex. Maybe it worked so well sometimes that they had to warm the building? I don't know, it's all very confusing. Or another possibility is, .."

Professor ArtifactFinder took his opportunity as his colleague took a quick breath, "Thank you Professor YatzshoeMaker for that debriefing. It is clear there are many more questions than answers here. We look forward to reading your reports as you draft them on the way back."

Professor ArtifactFinder continued, "And now for the last team, the Historical Linguistics team. Professor LandMarker please share your general findings."

Associate Professor LandMarker was a very shy man. Professor ArtifactFinder found it ironic that someone who studied the history of language, would have such a hard time saying anything. Professor ArtifactFinder gave him a little node and flick of the hand to let him know it was time to talk to the group, something Professor LandMarker did not like.

Professor LandMarker started, "If I may please, if I could, could I..." his hands pointing in the direction of the Map on the wall, as if he wanted to go over there to talk.

"By all means Professor LandMarker", as Professor ArtifactFinder moved out of his way. Professor LandMarker then hurriedly walked to the Map, and started at if for a few moments, his back still to his colleagues. "Professor LandMarker?", as Professor ArtifactFinder inquired.

"Sorry. Let me start by saying we haven't found much to go on here. We have this map of course. There are also the writings on the doors in the Pantry area. But not much more than that. We did find that it looks like there used to be quite a few book cases here, but most of them, and their books, had crumbled and mostly turned to dust. We did discover some remnants of books that may have fallen early or were left on a stone ledge. But these almost evaporated into dust as soon as they were touched. Moreover, any lettering on the binding or outside of the books were far too faded to have any linguistics value."

Professor LandMarker, still avoiding looking at anyone by holding his eyes to the floor in front of him, then shifted some, as if uncomfortable with what he was going to say next.

"Still, this map and the symbols are in reasonable shape. To be honest, I was able to decipher them within the first couple days here; the language appears to be an offshoot of a precursor to ancient Eastonian. But it seemed so fantastic I didn't want to share it until we had collaborating evidence; which, sadly, we haven't found. So let me go over this map.

"So first, look at the building on the knoll in the map and the wording above it. It can best be translated as 'North most building' or maybe 'Northern Outpost'." Professor LandMarker was now able to turn

around and look at the map instead of the people in the room, and he seemed much more comfortable with that situation.

"And over here" moving to the left of the building symbol on the map and pointing, "this path to what looks like the coastline to the west of the building on the map. This wording right here can be interpreted to say 'trail from building to ocean'. Of course, when outside we can easily see that this building is surrounded by water. Yet, although this map isn't to scale, it makes the ocean to be 5 to 10 kL to the west of the building.

"Next, take a look at this wording describing the trough around the building. That can be translated as 'Ancient's dig', suggesting that the trough around this knoll was here long before whomever made this map.

"This symbol here in the upper left corner of the map that looks like an arrow pointing northwest?" The professor quickly glanced backward to see if everyone was following him. "The wording there is 'Ice Reef', possibly suggesting sheet ice in that direction.

"And this path going along the coast from the south of the map to the trail from the building to the ocean, the map has it labeled as Northern Trail. The writing next to the arrow pointing down below where the tail ends on the bottom of the map says "North City"; in this case North is a noun adjunct, not an adjective", at which a few members looked at each other.

Professor LandMarker continued without pause, "And this trail that goes to the east of just a little bit then fades away, the wording at the end of the trail reads 'East Icesheet'.

"So in the end I don't have enough content to make many determinations about the structure of this language, much less what the people were doing and thinking. However, I can read enough to be completely baffled. We can see that ocean nearly surrounds us, and it is hot as an oven here. Yet the map shows the ocean kL away, and a surrounding frozen landscape. It could be that some storyteller made this map of a fantasy world he made up. Or it could be that there is something more inexplicable going on here."

Few had heard Professor LandMarker talk with such resolute confidence when in front of a crowd as they did in that last paragraph. And there was several moments of silence after that, with no one wanting to break the thoughts that everyone was contemplating.

Eventually, Professor ArtifactFinder broke the silence with "OK, thanks everyone for the debriefings. Please head out to your cots now and rest per the routine, being sure not to risk any heat stroke. The ship's crew has just about finished taking the creates to the ship, and when they are done they will shut the front doors like they were when we got here. Later, when it cools down again, they will seal them up too, so the seal of dust and dirt that we broke when we first opened them is restored. As soon as they are done with that, we'll pack up the rest area, go to the ship, and break anchor and start the journey home."

And with that he headed to the door, and everyone followed starting to talk among themselves. But Professor ArtifactFinder was lost in the thought that Professor LandMarker had just indicated there might be a city to the South of here. If he could just convince the University Board to fund another, longer trip next year, and find a better way to deal with or combat the heat, that discovery might make this one pale.

Lost in thought, he almost ran into Nart ShipMaster as he made his way out. Nart gently grabbed his arm motioning for him to stay until everyone had cleared out. Once they did, he faced Professor ArtifactFinder and asked "So would you say your find here is significant?"

Barely able to hold back a chuckle of understatement, Professor ArtifactFinder emphatically stated, "Yes Nart, I would say our finding is significant." Nart ShipMaster looked off into the distance and grimaced. "I was afraid you were going to say that".

Somewhere between concerned and mystified, Professor ArtifactFinder asked "Why?"

"Well," Nart retorted, "my orders were that if both you and I agreed the finding was significant, instead of returning to SouthEast City, I was to set course for a direct route to SouthCentral City and get you back for the SouthCentral Science Conference."

The Professor's face went flush as it also drooped in disbelief. "What?" he asked.

Nart, understanding that was a rhetorical question, let the silence hang until Professor ArtifactFinder regained his composure and could ask an intelligent question.

"I don't understand", the Professor finally continued. "I have never heard of someone attempting a journey like that. We will be 10's of thousands of kL from the coast, going right through the middle of South Ocean. Do you have any idea what is out there? Do you even have the fuel? What about the time? It would take us about 4 dY to get back there and the conference is in 2 ½ dY."

"I don't know what is out there," Nart calmly replied. "But you are the research head of research teams on a research ship, so I guess it will give you a chance to do more research."

At this point, Professor ArtifactFinder wasn't happy with Nart's almost mocking tone as Nart broke into a small smile.

"It will be OK Professor. My crew is very good at navigating by the stars. We will have no problem navigating there. Fuel is another matter. We loaded up with as much extra as we could when we left, and that small flotilla we encountered at about 10,000 kL south of the End-of-Rain-Line was a resupply group that also replenished our fuel. We'll make it. Just barely by my calculations, but we'll make it."

Professor ArtifactFinder was only slightly comforted by Nart's plausible answers. "What about the time?", he asked.

"That would definitely be a problem, except that we have some upgraded turbine engines that we should be able to push to 30 kLpcD, although we have never really tested it for more than a couple days of running. But we also brought 2 spare engines. So as long as we don't have more than 2 fail due to mechanical rather than heat, we should be OK. And that should get you back just in time for your conference. I hear they have reserved the last day for just you and your teams."

The Professor's head was spinning, as it started to hit him. First, he was going to be able to see his friends and attend the SouthCentral Science Conference in just 2 ½ dY. But second, he only had 2 ½ dY to prepare for the biggest presentation of his and his teams lives. So he was now even more anxious to set sail so he could start working on both getting home and getting prepared.