





### Volume 24 - Number 4

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TOOL BOX: Dell E6530; Lotus WordPro; Adobe Acrobat. IMAGES - Title Banner Wright Flyer from NASA/Ames PAO photo archive; U.S.S. Kitty Hawk (USN CV-63) from navicp.navy.mil; Constitution class cruiser from gwu.edu/~rljones/khawk. IMAGE - Featured Front Page

New color logo for the *Kitty Hawk*.



## A View From the Catbird Seat By J.R. Fisher



August is the month that the ship goes into spacedock for our annual refit and upgrades, so

the crew is on liberty until time to report back the first Saturday in September. Please be extra careful while you are planetside and report back ready for another year of adventure.

I want to thank all hands for their generous donations to Ms. Poole's classes that vou brought to the last meeting in Julv. There may be an amended list in this Wright Stuff of still needed items. If not, anything from the earlier list is still appreciated. [Editor's note: a reprint of Sherry's request from June appears at the end of this month's Catbird.]

I don't believe any of our crew attended the IC this weekend, but I am sure to get lots of reports from some who did. I did watch the opening session on U-tube Friday evening.

There are going to be some changes in cost to renew for Starfleet. There has not been an increase in about 18 years. The new rates will reflect how you wish to receive the CQ, either electronically or printed. I will give you the final decision at the September meeting.

Have a good and safe August.

Esse Quam Videri

The needed items are more definitive this year because we will be receiving "0" supplies from school and/or the PTA.

The things needed are what you would imagine in order for a student to be able to complete various classes:

Middle school

- wide and college ruled notebook paper
- mechanical pencils and lead #7 and #9
- graph paper small and larger grid
- construction paper
- large poster paper mostly white but also other colors if on sale
- pencil pouches these are always on sale somewhere
- erasers for the ends of wooden pencils and the larger, pink erasers for the pouches
- 1- and 3-subject spiral notebooks

Elementary school

- wide notebook paper
- lined paper to practice learning how to write letters
- fat pencils for kindergartners' hands
- colored pencils
- washable markers for drawing
- crayons
- any writing, math, science "learning" workbook you see... anywhere (The booklets I've been picking up are the size of coloring books, somewhat narrow) and have amply opportunities to practice their newly-learned skills.)
- I will need probably 4-5 smaller, brightly-colored, **happy** bookbags for the shoulders of K-3rd grade students...

Every student is going to have a portfolio this year so they can save their work and reflect on it at the end of each semester. I'm going to recycle manila folders, preferably the 3rd-cut. They can be cut apart and the back side with the tab be trimmed to the size of a sheet of notebook paper and 3- hole punched. This is going to be a very important part of everyone becoming organized this coming year, even my kindergartners! I wish someone had shown me how be better organized sooner! This will of course include everyone needing a black or white, insertable, 1" (elementary) / 1-1/2"-2" (middle school) 3-ring binder. I have rounded up 30 already and will need about 15 more.

Teacher wish-list:

- Kleenex, Kleenex, Kleenex
- Antibacterial hand sanitizer for my desk and other places in the classroom. (The kids already come in and automatically clean their hands. The younger students should not be too difficult to train this coming year.)
- Expo dry-erase markers of all colors, especially black
- Printer paper 20# mostly but 22 and 24# also needed for special projects

Any one item is so enormously appreciated and needed. You are all so incredibly helpful in assisting these children as they become more academically successful... AND LEARN ENGLISH!!!

## Computer Operations Report By John Troan

I'll start this month's musings with the first thing everyone saw when reading this month's edition -- the Kitty Hawk's full-color logo. I started with the image that Jane created from JR's hand-drawn original. After cleaning up all the lines, I added the fill colors and experimented to find the right shadings. The biggest challenge was getting the glossy finish on the communicator -- then I found the perfect solution through some Google searching. After combining all the pieces together, we now have the finished model of the new color logo. (The debut is on the Wright Stuff cover, but I'll be sending it to StarFleet and Region I for updating the Kitty *Hawk* listings on those web sites.)

The other big project out of Comp Ops is the on-line archive with all of the newsletters. All the issues have been posted to the *Kitty Hawk*'s web site ---<u>www.jt-sw.com/kittyhawk</u> -- and the chronological listings are complete. I'm still working through how to list the articles in a subject listings. The challenge is how to group all the features by subtopic.

