

VOLUME 11 ISSUE 2

VISION 2020

JULY-SEPTEMBER 2013

Foundations for Vision 2020 — Article By: Hu Sneed

For the past several issues we have talked about Call Henry, Inc.'s company vision-Vision 2020. We talked about what it means and how we plan to reach our vision. For the next few issues we would like to share with you some of the background for Vision 2020 and the principles underlying the vision.

At the very foundation of Vision 2020 are four principles: **Commitment, Responsibility, Concern** and **Integrity**. Over the next few issue of our newsletter I will share our thinking about each principle on which Vision 2020 is founded. Today I'd like to talk with you about *Commitment*.

The great American philosopher, poet and author Ralph Waldo Emerson said: "All great masters are distinguished by the power of adding a second, a third, and perhaps a fourth step in a continuous line. Many have taken the first step. With every additional step you enhance immensely the value of your first." Of course, what Emerson was pointing out was (1) commitment is characterized by action, it is not simply how we think, but how we act; and, (2) commitment is a journey, not a location; it is also characterized by the willingness to continuously take "just one more step" to get to your goal.



A Chinese proverb states it more simply: "All great journeys start with the first step." That is how Call Henry views our commitments to Vision 2020. The Company is committed to take the steps needed

to reach our Vision consistently over time to. We encourage you to make this same commitment to your life-your vision. Sometimes it isn't easy, but always it is exciting and challenging.

In order to achieve our vision, we focus our commitment on:

Our Customer: We commit that we will take all steps necessary to meet our contractual obligations to our Customer. We do this actively and aggressively, every day for as long as it takes to reach the highest levels of Customer Satisfaction and Appreciation. We commit not only to fulfilling our contractual obligations, but in working to provide our customer quality, timely services and products at the most reasonable cost we can achieve, and controlling Customer costs at reasonable, competitive levels.

Our Employees: We commit that the well-being of employees remains foremost in our mind. We commit that we will be straightforward and fair in all our all dealings with employees; that we will fairly compensate employees for their efforts and recognize them for their excellence. We will strive to create for our employees a pleasant, safe and healthy workplace and environment. We will conduct an Open-Door environment in which every employee may speak to any level of supervision or management to voice comments, suggestions or complaints-and we will carefully consider and act upon employees' concerns.

Our Company: We commit we will actively and aggressively seek to maintain a healthy business and financial base so that we may actively and aggressively achieve our commitments to our Customer. Our employees and our Company.

We encourage you to look closely at your commitment to your life and those to which you are committed and create your own vision for a Happy and Prosperous life. Next time we will talk about Vision 2020 and Responsibility.

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VISION 2020 GOALS

Become one of the largest, most respected Government service contractors.

Encourage and enable employee growth and well-being.

Meet profit goals of 6% on sales.



NEW BUSINESS — Bill Makynen

NASA Wallops Island Consolidated Contract II (WICC II): - We are bidding this with our Protégé Fort Mojave Construction Company, as a limited liability company (LLC) entitled Fort Mojave Services II. This opportunity came out as a draft months ago and was delayed a couple of times by the Government. We finally received the final request for proposal (RFP) in August and, after further delays by the Government submitted our proposal by the October deadline.

On June 12th we received a request from the Government to extend our proposal until March 2014. We have replied to confirm our commitment to the extension and now await an award announcement. We submitted what we believe is a competitive proposal and have high hopes for award of the contract.

U. S. Navy West Sound Base Operating Support Contract: - We have received notification that unfortunately , we are no longer in the final running for this award.

NASA John H. Glenn Research Center, Facilities Operation, Repair and Maintenance (FORM) - As we all know, CHI has held the FORM contract for nearly 10 years and its predecessor contract for 5 years before that. We think of this contract as our premiere, flag-ship contract. Those working at Glenn on the contract have been with CHI longer than any other group other than some of us at Corporate. We are proud of them and their accomplishments and we look forward to competing once again for the contract.

