



## “THE SKYCHASER”

South Dakota Wing Electronic Newsletter for September 2018

*Official Auxiliary of the U.S. Air Force - Citizens Serving Communities: Above and Beyond*

Publishers: Wing Commander Colonel David Small Jr. / Wing Vice Commander Lieutenant Colonel Buck DeWeese  
Editor: Lt. Col. Bruce Kipp • Wing Director of Public Affairs • (605) 261-4507 • bruce.kipp@sdcap.us

Follow us on Facebook at [www.facebook.com/SDWingCAP](http://www.facebook.com/SDWingCAP) and Like us on Twitter at [@SDWingCAP](https://twitter.com/SDWingCAP)

## WING TIPS

**REDCAP (ELT Search):** Early in the afternoon of 22 September, Lt. Col. Jeremy Langrock, a mission pilot, was flying a South Dakota Wing (SDWG) aircraft on a maintenance mission across the state from Sioux Falls to Rapid City. Near Pierre he was alerted by the Minneapolis Air Traffic Control Center that an emergency locator beacon (ELT) had been reported active in the vicinity of Pierre. Upon checking using both the radio and the aircraft's radio-direction-finding gear Langrock confirmed an ELT was indeed active. Since he was on a maintenance flight and there was no report of a missing aircraft or other indications that this was an urgent situation he continued on to Rapid City. The Wing staff contacted the Air Force Rescue Coordination Center (AFRCC) at Tyndall AFB, Florida, and described the situation. Though the AFRCC typically doesn't authorize an ELT search unless three unrelated reports have been filed they went ahead and gave SDWG a mission on the strength of Langrock's report. The nearest Ground Team was in the Pierre area at the Pierre Composite Squadron. 1<sup>st</sup> Lt. Richard Rezac quickly assembled a Ground Team which conducted a ramp check at the Pierre Regional Airport then expanded its search out from the airport. A SDWG aircraft was launched out of Rapid City crewed by Lt. Col. Langrock and 1<sup>st</sup> Lt. Jerry Hayden. When the aircraft arrived in the Pierre area radio contact was made with the Ground Team and a coordinated search was conducted for approximately 45 minutes. Neither the aircraft nor the Ground Team received any hint of a signal despite being in the location where the aircraft had originally heard the beacon. At this point, with no additional data points and no reports of missing or overdue aircraft the search was called off and the SDWG aircraft and Ground Team returned to base. Speculation is that it could have been an ELT accidentally set off on the ground during maintenance or from a hard landing by a private aircraft, which when discovered was subsequently turned off. Although the search was not productive it highlighted our readiness both in the air and on the ground. We were out in the field within an hour of getting the mission. Thanks to our aircrew and Ground Team members who actively participated in the search, especially to Col. Small, the initial Incident Commander and to Lt. Col. Rick Larson who took over as Incident Commander later in the mission.



LEFT: REDCAP GROUND TEAM (L-R)- REZAC, SALINAS, AINSLIE, HALL AND CROWSER  
RIGHT: USING HAND-HELD RADIO-DIRECTION-FINDING DEVICE TO SEARCH FOR THE ELT SIGNAL

- ***INSTRUMENT PILOT REFRESHER COURSE:*** Nineteen pilots from four different states spent the day in Sioux Falls on 1 September for an Instrument Pilot Refresher Course along with four non-CAP pilots. This ground course is designed to refresh skills and help pilots stay proficient in instrument flying. It was set up in several modules that provided a structured approach to help improve skills. Some of the topics covered were flight planning, approaches and landings, emergency procedures and Garmin G-1000 avionics suite programming. Instructors for the course were Lt. Col. Jeremy Langrock, Capt. Brandon West and Lt. Col. Craig Goodrich. (Submitted by Maj. Karla West and C/2<sup>nd</sup> Lt Branden Spence)



INSTRUMENT PILOT REFRESHER COURSE PARTICIPANTS

- ***KANSAS WING WINTER ENCAMPMENT:*** The Kansas Wing Training Group (host organization for the Kansas Wing Encampment) is now accepting applications! Here are the basic details: **Name:** Kansas Wing Encampment **Dates:** 26 December 2018 - 2 January 2019, **Location:** Fort Riley, KS, **Cost:** \$185. Application Website: <https://sites.google.com/a/kswg.cap.gov/encampment2018/student-info> POC: KSWG Public Affairs Office, [pao@kswg.cap.gov](mailto:pao@kswg.cap.gov) We are also still searching for Senior Staff, with more information available on our encampment website!