In personal news, I've now completed the first two (of three) Red Hat system admin classes and passed the first (of two) certification tests. I have plans to take the third class and take the second test in September, but haven't yet gotten a confirmation that the class has enough enrolled for it to be held.

A friend of mine was reading the *Houston Chronicle* on-line and found an article he knew would interest me -- a *Trek* fan in the Houston area has purchased and financed the complete restoration of shuttlecraft *Galileo*. The restoration was done at a New Jersey-based ship wright, but the new permanent home is in Space Center Houston. The <u>article in the</u> <u>Chron</u> isn't long, but the pics are great!

Wired magazine has an article about a group using the open source model to design an airplane. The goal is to have a standard design -- available for free -- for a home-built light sport aircraft (LSA) that can hopefully be built for under \$15K. There are already lots of plans for home-built planes, but they all have to be purchased and the planes are usually much more expensive to build. LSA's are light-weight planes -- with limited space, range, and speed -- that largely target pilots who don't want to go through the full training required for any bigger planes. (There is still FAA-mandated training for a sport pilot license.)

## **Security Report** By Spring Brooks

# Where have all the burglars gone?

The rich world is seeing less and less crime, even in the face of high unemployment and economic stagnation.

In the 1990s John Dilulio, a conservative American academic, argued that a new breed of "superpredators", "kids that have absolutely no respect for human life and no sense of future", would the terrorize Americans almost indefinitely. Mr. Dilulio later recanted and it is clear that the pessimists were wrong. Even as he wrote. America's crime wave was breaking. Its cities have become vastly safer, and the rest of the developed world has followed. From Japan to Estonia, property and people are now safer than at almost any time since the 1970s. Confounding expectations, the recession has not interrupted the downward trend. Even as America furiously debates the shooting of Trayvon Martin, new data show that the homicide rate for young Americans is at a 30-year low.

Some crimes have all but died out. Last year there were just 69 armed robberies of banks, building societies and post offices in England and Wales, compared with 500 a year in the 1990s. In 1990 some 147,000 cars were stolen in New York. Last year fewer than 10,000 were. In the Netherlands and Switzerland street dealers and hustlers have been driven out of city centers; addicts there are now elderly men, often alcoholics, living in state hostels. In countries such as Lithuania and Poland the gangsters who trafficked people and drugs in the 1990s have moved into less violent activities such as fraud.

Conservatives who insisted that the decline of the traditional nuclear family and growing ethnic diversity would unleash an unstoppable crime wave have been proved wrong. Left-wingers who argued that crime could never be curbed unless inequality was reduced look just as silly.

There is no single cause of the decline; rather, several have coincided. Western societies are growing older, and most crimes are committed by young men. Policing has improved greatly in recent decades, especially in big cities such as New York and London. with forces usina computers to analyze the incidence of crime: in some parts of Manhattan this helped to reduce the robbery rate by over 95%.

The biggest factor may be simply that security measures have improved. Car immobilizers have killed joyriding; bulletproof screens, security guards and marked money have all but done for bank robbery. Alarms and DNA databases have increased the chance a burglar will be caught. At the same time, the rewards for burglary have fallen because electronic gizmos are so cheap. Even small shops now invest in CCTV cameras and security tags. Some crimes now look very risky—and that matters because, as every survey of criminals shows. the main deterrent to crime is the fear of being caught.

### Loosen the cuffs

Many conservatives will think this list omits the main reason crime has declined: the far harsher prison sentences introduced on both sides of the Atlantic over the past two decades. One in every hundred American adults is now in prison. This has obviously had some effect—a young man in prison cannot steal your car—but if tough prison sentences were the cause, crime would not be falling in the Netherlands and Germany, which have reduced their prison populations. New York's prison population has fallen by a quarter since 1999, yet its crime rate has dropped faster than that of many other cities.

