



Photos by Angela Elbern

A pilot shows Mary Walker, Air Force General Counsel, the C-17 fight simulator during her visit here. The state-of-the-art simulator is more than two stories high and equipped to move one meter per second with a maximum of 60 inches. The simulator uses an electronic motion system to emulate the motions of the aircraft.

C-17 Globemaster III

Minus “pucker factor” simulator has all

By **Kirsten Tacker**
Kukini Photojournalist

Overflowing with computerized training modules capable of imitating every possible runway including feeling its terrain, Hickam’s state-of-the-art \$15 million, 27,000-pound C-17 simulator is more than two stories high and equipped to move one meter per second with a maximum of 60 inches.

This simulator is so advanced that it uses an electronic motion system rather than hydraulics to emulate the six basic motions of heave, sway, pitch, roll, slip and yaw, all of which an aircraft and its crew might experience.

“When we sit here and train people on the simulator, the only thing we are using is electricity to run it,” said Kent Flom, Hickam lead loadmaster instructor. “If they have any problems here, they are not going to ruin a \$165 million airplane.”

The cost of an airplane is only one aspect, because using the simulator saves on fuel since an airplane burns 20,000 pounds of gas in the first hour and 15,000 pounds every hour after that, according to Mr. Flom.

Training on the simulator for the loadmasters and pilots generates many possibilities.

“The simulator is about 98 percent of exactly what the C-17 can do,” said Mr. Flom. “When the pilots are training in the simulator, we can create emergency procedures by knocking out their engines, hydraulic systems and landing gear as well as shoot missiles.”

Pilots are required to complete a two-phase training session each quarter with both days being scenario based. Each quarter the sce-

narios changes and are unique.

“The first day of that phase generally deals with a mission that highlights instrument, emergency, start and cold weather procedures,” said Mike Phee, Hickam pilot instructor. Pilots face scenarios in day one including equipment malfunctions, problems with the flying instruments, visual patterns and heavyweight assault landings. Most things pilots face in the air can be practiced in the simulator.

“Now the reality of it is there is nothing like flying an actual assault landing,” said Mr. Phee. “This means landing on a narrow runway only 90 feet wide and it can be a landing distance of 500 feet long. To land on a very short runway surrounded by dirt and trees and land on that for real, versus doing it in the simulator you need to have that pucker factor.”

On the simulator if a pilot goes off the runway, Mr. Phee talks about what went wrong and practices it again with his students. They practice it until it is done correctly.

During the training, the instructor can also manipulate the computer to produce not only different runways shown on the Mylar concave mirrors that surround the cockpit simulator, but various surroundings as well.

“We put in different locations like Bagram, Baghdad or Afghanistan, so when the aircrew actually go there they know the visuals,” said Mr. Flom. “Everything is done on digital satellite imagery with computers and it is set to a one-pixel system.”

At the end of this month a new system will be attempted, by linking with Altus Air Force Base, Okla., and McChord Air Force Base, Wash. to do formation

flights and airdrop missions.

“For those crews who are airdrop qualified, they actually go on airdrop missions and fly in formation and low-level formation around hills,” said Mr. Phee. “In real life you actually need to go out and do those things and need to be out there with the other airplanes to experience it fully.”

As part of the required four phases of training, in one of the phases the simulator highlights coordination between the cockpit and the loadmaster.

“The crew works as a crew,” said Mr. Phee. “In our simulator here we can actually link the two sides, so one side can communicate with the other and run through their checklist.”

The loadmaster does all the weight and balance for the aircraft. Loadmasters supervise on-loading and off-loading, monitors the electrical and hydraulic systems, smoke detectors and help out the pilots.

“If we do have an emergency, one pilot controls the airplane and the other pilot makes the calls to air traffic control,” said Mr. Flom. “The loadmaster backs him up and makes sure everyone is following the checklist correctly.”

“A great deal of the aircrew’s training is now done in the simulator,” said Mr. Phee. “That saves a lot of airplane time, which only has so much service life to it. Airplanes suffer metal fatigue on the wings and there is damage to the engine each time you use it, consistent with normal wear and tear.”