- **AERIAL WILDLIFE SURVEYS:** SDWG flew seven aerial surveys of terrestrial wildlife over four days in September in support of the state’s Department of Game, Fish & Parks (GF&P) and South Dakota State University (SDSU). Both organizations have continually ongoing research projects surveying mountain lions, bobcats, swift foxes, white-tailed deer, mule deer, elk, bighorn sheep, and mountain goats. The result was 10.8 hours flying over western South Dakota and the Black Hills and 11 hours flying over eastern South Dakota for a total of 21.8 flight hours. CAP pilots were: Lt. Col. Gary Hewett, two sorties; Maj. E.W. Filler, three sorties; and Capt. Matt Meert, two sorties. Depending whom the sortie supported the pilot is accompanied by a representative from SDSU or from GF&P. The photo shows a Big Horn Sheep, one of the critters tracked by GF&P and SDSU researchers.

## STAFF NOTES



### **WING COMMANDER**

Col. David Small Jr., CAP

- **CADETS:** As of 28 September, SDWG has 111 cadets and 240 officers. This is the most in over 3 years!
- **AWARD SUBMISSIONS:** Squadron Commanders and Wing Staff; It is not too early to start thinking about awards for our deserving members. Most award nominations are due to Wing by 15 January. See CAPR 39-3 for more information on types of awards and criteria.
- **OCU AWARD:** Congratulations to Big Sioux Composite Squadron, Crazy Horse Composite Squadron and the Sioux Falls Composite Squadron on earning the Quality Cadet Unit Award for 2018 for their vibrant and diverse cadet programs! These squadrons value and embody the development of CAP’s vital cadet program. This award is tangible recognition of the many contributions made by the cadets who run the day-to-day operations of this essential segment of our CAP mission.
- **CAP MEMBERSHIP STATISTICAL SNAPSHOT:** I know that we cannot take membership numbers for granted but I wanted you all to note that we are up to 109 cadets - the highest number in well over 3 years. Since May 2016 we are up 25.3% in cadets, 18.3% in seniors and overall 20.4%. That is a long way from the goal of 200 cadets but we are headed in the right direction. Overall, CAP is growing as well. Here is the statistical snapshot for September 2018.

Overall Membership Numbers	Cadet Membership	Adult Membership
<b>61,066 Sep 2018</b>	<b>26,222 Sep 2018</b>	<b>34,844 Sep 2018</b>
60,340 Aug 2018	25,691 Aug 2018	34,649 Aug 2018
58,765 Sep 2017	25,106 Sep 2017	33,659 Sep 2017
Monthly Growth: +1.20%	Monthly Growth: +2.07%	Monthly Growth: +0.56%
Annual Growth: +3.92%	Annual Growth: +4.45%	Annual Growth: +3.52%



### **WING DIRECTOR OF CADET PROGRAMS**

Lt. Col. Linda Buechler, CAP

- **QUALITY CADET UNIT AWARD:** Congratulations to the Sioux Falls Composite Squadron, Big Sioux Composite Squadron, and Crazy Horse Composite Squadron for winning this Fiscal Year's Quality Cadet Unit Award! The award motivates squadrons to pursue objective goals that correlate with a successful squadron-level Cadet Program. This award differs from the Squadron of Merit/Squadron of Distinction program in that an unlimited number of squadrons may win each year. NHQ announces the award criteria annually. All squadrons are automatically considered for the award. CAP/CP announces winners by 30 September annually. Squadrons that qualify for the Quality Cadet Unit Award will receive an award emblem for the unit's website, letterhead, recruiting materials, and other publications and a certificate that will be presented by Wing headquarters at an appropriate venue.