Harsh punishments, and in particular long mandatory sentences for certain crimes, increasingly look counterproductive. American prisons are full of old men, many of whom are well past their criminal years, and non-violent drug users, who would be better off in treatment. In California, the pioneer of mandatory sentencing, more than a fifth of prisoners are over 50. To keep each one inside costs taxpayers \$47,000 a year. And because prison stresses punishment rather than rehabilitation. most of what remains of the crime problem is really a recidivism issue. In England and Wales, for example, the number of first-time offenders has fallen by 44% since 2007. The number with more than 15 convictions has risen.

Politicians seem to have grasped this. In America the of number new mandatory sentences enacted by Congress fallen. Even in has the Republican South, governors such as Rick Perry and Bobby Jindal have adopted policies favoring treatment over imprisonment for drug users. But more could be done to support people when they come out of prison.

Predictive policing, which employs data to try to anticipate crime, is particularly promising. A combination of officers talking to the people of neighborhoods the police and taraetina "hotspots" has has reduced crimes. Example, the area around Canal Street in Manhattan has had the murder rate of 29 per 100,000 residents in 1990 drop to around 1.5 by 2009. This method seems to work in countries as different as Sweden to Trinidad

Some broad social changes have helped. Young people are increasingly sober, well-behaved. better educated and more are still living with their parents. In countries where wife-beating has become more stigmatized self-reported domestic violence has fallen. The end of crack-cocaine epidemic in the 1990s and explosion of heroin use in the 1980's has receded even through hard economic times are back.

The repopulation of inner cities is probably helpful. Gentrifiers set up neighborhood watches, clean-up streets and lobby politicians to take crime more seriously.

Not all crime is falling. Not all sexual offenses are reported. Bank fraud and identify theft has growth potential. Pick-pocking and shoplifting has increased. Hate crimes are on the rise due to scape-goating.

THE ECONOMIST (July 20, 2013)

### *Curiosity* Nearing First Anniversary on Mars From NASA/JPL



[The full version of this press release is available with additional images at <u>http://www.jpl.nasa.gov/</u> <u>news/news.php?release=2013-240&</u> <u>cid=release\_2013-240.</u>]

NASA's *Curiosity* rover will mark one year on Mars next week and has already achieved its main science goal of revealing ancient Mars could have supported life. The mobile laboratory also is guiding designs for future planetary missions.

"Successes of our *Curiosity* -- that dramatic touchdown a year ago and the science findings since then -- advance us toward further exploration, including sending humans to an asteroid and Mars," said NASA Administrator Charles Bolden. "Wheel tracks now, will lead to boot prints later."

After inspiring millions of people worldwide with its successful landing in a crater on the Red Planet on Aug. 5, 2012, PDT (Aug. 6, 2012, EDT), Curiosity has provided more than 190 gigabits of data; returned more than 36.700 full images and 35.000 thumbnail images; fired more than 75,000 laser shots to investigate the composition of targets; collected and analyzed sample material from two rocks; and driven more than one mile (1.6 kilometers).

#### MSL Facts

*Curiosity* team members at NASA's Jet Propulsion Laboratory in Pasadena, Calif., will share remembrances about the dramatic landing night and the overall mission in an event that will air on NASA Television and the agency's website from 7:45 to 9 a.m. PDT (10:45 a.m. to noon EDT) on Tuesday, Aug. 6. Immediately following that program, from 9 a.m. to 10:30 a.m. (noon to 1:30 p.m.), NASA TV will carry a live public event from NASA Headquarters in Washington. That event will feature

NASA officials and crew members aboard the International Space Station as they observe the rover anniversary and discuss how its activities and other robotic projects are helping prepare for a human mission to Mars and an asteroid. Social media followers may submit questions on Twitter and Google+ in advance and during the event using the hashtag #askNASA.

*Curiosity*, which is the size of a car, traveled 764 yards (699 meters) in the past four weeks since leaving a group of science targets where it worked for more than six months. The rover is making its way to the base of Mount Sharp, where it will investigate lower layers of a mountain that rises three miles from the floor of the crater.

NASA's *Mars Science Laboratory* spacecraft and its unprecedented sky crane landing system placed *Curiosity* on Mars near the base of Mount Sharp. The mountain has exposed geological layers, including ones identified by Mars orbiters as originating in a wet environment. The rover landed about one mile (1.6 kilometers) from the center of that carefully chosen, 12-mile-long (20-kilometer-long) target area.