The government issued the final RFP May 8th with a proposal submittal date of June 21. We hand delivered our response at 1:00PM Friday June 21^{st} . We believe or response is technically sound and competitively priced. We anticipate an award announcement in the September timeframe with a 60-day phase in period beginning October 1^{st} and contract assumption on December 1^{st} . Wish us success in retaining this contract!

The figure below summaries these opportunities.

There are also two new business actions we are pursuing:

- 1 We are in the final stages of placing CHI on the GSA schedule for base O&M services that could offer us additional opportunities for contract acquisitions with minimal marketing effort. More to come on this as we finalize the assembly of all the required documentation for the Government's review and approval to place us on the current schedule of services.
- 2 We have taken on a consultant to help us market Capella to new market segments
 - Colleges and university systems that have large campus complexes, and
 - Oil refinery and Mining operations where the maintenance programs seek to maximize system reliability/up-time at the least cost.

We are somewhat optimistic that these market segments may offer the opportunity to move CHI's product line into different government areas as well as the private sector.

Current / Future Opportunity Chart

Opportunity Location	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
NASA Wallops Island Award									lacktriangle
EPA Research Triangle Park							∇		
NASA GRC FORM Contract Award			lacksquare						



EMPLOYEE PROFILE — Chris Logan — By: Alfreda Robinson

He greets everyone with a smile on his face. He loves to joke around with his coworkers. However, there is one area that CHI's Safety Manager, Christopher Logan (Chris), takes very seriously, "safety." Chris Logan is very serious about the safety of the 96 employees at Glenn Research Center (GRC).

Chris Logan has been CHI's Safety Manager since 2007. He ensures the safety of all of the trades' employees working multiple shifts. He responsible for face hazards unique to the specific trades and their activities. Due to the varying nature of each employee's activities, the plumbers, electricians, carpenters, boiler operators, HVAC technicians, crane mechanics and grounds personnel, this can be a daunting task. In addition, the broad spectrum of craftsmen often has individual licensing or certification requirements. Consequently, they use trade-specific equipment, resulting in a wide-range of training needs.

Chris provides most of the needed training himself. He is responsible for coordinating the company's activities with the Glenn Research Center's Safety Office and for evaluating changes in government policy. When changes occur, Chris adjusts company practices accordingly. His schedule is always full with Job hazard analyses, safety permits, S&H plans, and an abundance of recordkeeping responsibilities. In a word or two, Chris does it all.

Moreover, Chris has been a contributing member of GRC's Contractor Safety Committee since 2007. In 2010, Chris received GRC's "Best of the Best" safety achievement award for his contribution toward safety at GRC. In addition, he placed 2nd in the national safety competition.

The genuine culture of safety among the company's on-site employees and sub-contractors that Chris has created paid off this year with the accomplishment of four years without any "lost time" injuries. Since 2009, CHI's employees at GRC have logged over 750,000 hours without a "lost time" injury. This accomplishment has help to save the company thousands of dollars in Worker's Compensation premium costs. For this well deserved accomplishment, Chris was recently awarded CHI's Presidential award.

Chris Logan's safety efforts are an example of why achieving a good safety record is truly an asset for a company (not an expense). The unrelenting safety training has been monetarily rewarding but more importantly maintaining the safety of every GRC employees is invaluable. Moreover, this demonstrates what can be achieved when every employee becomes dedicated to doing his or her jobs safely, each day.





FEATURE ARTICLE: Serious Safety! — By: Alfreda Robinson

At Glenn Research Center Safety Is A Serious Matter

At Glenn Research Center, CHI employees consider safety a number one priority. For each of our employees' daily activities, safety comes first.

Plumbers, electricians, carpenters, boiler operators HVAC technicians, crane mechanics and grounds personnel receive a wide variety of safety trainings. Some safety trainings are craft specific. For example, the Grounds employees receive training in barricading, flagging, traffic control & flagman. While, the crane mechanics receive training in man lift, aerial lift, scaffolding set-up use. Other trainings are general such as lockout, tag out, housekeeping, slips and falls. The bottom line is Safety must always come first.