- **UPCOMING EVENTS:**

- 2019 Cadet Color Guard competition is tentatively planned for January 12, 2019, location to be announced.
  - NCR Cadet Color Guard Competition is scheduled April 12-14, 2019, at Camp Ashland, NE. Squadron color guards should start preparing for the competition now.
- Questions, contact Lt. Col. Linda Buechler, (605) 212-7032 or [linda.buechler@sdcap.us](mailto:linda.buechler@sdcap.us)



## **DIRECTOR OF PROFESSIONAL DEVELOPMENT**

Col. Mary Donley, CAP

- **PROFESSIONAL DEVELOPMENT:** Squadron Commanders I know you have several new members out there in your squadrons. Are they getting their Level I done in a timely fashion? Many senior members are not sure how to proceed once Level I is completed. Specialty Tracks are also something that holds up promotions and awards for senior members. Please contact me if you have questions on how to work through this. I will be holding a Professional Development Weekend in February 2019 (date to be determined) in Sioux Falls. We will hold an SLS and CLC. I have a few weekends available in November and December. If your squadron would like to host an SLS, CLC or TLC please contact me at: [mary.donley@sdcap.us](mailto:mary.donley@sdcap.us) to set up a time/place.

## **SQUADRON HIGHLIGHTS**

### **BIG SIOUX COMPOSITE SQUADRON (SD-058 – BROOKINGS)**

(Items and photos submitted by C/Maj Klosterman and C/Capt Klosterman)



- **EMERGENCY SERVICES TRAINING WEEKEND:** From 31 August through 1 September, our squadron conducted an Emergency Services Training Weekend at Lake Benton, MN. The event was geared toward training cadets in areas of land navigation, radio-direction-finding, and a few other skills. Cadets were able to display proficiency in quite a few tasks learned during the weekend. Senior members and cadets alike had fun during the course, and we plan to conduct training weekends for our squadron in the future.

- **SIoux FALLS MARATHON:** On 9 September, members of our squadron assisted with the 2018 Sioux Falls Marathon. We helped out by operating the final water and sports beverages stops along the route, as well as encouraging the 311 runners (202 Males, 109 Females). We assisted the marathon last year and once again we enjoyed it. We hope to do it again next year.



## **CRAZY HORSE COMPOSITE SQUADRON (SD-068 – CUSTER)**

(Items and photo submitted by Capt. Bierwirth)

- **O-RIDES:** Cadets Patience Hovland and Noah Hovland received their first o-ride from Lt. Col. Russ Limke. From the grins on their faces they liked it.
- **LEO CLUB:** Several of our Cadets have been teaching the Leo Club members (the youth organization of the Lions Club International) on posting colors for a dinner event they are preparing for.



- **OUT AND ABOUT:** We have been involved in several public affairs events to promote our squadron, boost Civil Air Patrol and sell wreaths for Wreaths Across America. We had a booth set up during the Custer State Park Buffalo Roundup and we assisted the Hot Springs American Legion Riders Post 71 with their fish fry bingo night.

On 30 September cadets and officers of the squadron hiked in the 6<sup>th</sup> Annual Fall Crazy Horse Memorial Volksmarch. It was the public's second chance of the year to walk 10K (6.2 miles) up the world's largest mountain carving in progress. The Crazy Horse Volksmarch is the most popular organized hike in the United States (15,000 walkers in a record year). This family event is sponsored by the Black Hills Chapter of the American Volksmarch Association (AVA) and hosted by Crazy Horse Memorial.