Scientists decided first to investigate closer outcrops where the mission quickly found signs of vigorous ancient stream flow. These were the first streambed pebble deposits ever examined up close on Mars.

Evidence of a past environment well suited to support microbial life came within the first eight months of the 23-month primary mission from analysis of the first sample material ever collected by drilling into a rock on Mars.

"We now know Mars offered favorable conditions for microbial life billions of years ago," said the mission's project scientist, John Grotzinger of the California Institute of Technology in Pasadena. "It has been gratifying to succeed, but that has also whetted our appetites to learn more. We hope those enticing layers at Mount Sharp will preserve a broad diversity of other environmental conditions that could have affected habitability."

The mission measured natural radiation levels on the trip to Mars and is monitoring radiation and weather on the surface of Mars, which will be helpful for designing future human missions to the planet. The *Curiosity* mission also found evidence Mars lost most of its original atmosphere through processes that occurred at the top of the atmosphere. NASA's next mission to Mars, *Mars Atmosphere and Volatile Evolution (MAVEN)*, is being prepared for launch in November to study those processes in the upper atmosphere.

JPL, a division of the California Institute of Technology, Pasadena, manages the *Curiosity* mission and built the rover for NASA's Science Mission Directorate in Washington.

To follow the conversation online about *Curiosity*'s first year on Mars, use hashtag #1YearOnMars or follow @NASA and @MarsCuriosity on Twitter.

For NASA TV streaming video, schedule and downlink information, visit <u>http://www.nasa.gov/ntv</u>. The events airing on Tuesday also will be carried on Ustream at <u>http://www.ustream.</u>tv/nasajpl.

A movie made with Hazard-Avoidance Camera images from *Curiosity*'s first year, titled "Twelve Months in Two Minutes," is available at http://mars.nasa.gov/msl/1yearin2mins.

For more information about the mission, visit <u>http://www.nasa.gov/msl</u> and <u>http://mars.jpl.nasa.gov/msl</u>.

## *Spitzer* Discovers Young Stars with a "Hula Hoop" From NASA/JPL

[The full version of this press release is available with additional images at <u>http://www.jpl.nasa.gov</u> /news/news.php?release=2013-236&cid=release\_2013-236.]

Astronomers using NASA's *Spitzer Space Telescope* have spotted a young stellar system that "blinks" every 93 days. Called YLW 16A, the system likely consists of three developing stars, two of which are surrounded by a disk of material left over from the star-formation process.

As the two inner stars whirl around each other. thev periodically peek out from the disk that girds them like a hula hoop. The hoop itself appears to be misaligned from the central star pair, probably due to the disrupting gravitational presence of the third star orbiting at the periphery of the system. The whole system cycles through bright and faint phases, with the central stars playing a sort of cosmic peek-a-boo as the tilted disk twirls around them. It is believed that this disk should go

on to spawn planets and the other celestial bodies that make up a solar system.

Spitzer observed infrared light from YLW 16A, emitted by the warmed gas and dust in the disk that still swathes the young stars. Other observations came from the ground-2MASS based survey, as well the from as

NACO instrument at the European Southern Observatory's Very Large Telescope in Chile.

YLW 16A is the fourth example of a star system known to blink in such a manner, and the second in the same star-forming region Rho Ophiuchus. The finding suggests that these systems might be more common than once thought. Blinking star systems with warped disks offer scientists a way to study how planets form in these environments. The planets can orbit one or both of the stars in the binary star system. The famous science fictional planet Tatooine in "Star Wars" orbits two stars, hence its double sunsets. Such worlds are referred to as circumbinary planets. Astronomers can record how light is absorbed by planet-forming disks during the bright and faint phases of blinking stellar systems, which in turn reveals information about the materials that comprise the disk.

"These blinking systems offer natural probes of the binary and circumbinary planet formation process," said Peter Plavchan, a scientist at the NASA Exoplanet Science Institute and Infrared Processing and Analysis Center at Institute the California of Technology, Pasadena, Calif., and lead author of a new paper accepted for publication in Astronomy & Astrophysics.