When interviewed by Safety and Health Magazine, Katherine Rodriguez, whose father died from workplace burns in 2004, pointed out the scores of civilians injured, and buildings and homes destroyed, by the recent West, TX fertilizer plant explosion, and said such incidents are not limited to workplaces.

"Anyone who thinks workplace safety does not apply to them because they don't work in a hazardous environment, they are mistaken," said Rodriguez, a board member at United Support and Memorial for Workplace Fatalities, a support group for people who lost loved ones in job-related incidents.

The ongoing training that CHI's employees at GRC have received has paid off in the accomplishment of 4 years without a lost time injury! This is a monumental accomplishment. Each employee should be proud of what they contribute toward keeping themselves, their coworkers as well as the center personnel safe







Thank you for your excellent work and continued efforts, GRC/CHI Safety Team!



FEATURE ARTICLE: Power Down! — By: Robert Clark

FMSII's Vandenberg Crew called to provide emergency power to Space Launch Complex 6

Fort Mojave Services, Inc. II (FMSII), a joint venture between majority owner (51%) Fort Mojave Construction, Inc. and Call Henry Inc., operates the Vandenberg AFB Launch Operations Support Contract (LOSC).

A power outage in California over the weekend has delayed launch preparations for NASA's newest sunstudying spacecraft by 24 hours, pushing the new solar observatory's blast off to no earlier than Thursday, June 27. The power outage was spread over several counties in Central California which had Fort Mojave Services scrambling in the middle of the night to provide emergency power. FMS was called into action at 2215L on Sunday to provide emergency power to Space Launch Complex 6 as there is an Atlas Rocket being prepared for a future launch.

The Fort Mojave Employees, Merl Powell, Tony Calderon, and Dan Elliott were quick to respond and had the South Vandenberg Power Plant on line and



providing power to SLC 6 at 2300. Pacific Gas and Electric was able to restore power by midnight, however, this was just the beginning of what was to be a long night. Fort Mojave Employees were dispatched to check to ensure all emergency generators returned to normal when power was restored as well as to bring systems online that tripped due to the single phasing of the power grid preceding the total outage. Alex Lopez, Larry Vea, Pony Perez, and Dan Elliott worked throughout the night ensuring all system were normal.

Another casualty of the outage was in the electrical substation that powered the 30th Space Wing Western Range Operation Center which suffered a catastrophic failure resulting in the total loss of power to the complex. At first light on Monday morning Fort Mojave employees along with the 30th Civil Engineering Squadron "Power Pros" began installing portable emergency generators to the facility to maintain power to critical systems. Commercial power was finally restored at 0300L on Wednesday, June 26 and the process of bring systems online began. Fort Mojave continues to excel in providing Launch Operation and Support to the Air Force providing Quality Services at Less Cost!





ADVANCED TECHNOLOGY — Bill Makynen

Laser Alignment

Laser alignment systems are a cost effective element of our RCM program. They have several advantages over dial indicators and other methods of alignment. They range in cost \$3,000 to near \$20,000, with some of the best high-quality systems averaging around \$12,000 to \$15,000. When time savings, reduced downtime, increased reliability, fewer repair costs, and lowered electricity costs are all considered, a high-quality laser alignment system is easily one of the best and fastest payback investments we can make in our RCM program.

It is no secret—precise shaft alignment will pay for itself. It reduces bearing and seal damage, minimizes energy loss, and reduces system/equipment downtime. To neglect proper shaft alignment is like failing to perform regular oil changes on your car. You could get by without it in the beginning, but it could cost a lot of money down the road.

According to the Mechanical Power Transmission Association, if a gearbox bearing's loads increase by 30 percent due to misalignment; this could cut down on the bearing's life by as much as 58 percent. The use of laser coupling alignment methods can help us with such misalignment issues.

Not only is precise shaft alignment essential, but doing it in the least amount of time is also a necessity. Machinery downtime will cost your facility money, especially if that piece of machinery is in the critical path of operation. In some situations, loss of a critical item of equipment or system supporting a mission critical event such as a launch or research activity could cost our customers hundreds of thousands of dollars. Precise shaft alignment occurs when the centerlines of rotation of two shafts are essentially collinear with each other. The degree to which two machines are misaligned can be determined by examining the amount of offset and angularity that exists between them. Offset is essentially the distance between the two rotational centerlines while angularity is the angle between the centerlines that is created by the misalignment of the two centerlines.