The precision and resolution in the simulator endowed with at least 500 aircraft malfunctions is so comprehensive it gives an aircrew the opportunity to digitally and visually prepare for any mission.



Pilots enter the simulator for training. The simulator not only provides training to pilots but also loadmasters and other aircrew.

Crossword Puzzle: Hispanic American Heritage

By Capt. Tony Wickman
71st Flying Training Wing
Public Affairs

ACROSS

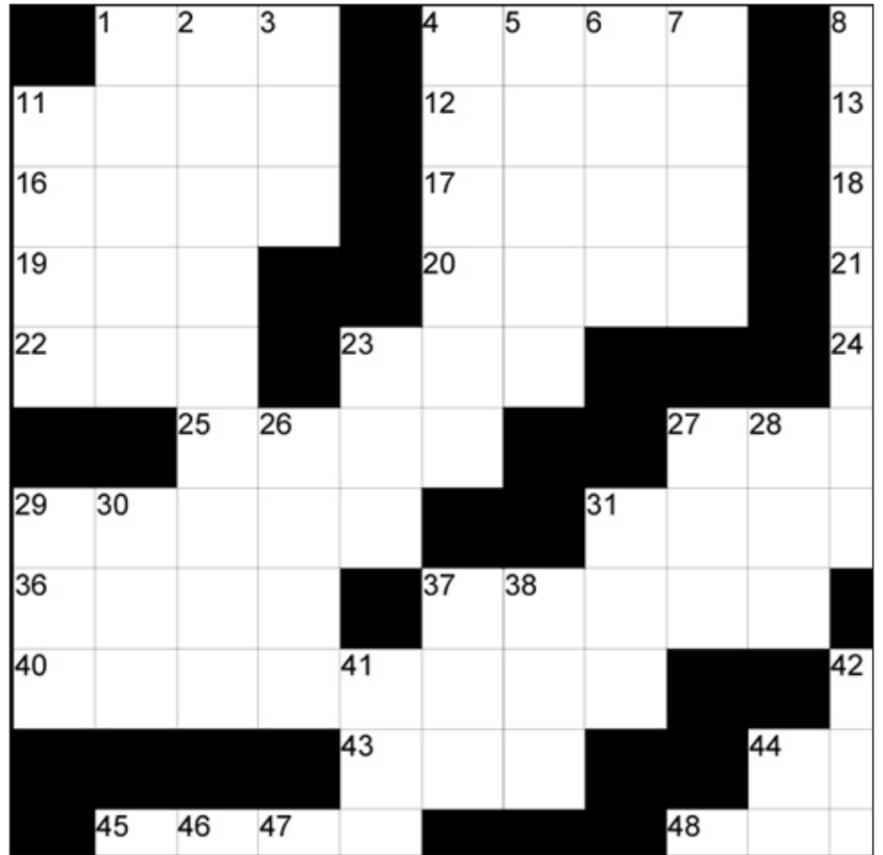
- 1. Imitate
- 4. Performs
- 8. US cryptological org.
- 11. Carry
- 12. ___ Croft: Tomb Raider
- 13. Dr. Ellen ___; first female Hispanic astronaut
- 16. Taj Mahal site
- 17. Middle Eastern country
- 18. Swerves
- 19. US spy org.
- 20. PACAF exercise ___ Thunder
- 21. Legislate
- 22. Query
- 23. Snakelike fish
- 24. Queen of Sparta, mother to Helen
- 25. Singer Fitzgerald
- 27. State home to Dover AFB
- 29. Fencing swords
- 31. Maria ___; Hispanic-American journalist on NPR and CNN
- 36. Gary ___; Hispanic-American writer known for children books
- 37. Edward James ___; Emmy-winning Mexican-American actor
- 39. Musical instrument

- 40. Henry ___; Hispanic-American appointed as HUD Secretary
- 42. Ledge
- 43. Place
- 44. Heal
- 45. Helper, in brief
- 48. Glum
- 49. Bond writer Fleming
- 52. Ice or roller
- 53. Duo
- 55. Before, poetically
- 56. Steamed rice dish
- 57. Crest
- 58. ___ and the King
- 59. Rudolfo ___; award-winning Chicano writer
- 60. Fe on periodic table
- 61. Healed wound
- 62. Mil. telephone system
- 63. Night time host
- 64. Candy type