NASA's Jet Propulsion Laboratory, Pasadena, Calif., manages the Spitzer Space Telescope mission for NASA's Science Mission Directorate. Washington. Science operations are conducted at the Spitzer Science Center at Caltech. Data are archived at the Infrared Science Archive housed at the Infrared Processing and Analysis Center. Caltech manages JPL for NASA. For more information about Spitzer. visit http://spitzer. caltech.edu and http://www.nasa. gov/spitzer.



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## NASA's SLS Completes Preliminary Design Review From NASA

NASA has achieved a major milestone in its effort to build the nation's next heavy-lift launch vehicle by successfully completing the Space Launch System (SLS) preliminary design review.

Senior experts and engineers from across the agency concluded Wednesday the design, associated production and ground support plans for the SLS heavy-lift rocket are technically and programmatically capable of fulfilling the launch vehicle's mission objectives. NASA is developing the SLS and Orion spacecraft to provide an entirely capability new for human exploration beyond low-Earth orbit, with the flexibility to launch spacecraft for crew and cargo missions, including to an asteroid and Mars.

"The review had to be incredibly detailed, so our plans vehicle integration, fliaht for software, test, verification and operations will result in a safe, affordable and sustainable vehicle design," said Todd May, manager of the SLS Program at NASA's Marshall Space Flight Center in Huntsville, Ala.

This review concludes the design and technology initial development phase. The next milestone in the continuing process verification is Kev Decision Point-C, in which NASA will grant the program authority to from formulation move to implementation.

"The agency not only reviews the program internally, but also seeks help from many external sources," said LeRoy Cain, head

independent of the standing review board for SLS. "There are external NASA several stakeholders and organizations -including Congress, the Office of Management and Budget, and the public -- who require a thorough, truly independent look at these programs as they transition through their lifecycle."

People from across the country, including experts on 11 different review teams. participated in the design review process, which included analysis of approximately 200 documents and 15 terabytes of data. NASA's industry partners -- The Boeing Company of Chicago, ATK of Brigham City, Utah, and Aerojet Rocketdyne of Sacramento, Calif. also contributed this --to successful checkpoint, and will

continue to work to meet all program milestones.

In July 2012, the SLS Program completed а combined system requirements review and system definition review. which set requirements of the overall launch vehicle system. That successful completion confirmed the SLS was ready to move from concept to design. element-level All preliminary design reviews for the SLS core stage, boosters, engines and spacecraft and payload integration



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have been completed successfully.

"In two short years from the first announcement of the Space Launch System, we are at a milestone that validates the detailed design and integration of the system," said Dan Dumbacher, deputy associate administrator for the Human Exploration and Operations Mission Directorate. "You can feel the momentum of the workforce as we produce test hardware today. We are creating a national capability, and we will get this country, and the world. exploring deep space."

The initial 70-metric-ton version of SLS will stand 321 feet tall, provide 8.4 million pounds of thrust at liftoff, and carry 154,000 pounds of payload. The rocket is scheduled for its first mission. Exploration Mission 1, in 2017 at which time it will launch an uncrewed Orion spacecraft. The mission's goal is to demonstrate the integrated system performance of the SLS rocket and spacecraft before a crewed flight in 2021.

The SLS will be modified from the 70-metric-ton version into the most powerful rocket ever built, a 130-metric-ton version, which will be capable of lifting 286,000 pounds. NASA plans to engage industry peers to further refine the 130-metric-ton design to support any destination, any payload and any mission to deep space.

For more information on the SLS preliminary design review, visit <u>http://go.nasa.gov/17m4zFe</u>.

For more information on SLS, visit <u>http://www.nasa.gov/sls</u>.

## Tenth Parachute Test For NASA's Orion Adds 10,000 Feet of Success From NASA

A complicated, high-altitude test Wednesday demonstrated NASA's new Orion spacecraft could land safely even if one of its parachutes failed.

The 10th in a series of evaluations to check out the Orion multipurpose crew vehicle's parachute system dropped the test capsule from a C-17 aircraft at its highest altitude yet, 35,000 feet above the Arizona desert. One of three massive main parachutes was cut away early on purpose, leaving the spacecraft to land with only two. The test at the U.S. Armv's Yuma Provina Ground was the highest-altitude test of a human spacecraft parachute since NASA's Apollo Program.