Although it is not necessary to get a perfect "zero" offset and a perfect "zero" angularity. However, the higher the rpm of a piece of machinery, the tighter the tolerance must be. As a guideline there are tolerance tables that specify excellent and acceptable (or fair) tolerances for both offset and angularity as shown below. The acceptable standard can be used for realignments on noncritical machinery, or where time is of the essence. For new installations and critical machines we should always align to the excellent standard. Our goal should be to try and align all machines to the excellent standard when possible.

For example, a machine turns 1800 rpm, and the shaft alignment measured 1.7 mils for the offset and 3.5 mils per 10 in. for the angularity. The alignment can be left as is because it falls within tolerance. The offset is within excellent tolerance and the angularity is within acceptable tolerance. It would be ideal to get the gap within the excellent tolerance, but if that is not possible, the acceptable tolerance would be OK.

There are many methods currently available for shaft alignment. They can range from "eyeing" it with a straightedge to using a state-of-the-art, five-axis laser-based alignment tool. Of the many methods available to measure shaft alignment, the two most popular are dial indicator alignment and laser alignment.

TYPICAL TOLERANCE TABLE						
RPM	Offset	(mils)	Gap (mils/10 in.)			
	Excellent	Fair	Excellent	Fair		
600	5.0	9.0	10.0	15.0		
900	3.0	6.0	7.0	10.0		
1,200	2.5	4.0	5.0	8.0		
1,800	2.0	3.0	3.0	5.0		
3,600	1.0	1.5	2.0	3.0		
7,200	0.5	1.0	1.0	2.0		





ADVANCED TECHNOLOGY — Bill Makynen

Laser Alignment (Continued)

Dial indicator alignment - Alignment by dial indicator is an accurate method provided these potential problems that can adversely affect readings are dealt with correctly:

- Indicator bar sag
- Indicator hysteresis (internal friction causing the indicator to stick)
- Low resolution
- Reading errors (such as not following the indicator travel properly and misinterpreting the sign (+/-) of the reading, or a parallax error from not having the indicator mounted perpendicular to the indicating surface)
- Play in mechanical linkages
- Components the indicator touches magnetized by an exciter
- Shaft axial play (endfloat)
- Vibration from surrounding running machinery

Provided that you can properly control or compensate for all of these factors, dial indicators can allow for accuracies of up to 1 mil (1/1000 in.).

If used correctly, dial indicators can be an effective means of shaft alignment. In addition to the previously mentioned factors which can adversely affect indicator readings. However, we still must calculate the offset and angularity values at the coupling center from the raw dial indicator readings at a different locations on the shafts and then use this data to calculate the foot corrections to get them aligned precisely. Performing this in the field and then retaking measurements can be a very time-consuming and error-prone process.

However, Laser-based alignment systems have features that will do the number crunching for us. This means foot corrections and alignment data at the coupling are provided instantly. Some systems even have a soft-foot function that will allow the PT&I Tech to check for a soft-foot condition, and some even suggest corrections. Laser systems also lets us accommodate much longer spans than dial indicators with great ease (which is necessary for cooling tower fans or cardan shaft drives, for instance) and others will even allow us to turn the shafts independently when uncoupled. Additionally, they provide the methodology for precision shaft alignment with the potential for much greater accuracy than dial indicators, with the added convenience of good time savings. There are several laser systems available. Some use a single laser and detector configuration, some use a reflected beam approach, and some use dual laser configurations. A good laser alignment system should have an accuracy of at least 0.0001 in. (1/10000 in.).