## **PIERRE COMPOSITE SQUADRON (SD-038 – PIERRE)**

(Items and photos submitted by Lt. Col. Mckenney, Capt. Becker and Lt. Col. Gatje)



and King Air, Greg Klein from Lake Area Tech in Watertown, Steve Christensen from Platte. Both Steve and Greg flew Young Eagles flights along with three or four other aircraft. It was windy, but an otherwise great day. Many pancakes and sausages were served, over 30 Mobridge area kids got airplane rides and a number of people were introduced to CAP and were given brochures and other information as members discussed the programs with them. In the photo (l-r) are Capt. Jon Becker, Mobridge Airport Manager Tyler Hearn, 1<sup>st</sup> Lt. Matt Tennant, Lt Col Nancy McKenney and Capt Richard Helton as they met at the CAP aircraft in Mobridge.

- **MOBRIDGE FLY-IN:** On 8 September, the Mobridge Municipal Airport held a Fly-In/Drive-In Breakfast and CAP was there! It was a busy day at the airport. Among the many activities were pilots from the Experimental Aircraft Association Young Eagles program offering free rides for young people. Capt. Jon Becker, 1<sup>st</sup> Lt. Matt Tennant, and Lt. Col. Nancy Mckenney flew a CAP plane out of Pierre for a static display. Capt. Richard Helton of Pierre Composite Squadron flew in with his own plane; a Cheetah. We had a great time and met lots of people. Capt. Vergil Lenling, a member of SDWG's Ghost Squadron, who used to run the FBO at Mobridge Airport, was also there. Other attendees were a T-6 from Minneapolis, a Sanford medevac helicopter



eggs, sausage, pancakes, coffee and juice drinks as well as the other "fixin's" to go with those items. CAP's participation was organized by 1<sup>st</sup> Lt. Richard Rezac and other senior members of the squadron. Producers and vendors provided the food, and cooking equipment was rounded up from squadron members to produce food quickly to feed the hungry folks.

- **COWBOY BREAKFAST:** The Squadron worked at the three-day Dakota Western Heritage Festival held recently in Fort Pierre, SD in conjunction with the Festival's 7<sup>th</sup> annual event. The event began with a trail ride and steak feed and musical entertainment. It included a wagon train on a daylong ride and many fun activities lasting all day. This allowed participants to enjoy the prairie scenery. The Festival culminated on Sunday at the Expo Center with Cowboy Church, Cowboy Poets and musicians, wagon and stagecoach exhibits, Western Artisans and vendors. As a fundraiser Civil Air Patrol officers and cadets cooked and served a buffet style breakfast that was very well received by the attendees. The menu consisted of

## **SHIOUX FALLS COMPOSITE SQUADRON (SD-050 – SHIOUX FALLS)**

(Item submitted by Lt. Col. Epp)

- **PRESIDENTIAL SELFIE:** It's great to get out of school early on a beautiful late summer Friday afternoon. It's greater to get to see a real live sitting President, up close and personal. But what's the greatest? Getting a selfie with President Donald Trump. On 7 September, SDWG cadets Andrew Petterson and Brayden Parke, both members of Sioux Falls Composite Squadron, got that thrill soon after Trump deplaned from Air Force One and worked the rope line at the South Dakota Air National Guard base at the south end of Joe Foss field. Both boys' fathers are Air National Guardsmen. The base commander selected the boys for the honor. So, what's it like getting a selfie with a President? "Awesome!" Parke said. "He thanked our fathers and said we

were good kids," Petterson said. However, they said they even more impressed with Air Force One. Both boys want to be fighter pilots in the U.S. Air Force.

## ★ ★ PROMOTIONS ★ ★

### **Senior Member Promotion**



Congratulations to Richard Rezac of Highmore, a member of Pierre Composite Squadron, who due to his receipt of the Amelia Earhart Award as a cadet, has been promoted to the rank of First Lieutenant!

### **Cadet Officer Promotions**



Congratulations to Annabelle Klosterman of Brandon, a member of Big Sioux Composite Squadron, on her promotion to the rank of Cadet Major!



Congratulations to Isaiah Klosterman of Brandon, a member of the Big Sioux Composite Squadron, on his promotion to the rank of Cadet First Lieutenant!

### **Cadet Noncommissioned Officer Promotions**



Congratulations to Lydia Klosterman of Brandon, a member of the Big Sioux Composite Squadron, on her promotion to Cadet Senior Master Sergeant and receipt of the General Jimmy Doolittle Award!