During previous tests, a mock capsule was dropped from a height of 25,000 feet and the parachutes deployed at no higher than 22,000 feet. The extra 10,000 feet of altitude at the beginning of Wednesday's test made the demonstration the best so far of Orion's parachute flight and landing.

"The closer we can get to actual flight conditions, the more confidence we gain in the system," said Chris Johnson, project manager for the Orion capsule parachute assembly system at NASA's Johnson Space Center in Houston. "What we saw today --

other than the failures we put in on purpose -- is very similar to what Orion will look like coming back during Exploration Flight Test-1's Earth entry next year."

During its return from space, Orion's parachute system will begin to deploy 25,000 feet above the ground.

Engineers gathered data on the effects of losing a parachute during the descent. The team already proved Orion can land with just two of its three main parachutes, but this was the first opportunity to study how one parachute pulling away in mid-flight might affect the remaining two.

"We wanted to know what would happen if a cable got hooked around a sharp edge and snapped off when the parachutes deployed," said Stu McClung, Orion's landing and recovery system manager at Johnson. "We don't think that would ever happen, but if it did, would it cause other failures? We want to know everything that could possibly go wrong, so that we can fix it before it does."

The test was part of a series of parachute tests that will enable NASA to certify Orion to carry humans into space. The system already has met the necessary requirements for Orion's first mission, Exploration Flight Test-1 (EFT-1), in September 2014. During that flight, Orion will travel 3,600 miles into orbit then return to Earth at speeds as fast as 20,000 mph. putting the parachute system to the test again as it lands in the Pacific Ocean.

For more information about Orion, visit <u>http://www.nasa.</u>gov/orion.



### Voyager - *The Seven* By Brad McDonald

#### ACT THREE

FADE IN:

EXT. SPACE - VOYAGER

Voyager is motionless in space.

INT. VOYAGER - BRIDGE

The Doctor is working at a console, trying to reactivate the shields. He is upset and frustrated and his patience are running thin.

### DOCTOR

All I have to do is initiate the bypass circuits and test them. The shields should work, so what am I doing wrong?

He strikes his fist against the console.

DOCTOR Computer? State the steps necessary to restore the ship's shields.

COMPUTER All repairs are complete. Shields are ready.

The Doctor is still frustrated.

DOCTOR So all I have to do is turn them on?

#### COMPUTER Correct.

He gazes at the vast controls and becomes exasperated.

DOCTOR Exactly how do I do that?

#### COMPUTER

Raise shields by doing any of the following: Ops panel, control G 15, alter power levels from zero to one hundred per cent. Security panel, control--

The Doctor is getting more confused and flustered.

DOCTOR Wait, wait! Ops panel, control G 15, alter from zero to one hundred per cent?

COMPUTER Correct. This will establish the ship's shields.

He hurries to Ops, reciting the steps silently to himself. He activates the panel, very carefully and deliberately.

> DOCTOR There, that should do it. Computer, are shields up?

COMPUTER Affirmative, shields at one hundred per cent.

Satisfied and relieved, he sits hard in a nearby chair.

DOCTOR Finally. If all of the ship's systems are this difficult, I'm going to have a hard time taking control and retrieving the crew.

He is reminded of something and stands abruptly.

DOCTOR (continuing) That's it, a crew. I am going to create a crew, from me.

Then he remembers something else.

DOCTOR (continuing) But I'm not sure how to do that.

#### SICK BAY

The Doctor is collecting various tricorders and instruments.

DOCTOR Now, I'm ready, I think. Computer, display Emergency medical hologram program.

COMPUTER Program displayed.

#### NEW ANGLE - ON DISPLAY

He studies the display for a moment.

DOCTOR Computer, is it possible to duplicate the emergency holographic program?

COMPUTER Affirmative.

DOCTOR Will there be a degradation of the original program?

COMPUTER Negative, however, the duplicate program will experience a twelve per cent degradation.

The statement catches Doctor by surprise.

#### DOCTOR

Meaning each duplicate will be equally imperfect on an equal basis or that the degradation will be compounded with each duplicate.

COMPUTER Degradation will be equal.

#### DOCTOR

Display process to duplicate the EMH program.