DOWN

- 1. USN ship defense system
- 2. Small slender parrots
- 3. Period
- 4. Dr. Victor ___; Hispanic-American humanist, educator
- 5. Actress Burnett
- 6. Snare
- 7. Rational
- 8. First Hispanic person and first woman to be Surgeon General
- 9. Locale
- 10. Leading the race

- 11. Spec 4 John ___; Medal of Honor Recipient (1970)
- 14. Killer whale
- 15. Standard time in ninth time zone west of Greenwich, in brief
- 23. Golfer Ernie
- 26. Tania ___; Cuban-American conductor, composer, music director
- 27. Classic rock singer Ronnie James ___
- 28. USN rank
- 29. Keyboard key
- 30. Hawaiian food made from taro
- 31. Beginning of UK naval ships
- 32. ___ Ruiz; first-ever Hispanic heavyweight champ
- 33. Compliance
- 34. Old French coin worth 12 deniers
- 35. USAF deployment set
- 37. Mining goal
- 38. One's fortune in life; fate
- 41. Gloria ___; Grammy Award-winning Cuban-American singer
- 42. Embroider
- 44. Arturo ___; business man and MLB's first-ever minority team
- 45. Comparable
- 46. Dish before dinner
- 47. Stops



- 48. Jose ___; Hispanic-American dancer, choreographer, teacher
- 50. Famous Cuban-American band leader and actor
- 51. Close
- 52. Health resort
- 53. Beach item
- 54. Farm measurement
- 58. Cleo killer

See SOLUTION, B3

CHAPEL

Editor's note: For more information on Base Chapel services or for prayer requests call the Chapel Center at 449-1754 or Nelles Chapel at 449-6562.

PROTESTANT

Nelles Chapel
Sunday Contemporary Service 8:30 a.m.
Sunday Gospel Worship 11:15 a.m.
Sunday Praise Gathering

5:30 p.m.
Chapel Center
Sunday Traditional 8:30 a.m.

JEWISH

Aloha Jewish Chapel,
Pearl Harbor – 473-0050

Jewish Lay Leader Mr. David Bender 527-5877
Naval Station Chapel – 473-3971

CATHOLIC

Nelles Chapel

Weekday Mass 11:30 a.m.
Saturday Confessions 4:15 p.m.
Saturday Mass 5 p.m.
Chapel Center
Sunday Mass 10 a.m.

BUDDHIST

Honpa Hongwanji Hawaii
Betsuin A Shin Buddhist Temple – 536-7044

ORTHODOX

For more information, call 438-6687

ISLAMIC

Friday Congregational Service
(1935 Aleo Place, Punahou) 1 p.m.
Muslim Association of Hawaii 947-6263

AT THE MOVIES

Memorial Theater 448-2297 • CLOSED Monday and Tuesday

Today and Wednesday, 7 p.m.

Material Girls – Ava and Tanzie Marchetta have it all. The heiresses to a multi-million dollar cosmetics company, the girls approach life as on big party. But when a scandal involving one of their product emerges, the girls are left penniless, homeless, and seemingly helpless. They could, of course, take the easy way out and listen to the board of directors who want to sell the company to their biggest competitor, but that would forever taint the name of their late father, who built it from the ground up. Starring Hillary Duff and Haylie Duff. Rated PG for language and some rude humor.



Saturday and Sunday, 7 p.m.

World Trade Center – In the aftermath of the World Trade Center disaster, hope is still alive. Refusing to bow down to terrorism, rescuers and family of the victims

press forward. Their mission of rescue and recovery is driven by the faith that under each piece of rubble, a co-worker, a friend, a family member may be found. This is the true story of John McLoughlin and William J. Jimeno, the last two survivors extracted from Ground Zero and the rescuers who never gave up. It's a story of the true heroes of the fateful time in the history of the United States when buildings would fall and heroes would rise, literally from the ashes to inspire the entire human race. Starring Nicholas Cage and Michael Pena. Rated PG-13 for intense and emotion content, some disturbing images and language.