For accurate and repeatable measurements, quality is absolutely essential. The tool must withstand the rigors of the field and be flexible enough in its functionality and features to permit aligning the many combinations of machinery and coupled shafts we find in the field. It also must be user friendly so the PT&I Technician can concentrate on getting the alignment right, instead of working to figure out how to operate the system. It should also be:

- Compact as large laser and sensor heads could prove difficult to use in situations with limited clearances or obstructions to rotation
- Lightweight with ridged bracketing as flimsy or heavy bracketing could shift/distort during rotation resulting in inaccuracy in the measurements
- Shock resistant
- Waterproof (at least IP-65), and very rugged
- Durable in terms of temperature and humidity extremes
- Have range extension features and the ability to independently enter target specifications for thermal growth as well as thermal growth values at the support points of the machine
- The capability to recalculate corrections when you get bolt-bound (a static foot function) for all machine feet
- The ability to accommodate machine trains (three or more machines) and display results for the whole train
- The tool must tell the PT&I tech when he has arrived within tolerances, and these tolerance parameters controllable by the tech with the capability to store a file, reopen it, continue working, and print a report.







CAPELLA CORNER — Bill Makynen ☆☆☆☆

Scheduling Enhancements *UPDATE*

As reported in the last two newsletters we have been in the process of developing several enhancements to scheduling to streamline the weekly scheduling meetings. We are happy to report that they have now been completed. The last enhancement completed is the "Employee Workload" function.

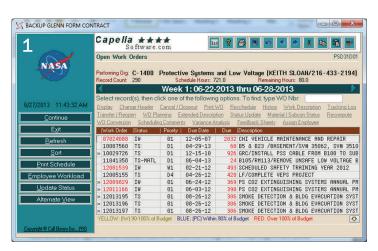
This is a very powerful element of scheduling to fine tune the work order assignment process. The screen shown below is accessed by selecting Option 4 "Shop Scheduling" from the Work Scheduling main menu and then selecting Option 10 "Current Period Schedule." This will display a list of the Shop organizations that have been scheduled and allow you to select one to review. Selecting an individual shop presents the Shop schedule display shown in screenshot 1. The new feature is accessible by selecting the left sidebar option "Employee Workload". Selecting this option displays he screen shown in screenshot 2.

Screenshot 2 shows the supervisor how work in the current schedule is assigned to each person within his crew as well as that which is yet to be assigned.

The work load for each craftsman is displayed using the

remaining Estimated Hours to Complete (ETC) for the work orders in each queue. If work has not been started the ETC is the estimated hours for the work order. If the work order is in work the ETC is the estimated hours less the actual hours charged to date of an ETC that has been entered by the craftsman. So if a work order is going to continue beyond one's regular shit it is important to enter one's best guess as to how long it is actually going to take to complete the job.

To assign unassigned work double-click the top of the unassigned work column and you will have the option to assign work to any of the craftsmen in the selected shop to fully load each craftsman's schedule. Similarly you can transfer work from one person to another by selecting the person you wish to transfer work from.







QUALITY MANAGEMENT AND SAFETY TIPS

QUALITY MANAGEMENT: WE ALL WANT QUALITY - Richard Olinek

Companies often go out of their way to define their products and services as being of "high quality"; and for good reason. Consumers want products that work, services that satisfy their needs and repairs that are effective and long lasting. Our customers are no different.

There are multiple approaches to achieving quality; some more costly than others. Oddly enough, the approach that on the surface seems the least costly is actually the most expensive. This method involves allowing customers to determine quality and reacting only when customers are dissatisfied. - Allowing customers to discover defects or problems doesn't require a single hour of inspection time. It's virtually a free quality control program! Or is it?

Actually it's a very costly approach to quality control; loaded with hidden costs including:

- Investigating, documenting and processing customer complaints
- Performing free warranty services or rework
- Potential liability and legal actions for sub-par workmanship
- · And above all, the cost of a damaged reputation, lost customer trust and good-will

Most organizations feel it makes better sense to discover problems and defects internally through self-examination and inspection processes. But this approach can be costly as well because of:

- Scrapped or unusable parts and materials
- Schedule disruptions, and the possible need for overtime
- Wasted labor performing rework and repair
- And missed commitments on this and possibly other jobs

By far, the most economical way for any organization to achieve its quality goals is through an effective Quality Management System designed, not to find and fix mistakes, but to prevent them through consistent and uniform work processes. Uniform work processes reduce variation in work methods, and in most cases are easily achieved through clear, documented procedures that limit the need for frequent field decisions and guess work. Documented procedures make it easy for different employees to perform the same job the same way. Developing and adhering to procedures is the best way to reduce errors, minimize mistakes, and provide the quality of work our customer's deserve.