#### ANGLE ON MAIN VIEWER

The screen is filled with an elaborate, step by step outline.

DOCTOR Oh dear, this isn't going to be as easy as I thought.

#### SEVENTH PLANET

In a Spartan, poorly lit room, Janeway comes to slowly. She surveys her surroundings, there are several discarded items, some familiar, others alien. She taps her comm badge.

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#### JANEWAY Janeway to Voyager.

balleway to voyagel.

After a brief pause, she tries again.

JANEWAY (continuing) Janeway to Voyager. Janeway to Chakotay. Janeway to anyone.

Frustrated and angry, she inspects the discarded items. There are Starfleet tunics, alien clothing and unfamiliar devices. She is startled by a noise and a doorway opens. She goes to it just as Chakotay, Seven, Paris and Kim enter. She is relieved to see they are well. They all look weary and haggard.

> JANEWAY Chakotay! Tom, Harry, Seven.

She looks around as the door closes.

JANEWAY (continuing) Where are the others?

Chakotay is following her voice as his eyes adjust to the light.

CHAKOTAY Captain! Are you well?

She approaches them.

JANEWAY Report. What's going on here? Where's the rest of the crew?

CHAKOTAY We've been taken as laborers for mining and field work. The crew is divided into various groups and put into these holding cells when not working. No more than ten in any group. I'd like to say I'm happy to see you, but we were hoping you'd be in the process of rescuing us.

JANEWAY I was, until I was grabbed. Who's behind this?

SEVEN Unknown. We have yet to see our captors. I checked with the other groups, they are equally uninformed.

PARIS Where you taken from the shuttle?

#### JANEWAY

No. I had returned to Voyager and found an empty ship. If they're after Voyager, it won't be any use to them. I initiated a command lock out.

Kim is a bit hesitant.

KIM So even if we escape, you'll need to be there too.

JANEWAY Afraid I won't make it, Ensign?

Kim is embarrassed and the others are amused by his obvious discomfort.

### JANEWAY

(continuing) Relax Harry, I won't take it personally. Doc is still aboard and he has access. In fact we had just repaired the shields and I was going to start assembling a crew when I was kidnapped.

CHAKOTAY Assembling a crew?

JANEWAY I was going to duplicate Doc.

Everyone reacts at the thought.

PARIS Multiple EMH's?

KIM (excited) Sure, why not? Conceivably you could create an entire crew.

JANEWAY And program each one with basic skills in a variety of fields.

#### SEVEN

Question is, will the Doctor be able to accomplish the work?

CHAKOTAY Had you begun the process?

#### JANEWAY

No. I was just explaining my plan when... I found myself here.

She rubs the back of her head.

### JANEWAY

(continuing) I take it I've been out for a while.

#### CHAKOTAY

Difficult to tell, we were only here for a short time until duty assignments were handed out.

After a brief moment of silence:

#### PARIS

Can the Doctor help us?

#### JANEWAY

I'm optimistic. Remember, he's shown himself to be very resourceful on several occasions. However, we should pursue an escape plan, just in case. Now, what else have you learned since being here?

EXT. SPACE - VOYAGER AND QUAD STAR

INT. VOYAGER - SICKBAY

The Doctor is standing at the display, reading the directions and muttering to himself.

#### DOCTOR

I doubt Doctor Frankenstein had as much trouble as I am having right now. Computer, have I completed the process for creating a duplicate EMH?

### COMPUTER

Step twelve was bypassed. You must return to step eleven and restart process of pattern duplication before initializing the --

Doctor becomes annoyed.

DOCTOR Wait! I skipped step twelve?

COMPUTER Affirmative.

DOCTOR Great. This makes the seventh try.

He steps back exasperated.

DOCTOR (continuing) Why don't you just do it for me?

COMPUTER Acknowledged. Duplicate process complete.

He is stunned by the computer's compliance and the realization of his own 'stupidity'.

DOCTOR 2'S VOICE (o.c.) State the nature of your medical emergency.

He turns quickly to see the duplicate and is pleased.

DOCTOR Well, that wasn't so bad after all.

Doctor 2 stares at the original.

DOCTOR 2 Is this a technical malfunction?