Congratulations to Daniel Willison of Sioux Falls, a member of the Sioux Falls Composite Squadron, on his promotion to the rank of Cadet Master Sergeant and receipt of the Charles Lindbergh Award!



Congratulations to Nolan Rohl of Bruce, a member of Big Sioux Composite Squadron, on promotion to the rank of Cadet Technical Sergeant and receipt of the Captain Eddie Rickenbacker Award!



Congratulations to Devin Griffin of Black Hawk, a member of the Rushmore Composite Squadron on his promotion to the rank of Cadet Staff Sergeant and receipt of the Wright Brothers Award!



### **Cadet Airman Promotions**



Congratulations to Matthew Tracy of Summerset, a member of the Rushmore Composite Squadron and to Preston Drew of Custer, a member of the Crazy Horse Composite Squadron, on their promotion to the rank of Cadet Senior Airman and receipt of the Mary Feik Award!





Congratulations to Timothy Daene of Sioux Falls and to Keon Den Hoed of Boyden, both members of the Sioux Falls Composite Squadron, on their promotion to the rank of Cadet Airman First Class and receipt of the General Hap Arnold Award!



Congratulations to Hannah Decker of Tea and Mesha Horsa of Sioux Falls, both members of the Sioux Falls Composite Squadron, to Adalida, Noah and Patience Hovland, all of Edgemont and all members of Crazy Horse Composite Squadron (Custer), and Kade Vandusseldorp of Pierre, a member of Pierre Composite Squadron, on promotion to Cadet Airman and receipt of the General John F. Curry Award!



**★ ★ KUDOS ★ ★**



Congratulations to C/Capt Kyle Clement of the Sioux Falls Composite Squadron who soloed on 10 September on the way to earning a private pilot's license. Kyle has been receiving flight instruction in Tea and has self-funded his training. We are proud that we have a new cadet pilot!



Congratulations Cadet 2<sup>nd</sup> Lt Sydnie Cloutier soloed this afternoon at Lincoln County airport. Flying on the SFCS scholarship, her first flight was in April. It all came together this week with three perfect full-stop landings.



Congratulations to C/2<sup>nd</sup> Lt Branden Spence, a member of Rushmore Composite Squadron, who took and passed his CAP Form 5 checkride in a Cessna-172 last week!



Congratulations to Maj. Jerry Gabert of Sioux Falls who completed the Aerospace Education Program for Senior Members and in recognition thereof has received the Brigadier General Charles E. "Chuck" Yeager Aerospace Education Achievement Award certificate and ribbon!

**★ ★ TELEPATHIC DRONE CONTROL ★ ★**



It's now technically possible for a person to use a chip embedded into their brain to control a drone swarm or even a fighter jet. The U.S. military's Defense Advanced Research Projects Agency (DARPA) is conducting new research in brain-computer interfaces that allows a pilot to control multiple simulated aircraft at once.

A person with a brain chip can now pilot a swarm of drones - or even advanced fighter jets. The work builds on research from 2015, which allowed a paralyzed woman to steer a

virtual F-35 Joint Strike Fighter with only a small, surgically-implantable microchip. Agency officials have announced they had scaled up the technology to allow a user to steer multiple jets at once.

“As of today, signals from the brain can be used to command and control ... not just one aircraft but three simultaneous types of aircraft,” said Justin Sanchez, who directs DARPA’s biological technology office, at the Agency’s 60th-anniversary event in Maryland.