Thursday, 7 p.m.

Crossover – Noah Cruise, a naturally talented basketball player, is determined to become a doctor using his basketball scholarship to UCLA pre-med, rather than succumbing to the lure of a former sports agent Vaughn, and his push for Noah to go for the NBA. Noah's best friend, Tech, the buddy that covered for him and did time for an assault charge, is also an outstanding basketball player, but has less lofty ambitions – he wants to get his GED and win an underground street ball game against an arrogant rival. Starring Anthony Mackie and Shellie Boone. Rated PG-13 for sexual content and some language.

SUDOKU

Puzzle created by Staff Sgt. Sarah Kinsman
For solution, see SUDOKU, B4

3	1			9			4	
	5		8		3	2		7
					4			
				1				
1		3			2	5	8	6
8		7	6					
			7		6	1		2
5			4					
2		8		3			6	4

SOLUTION, From B2

A	P	E	A	C	T	S	N	S	A			
B	E	A	R	L	A	R	O	C	H	O	A	
A	G	R	A	I	R	A	N	V	E	E	R	S
C	I	A	C	O	P	E	E	N	A	C	T	
A	S	K	E	E	L	L	E	D	A			
E	L	L	A	D	E	L						
E	P	E	E	S	H	I	N	O	J	O	S	A
S	O	T	O	O	L	M	O	S	O	B	O	E
C	I	S	N	E	R	O	S	S	H	E	L	F
S	E	T	M	E	N	D						
A	S	S	T	L	O	W	I	A	N			
S	K	A	T	E	P	A	I	R	E	R		
P	I	L	A	F	A	C	M	E	A	N	N	A
A	N	A	Y	A	I	R	O	N	S	C	A	R
D	S	N	L	E	N	O	P	E	Z			

Can a male spouse PCS?

Jenny

YOU'RE THE SPOUSE? YES

YOU PCSed ALL BY YOURSELF? THAT'S AMAZING!

WELL, THIS BRINGS UP ALL KINDS OF QUESTIONS! WHAT ABOUT THE KIDS, THE PAPERWORK, THE HOUSING...???

IT'S NO BIG DEAL...

I ALWAYS HAVE THE MOVERS UNPACK THE TOYS FIRST SO THE KIDS CAN SAFELY PLAY WHILE I'M BUSY... I PRE-ENROLL THEM AT THE LOCAL SCHOOLS, HAND-CARRY A COPY OF ALL MEDICAL RECORDS, APPLY FOR HOUSING USING MY POA, PLUS I START HOUSE-HUNTING AT LEAST THIRTY DAYS OUT IN CASE THE BASE HAS NOTHING AVAILABLE.

THOSE ARE THE SAME THINGS YOU DO, RIGHT?

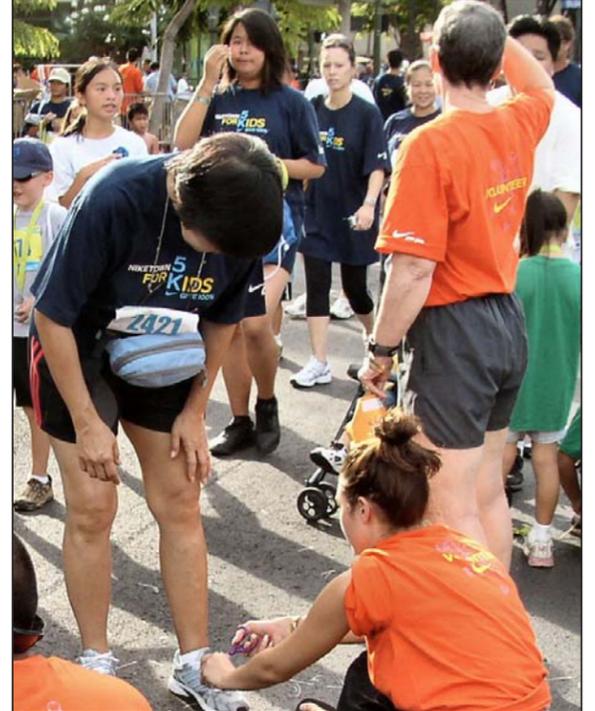
ABSOLUTELY! OF COURSE! EVERY TIME!