Doctor explains with pride and a bit of self importance.

DOCTOR Actually, I've created you to assist me with running the ship.

DOCTOR 2 I'm a doctor, not an officer of the line.

Doctor realizes his error and is taken down a peg.

DOCTOR I'm afraid that's my fault. I should have preprogrammed you with additional skills.

DOCTOR 2 How marvelous, I'm inadequate before I can even begin my duties.

Doctor's ego is slightly bruised but he recovers.

DOCTOR No problem. Since I will be in command, you can be my replacement in sickbay.

DOCTOR 2 Great, a hologram with a God complex.

Doctor gives him a harsh stare then turns away from him.

DOCTOR Computer, the next duplicate will require additional skills.

He picks up one of the data padds and taps a few controls.

DOCTOR (continuing) Please use the information from this padd to program basic engineering skills into duplicate number two.

COMPUTER Understood. Duplicate will be ready in sixty seconds.

Doctor is very pleased with himself once again.

DOCTOR Excellent. This won't be difficult at all.

He begins to gather all of his padds and tricorders.

DOCTOR 2 Isn't this just lovely. How many of us do you plan on creating?

DOCTOR Six duplicates, seven all together.

Doctor 2 looks around sickbay.

DOCTOR 2 Won't it get a bit crowded in here? Doctor is busy and only half listening.

DOCTOR

Not at all. Most of us will be on the bridge, only you will remain here.

#### DOCTOR 2

Oh really? And how will we do that? Once our 'brothers' exit sickbay, they will cease to exist.

Doctor turns quickly. Realization has hit him and he stares at Doctor 2's arm.

DOCTOR You don't have the mobile emitter!

DOCTOR 2 The emitter? Of course not! It's not a hologram and therefore not part of the hologram program.

Now Doctor is really concerned.

DOCTOR There are only a few emitters built into the ship. That will severely limit the duplicates' movement. If the ship should require repairs, or if we need to transport anywhere --

DOCTOR 2 I'd say we were in trouble.

Doctor is totally devastated.

Off his reaction...

FADE OUT.

#### END OF ACT THREE

THE WRIGHT STUFF

## Puzzle - ST:DS9 Crossword From U.S.S. Kitty Hawk Puzzle Book



### ACROSS

- 1. Name of the space station near Bajor
- 2. Federation enemy at Wolf 359
- 3. Type of disturbance heralding the wormhole
- 6. Commander of #1 Across
- 8. A person's life force
- 10. Walls, floor, and ceiling
- 11. Wormhole is claimed by
- 15. Constable of #1 Across
- 17. Ferengi saloon owner
- 18. Title of Bajor religious leader
- 19. Quadros \_\_\_\_\_ probe
- 20. Quadrant at the other end of wormhole
- 22. #26 Down is this species
- 25. Optical Data Network
- 27. #17 Across is this species
- 29. Name of a runabout

### **DOWN**

- 1. \_\_\_\_\_ asteroid belt
- 2. Dr. Julian \_\_\_\_\_
- 4. Linear \_\_\_\_
- 5. Bajoran religious artifact
- 6. #6 Across' ship at Wolf 359
- 7. Bajor religious leader's name (in series premier)
- 9. Cardassian title
- 12. First name of son of #6 Across
- 13. Keiko O'Brien's mother lives here
- 14. Utopia \_\_\_\_\_ shipyards
- 16. Chief of Operations
- 21. Keiko's husband
- 23. Major \_\_\_\_\_ Nerys
- 24. Sisko's pet name for Jadzia "Old \_\_\_\_\_"
- 26. Lt. Jadzia \_\_\_\_
- 28. Nephew of #17 Across

THE WRIGHT STUFF

# Upcoming Events

Sep	7	<b>4 p.m. Ship Meeting, Triangle Factory Outlet</b> (Bring school supplies for Sherry - see JR's article for details)
Oct	5	4 p.m. Ship Meeting, Triangle Factory Outlet
	12	Articles Due for Wright Stuff

### **DON'T FORGET TO CHECK YOUR STARFLEET STATUS**

*THE WRIGHT STUFF* U.S.S. KITTY HAWK 5017 Glen Forest Dr. RALEIGH NC 27612