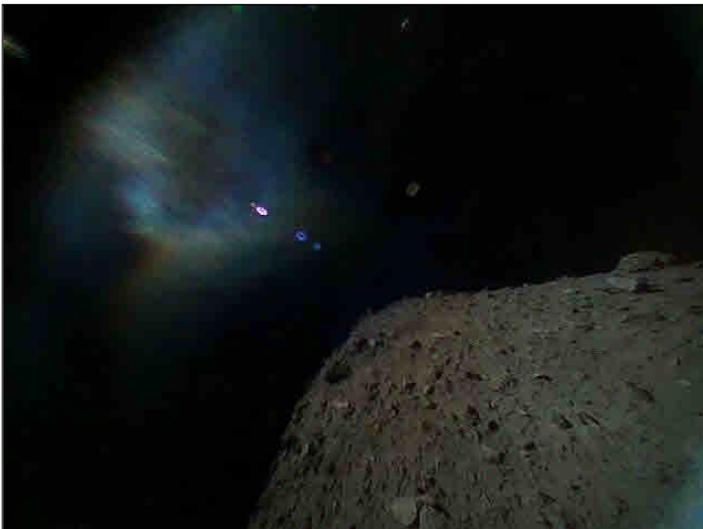
More importantly, DARPA was able to improve the interaction between pilot and the simulated jet to allow the operator, a paralyzed man named Nathan, to not just send but receive signals from the craft.

“The signals from those aircraft can be delivered directly back to the brain so that the brain of that user [or pilot] can also perceive the environment,” said Sanchez. In essence, it’s the difference between having a brain joystick and having a real telepathic conversation with multiple jets or drones about what’s going on, what threats might be flying over the horizon, and what to do about them. “We’ve scaled it to three [aircraft], and have full sensory [signals] coming back. So you can have those other planes out in the environment and then be detecting something and send that signal back into the brain,” said Sanchez.

It’s another breakthrough in the rapidly advancing field of brain-computer interfaces, or BCIs, for a variety of purposes. The military has been leading interesting research in the field since at least 2007. In 2012, DARPA issued a \$4 million grant to build a non-invasive “synthetic telepathy” interface by placing sensors close to the brain’s motor centers to pick up electrical signals - non-invasively, over the skin. The science has advanced rapidly in recent years, allowing for breakthroughs in brain-based communication, control of prosthetic limbs, and even memory repair.

Source: Patrick Tucker, Technology Editor, Defense One, [www.defenseone.com/technology/2018/09/its-now-possible-telepathically-communicate-drone-swarm/151068/](http://www.defenseone.com/technology/2018/09/its-now-possible-telepathically-communicate-drone-swarm/151068/), accessed September 10, 2018.

## ★ ★ JAPANESE LAND ON ASTEROID ★ ★



(TOKYO) — Japan Space Rovers landed on an asteroid to collect data on the solar system. A Japanese spacecraft released two small rovers on an asteroid on 21 September in a mission that could provide clues to the origin of the solar system. The Japan Space Exploration Agency (JAXA) said the two Minerva-II-1 rovers were lowered from the unmanned spacecraft Hayabusa-2 to the asteroid Ryugu. The spacecraft arrived near the asteroid, about 280 million kilometers (170 million miles) from Earth, in June. Hayabusa-2 approached as close as 55 meters (180 feet) to the asteroid to lower the rovers, waited for a minute and then rose back to its waiting position about 20 kilometers (12 miles) above the surface. JAXA said the release went successfully. The two rovers, each

about the size of a cookie can, are to capture images of the asteroid and measure surface temperatures before a larger rover and a lander are released later. The rovers move by “hopping” up to 15 meters (50 feet) at a time because the extremely weak gravity on the asteroid makes rolling difficult. They can continue jumping as long as their solar panels and power last, JAXA said. Hayabusa-2 is scheduled to attempt three brief touch-and-go landings on the asteroid to collect samples in hopes of providing clues to the origin of the solar system and life

on Earth. Since it arrived at Ryugu, scientists have been looking for suitable landing sites on the uneven surface, and its first attempt is expected in October. The spacecraft is set to release a German-French lander called MASCOT carrying four observation devices in early October and a bigger rover called Minerva-II-2 next year. Hayabusa2, launched in December 2014, is due to return to Earth in late 2020. The photo, made available by JAXA, taken on Sept. 21, 2018 by Rover-1B shows the surface of asteroid Ryugu.

Source: Time, The Brief, [Time@email.time.com](mailto:Time@email.time.com), Sunday, September 23, 2018.