SAFETY TIPS: SLIPS, EMERGENCY PREPAREDNESS — Richard Olinek

Though we prefer to think of disasters and emergencies as unlikely events, failing to prepare for them is literally foolhardy. Often, during an emergency, time doesn't allow for detailed planning and clear thinking. That's why, when faced with emergencies, it's important to have a well thought out, pre-planned response. At home, this means teaching even the youngest members of the family how to contact police, fire department and other emergency responders. It means developing fire escape routes and rehearsing them with your family. It means identifying locations in your home offering the best protection from severe weather.

At work being prepared for an emergency is even more critical. Even the best safety program doesn't eliminate the need for advance planning to counter health emergencies, injuries, fire, chemical spills, bomb threats, severe weather, acts of violence and other

unexpected events. Readily accessible first aid kits should be available to allow quick treatment of minor injuries. Nearby or on-site clinics, hospitals and emergency medical service (EMS) providers should be identified in advance, and their hours of operation, addresses, phone numbers and driving directions posted in visible locations. Responses to emergencies should be planned in advance, distributed and rehearsed. Employees on all shifts should participate in fire and evacuation drills annually, and should be familiar with methods available for summoning emergency help, if necessary.

Emergency procedures should be reviewed with employees annually, and emergency contacts and phone numbers updated and posted in conspicuous locations. In the event of emergency, being able to respond in accordance with a pre-established plan lessens the chance of making potentially poor emergency decisions. Play it safe; plan ahead!





HEALTH AND WELLNESS

UNDERSTANDING ACHES AND PAINS

Muscle and joint pains can be crippling regardless of ones age, however after the age of 40 such pains can become much more frequent and the recovery from such pains noticeably slower. While treatment options for ongoing joint and muscle pains are advancing rapidly, prevention of such pains before the develop is of utmost importance. Listed below are some of the common causes of joint and muscle aches and pains and ways to mitigate the risks associated with each:

- Sleep: A good nights rest is so crucial to many aspects of our health. After a long day of use, our joints and muscles get fatigued and require rest in order to rejuvenate and recharge. Getting a regular, restful sleep schedule can help to alleviate and prevent joint/muscle aches and pains.
- Stress: Mental stress buildup can take its toll on our body. When stressed, the body tenses up which causes a
 restriction of blood flow to our muscles and nerves. This is especially damaging to the upper body. Prolonged muscle
 tension can also lead to backaches and headaches. Take proper time to unwind before stress builds up to critical
 levels.
- Posture: Our daily activities such as sitting at a desk or in the car for extended periods can produce aches, pains and stiffness for every muscle group. In order to reduce tension it is important to maintain proper posture.
- Muscle Use: We tend to get into habits with which muscles we use on a daily basis. Some get used to the chronic
 stress, while others go unused and lose mass. In order to lessen unexpected muscle pains, try to give each muscle
 group a workout when possible.
- **Duration:** When starting an exercise routine, it is important to know your body's limits. Trying to exercise for too long and exceed your body's ability to adapt to increased muscle demand can result in soreness and injury. It is better to gradually increase the duration of your exercise routine than to do it all in one go.
- Weight: Excess weight can cause stress to your joints and also increases the risk of osteoarthritis. Reducing your
 excess fat around your abdomen can reduce the strain on your joints and relieve the pressure in your lower back
 muscles.

Source: Personal Best Healthlines

UnitedHealthCare Wellness Program

Did you know that UnitedHealthCare, CHI's healthcare provider, has a free Wellness program with many tools and resources for use by CHI employees? To see what kind of services are offered and review these benefits you can log into the Call Henry employee benefits page at:

www.myuhc.com