JENNY, HAVE WE "HELPED" ENOUGH? DEFINITELY!

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A comic strip about life as a military spouse. Copyright Julie L. Negron

Niketown race



Runners head for the starting line during the Niketown 5K race in Fort DeRussy Park Saturday. More than 8,000 runners participated. Team Hickam volunteers came out to help support the event.

Photos by Walter Kalohi

SPORTS SHORTS

Personal trainer certification – Share the gift of fitness with others by becoming an Aerobics and Fitness Association of America certified personal trainer. This Personal Trainer Certification course begins today from 1 to 9:30 p.m. and continues Saturday and Sunday from 8 a.m. to 6 p.m. Tuition is \$329.25 and up to \$199 may be covered by tuition assistance. To register, call the provider at 1-877-968-7263. For more information about the class, call the Fitness center at 448-2214.

Mixed couples tournament – Find a partner with drive and enter the mixed

couples tournament at Mamala Bay Golf Course Sunday. Second round times will be used beginning at 11:45 a.m. It's an 18-hole event with multiple formats. The entry fee is \$15 plus daily green and cart fees. Sign up at the Pro Shop. For more information, call 449-6490.

Volksmarch 5K/10K/20K run-walk and 300m swim – The Volksmarch 5K/10K/20K run-walk and 300 meter swim is a base-wide event Monday. There are staggered race start times between 8 and 10:30 a.m. Pre-registration continues at the Hickam Harbor Office through Sunday with a \$10

entry fee. Event day registration will be from 6:30 to 7:30 a.m. at the Foster Point Pavilion with an entry fee of \$15. For more information, call outdoor recreation at 449-5215.

Football Frenzy – Football Frenzy has made a touchdown at J.R. Rockers at the Enlisted Club. Club Members of all ranks can fill out an entry form for a chance to win a trip to the Super Bowl. Sunday games will be shown at 7 a.m., 10:15 a.m. and 2:15 p.m. Monday games are at 1 p.m. and 4:15 p.m. For more information, call 448-2271.

SUDOKU, From B4

3	1	6	2	9	7	8	4	5
4	5	9	8	6	3	2	1	7
7	8	2	1	5	4	6	9	3
6	2	5	3	1	8	4	7	9
1	4	3	9	7	2	5	8	6
8	9	7	6	4	5	3	2	1
9	3	4	7	8	6	1	5	2
5	6	1	4	2	9	7	3	8
2	7	8	5	3	1	9	6	4



Photo by Angela Elbern

Trisha Groenheim, spinning instructor, leads students through a spinning class at the spinning center here. Spinning can help people get in shape regardless of their individual fitness level. The sport provides a low-impact way for people to get their heart rate up and burn as many as 800 calories in an hour.

Spinning sculpts the body

By Kirsten Tacker
Kukini Photojournalist

Having coordination is not a pre-requisite for spinning, since there are no complicated moves to learn.

Surrounded by a motivating group of fellow spinners, the energy from the music begs legs to pedal. As a result participants exercise their way to a leaner, stronger body.

"Normally each class is about an hour, beginning with a warm-up," said Maggie Simpson, a class participant. "I have muscles where I never used to have any from taking spinning. It works your core muscles like nothing else. No sit up will ever do what this does. Spinning makes you smaller."

There are seven muscle groups used during the pedal stroke and a total of 11 muscle groups used in cycling overall.

"For those who are on profile, pregnant or injured, who still want to work the cardiovascular system without damaging or setting up another reoccurring injury, spinning is the perfect thing" said Trisha Groenheim, a spinning instructor.

Spinning is a safe activity for people of all fitness levels.

"If it is your first time coming to a spinning class and you're not in a normal exercise routine, please go see your physician first for approval," said Mrs. Groenheim. "Make sure there isn't something underlying that we need to know about."

First time spinners should arrive 15 minutes prior to class, so the instructor can assist individuals in finding their resting heart rate and prepare them for the class. The instructor will show each new participant how to find their maximum heart rate and their cardio zone.

Also, they will provide heart rate monitors for use during the class.

"A first time person can make it through class. They usually sit up and take breaks," said Mrs. Groenheim. "You can relax your back to catch your breath and return to the class, because you can work out at your own pace."

It is encouraging for beginners to know that taking a break is subtle because peddling continues throughout class.

"You can work your heart rate low or high without putting any stress on the body," said Mrs. Groenheim. "On the bike we are not putting any stress on

our joints."

Going at one's own pace also ensures the development of proper muscle memory.

"In the interval class we do, we max out the cardiovascular system and then we take it into a recovery period," said Mrs. Groenheim. "We do this repetitively which works the system going beyond its normal threshold."

In the strength endurance class they reach a threshold of about 80-85 percent of the maximum heart rate.

"One of the benefits of spinning is the resting heart rate comes down," said Mrs. Groenheim. "This is really good for everyone if you can bring your resting heart rate and blood pressure down."

One class participant just recently returned from a six-and-a-half month tour in Baghdad and shared how spinning had an impact on her while she was there.

"I was surprised, because they actually had some spinning bikes in Baghdad with an active-duty person teaching the class," said Debbie Garza, 15th Security Forces. "It made sense though, you don't want to be running outside where it was 120 degrees. Also, people tend to have habits when they exercise and then you become predictable. So if you are running at a regular time, you become an easy target."

"Another benefit to spinning is it coincides with the Air Force fit to fight program because it increases your strength and endurance," continued Garza. "Spinning helps with strength and endurance and I include yoga for flexibility. Spinning is really a great way to achieve physical fitness and to keep your heart rate under control. I know personally it kept Airmen fit to fight in Baghdad."

The daily spinning classes help people get in shape regardless of individual fitness levels. They also give a heart pounding, yet low-impact workout while maintaining the ability to go at an individual pace burning on average 800 calories.

Spinning classes are Monday, Wednesday, and Friday at 5:30 a.m. and Tuesday and Thursday at 8:15 a.m. and 5:15 p.m. at Hickam's spinning center located in building 1113, 990 Scott Circle.

For more information about the free daily spinning classes, call 448-2214.



Photo by Senior Airman Erin Smith

Above: Students begin their cool down session at the end of an evening spinning class. During the class, the students made their way up and down hills and sweated their way through the session. Spinning sessions can help sculpt long lean muscles and develop a more trim body.

Left: Kristy Peterson, a contractor at Pearl Harbor stretches during the cool down session at the end of a spinning class.



Photo by Senior Airman Erin Smith

Team Hickam Pick 'Em



58 - 38

54 - 42

Team Roster	Cleveland vs. Carolina	Miami vs. New England	St. Louis vs. Green Bay	Tampa Bay vs. New Orleans	Washington vs. N.Y. Giants	Oakland vs. San Francisco	Dallas vs. Philadelphia	Baltimore vs. Denver	Records	
									Last week	To date
Col. J.J. Torres 15th AW/CC	Carolina	New England	St. Louis	New Orleans	Washington	Oakland	Philadelphia	Baltimore	4-4	15-17
Lt. Col. Lewis Carlisle 352nd IOS/CC	Carolina	New England	Green Bay	New Orleans	Washington	Oakland	Philadelphia	Baltimore	6-2	21-11
Capt. Brian Moritz 535th AS	Carolina	New England	St. Louis	New Orleans	N.Y. Giants	San Francisco	Philadelphia	Denver	6-2	18-14
CMSgt. Robert Wyman 692nd IG	Carolina	New England	St. Louis	New Orleans	N.Y. Giants	San Francisco	Dallas	Baltimore	5-3	22-10
TSgt. Youlanda Grant 15th AW/CCA	Carolina	New England	St. Louis	New Orleans	N.Y. Giants	Oakland	Dallas	Baltimore	3-5	19-13
SrA Jeff Galdikas 15th CES	Carolina	New England	Green Bay	New Orleans	N.Y. Giants	San Francisco	Dallas	Baltimore	4-4	17-15



TEAM HICKAM NFL CHALLENGE

