



Kermit Braves the Cold Ocean Winds Winter Experiment January 17 through February 9, 2007 Archive

Day 1, January 17, 2007

Here's a quick synopsis of our arrival and 1st day in St. John's for Ocean Winds. Kermit arrived Newfoundland after a routine ferry flight to a point off of Nova Scotia, at where we descended to 3,000 ft. for a calibration of the NESDIS equipment prior to our landing at St. John's. Upon arrival we were shuttled to a remote site on the field because of the lack of parking at the FBO. At the time of our arrival, the wind was whipping the snow across the ramp at upwards to 35 knots, and the temperature was a balmy 5 degrees F. Plaudits to our FBO folks; however, as they had a bus ready to transport all of us to the office and to our pre-arranged vehicles in the parking lot. In spite of the harsh weather, all went well and folks were able to grab stuff from the container and head for town.

Day 2, January 18, 2007

On Thursday, the aircraft was repositioned and the SED and maintenance personnel completed some maintenance work during the remainder of the day.

Day 3, January 19, 2007

Today is a hard-down day to reset the clock. We are anticipating our first mission on Sunday or Monday. Weather wise, we are expecting some moderation in the temperature with a high today of about 33 degrees F. Presently (6:38 a.m.), we are at 21 degrees with light snow flurries. If you have a yearning to see what it looks like in St. John's, please go to the following web site for some photos: <http://www.stormpost.com/tips/>

UPDATE: Today was a down day, or at least it started that way. After seeing some of the new forecasts for this area, it became obvious that we would have to take some action to move Kermit out of harm's way. High wind warnings are in effect tonight into the early morning with possible gusts in excess of 50 knots, possibly even higher. So, we mobilized the troops (maintenance and the A.C.) and motored Kermit back out to the "south 40" where it sits tonight well chocked on dry pavement. We're watching the weather closely to make sure that we don't have to boogie out of here. The latest TAF is encouraging, dropping the highest gusts down to 35 knots Tomorrow we have our first mission planned for a 1600L takeoff. We'll taxi Kermit back to the FBO, fuel it and go. This will not be a full mission, rather a full-up test of all systems. We are planning a follow-on full mission Sunday late afternoon into evening or early Monday morning. Outlook beyond that day is a bit murky.

Warmed up today with the temperature going from a low of 12F last night to a high of 32F in the last couple of hours. We're expecting some heavy rain tomorrow, but that could also change.

Day 4, January 20, 2007

Well, we dodged a bullet last night and this morning with the wind, but if we hadn't moved the plane yesterday afternoon, it probably would be sitting in the front office of the FBO. But all is well. Winds peaked at 55 knots, so that wasn't too bad. An Air Force Hercules that took our spot in front of the FBO almost lost it this morning, but it too is okay. Troops are currently out flying a short 5-hour mission and will catch two satellite overpasses this evening. Two's kind of a bonus. Not sure about tomorrow. Snow is in the forecast for the evening, which could down the aircraft. Monday may be a better day science and weather wise. We'll see. We'll take the hard down day tomorrow if we don't fly.

Day 5, January 21, 2007

Well, we made it through the high wind warning as I indicated in my previous message and successfully flew a 5.4 hour mission after repositioning the aircraft back to the FBO. Take off was around 1700L NST, and the aircraft returned to St. John's around 2220L last evening. The mission, flown at 3,000 ft., went very well. Essentially it was a straight track from St. John's and back through the low that had come up the east coast. The scientific crew was quite happy and have requested another mission for tomorrow morning. NavCanada has blocked airspace for us from the sfc. to 6,000 ft. that is approximately 560 X 350 miles. All things being equal, this should be a good mission into a region forecast to have winds of hurricane strength. But all things are not equal. A winter storm warning was issued for St. John's and vicinity this morning followed by a heavy snow warning this afternoon. Accumulations of 6-inches or more are expected over night, and that coupled with windy conditions could lead to a difficult situation by take off time in the morning. We will assess the situation then make a go-no go decision. Obviously, clearing the aircraft of snow, which may require a limited de-icing, plays a major factor in the decision.

Day 6, January 22, 2007

We really dodged a bullet this morning. Paul Chang had called for a flight today. But as I said in my previous update, the weather, namely heavy snow, might spoil the party. Well, it did snow last night - about 7 inches worth and when we walked out of the hotel this morning, I was sure that we were in trouble. Upon reaching the airport and having to walk through thigh deep drifts just to get to the FBO, I was sure that the game was over. But alas, when we opened the door out into the ramp where Kermit sat, we discovered that it had all blown off during the night. Granted, the mains were partially buried in snow, but the wings, fuselage and horizontal stabilizer were devoid of any snow. So, with the help of the FBO personnel, we (read Greg, Joe and Randy) dug her out. The crew did the pre-flight and we launched the aircraft for an 8-hour mission. That was darn good considering the weather. Kudos to the maintenance guys - as well as the rest of the crew.

What does the future hold? Well, Indy and the Bears will meet on the 4th, but it's a little less uncertain here. We're expecting a bit more snow today (it's snowing now) and again on Wednesday into Thursday. The forecast for the weekend calls for another bomb (another

meteorological term) to come through this area with more high winds and snow. But, you know about forecasts. Tomorrow and Wednesday will be no-fly maintenance days and with a possible busy weekend of flying coming up, we may reset the clock on Thursday or Friday. Time will tell.

Day 7, January 23, 2007

When you watch the Canadian Weather Network up here and the screen turns a bright red, you know you are in trouble. Right now, the screen is bright red! What does it mean this time? A severe weather warning has been issued for Atlantic Canada tomorrow, Wednesday, and again on Friday. A blizzard has been issued for St. John's tomorrow, so it's unlikely that we'll stray too far from our hotels, much less Friday. We've elected to do the 50 hour, along with some electric maintenance, today because the weather isn't too bad. Then we will wait the challenge of the rest of the week and weekend.

Kermit and crew completed a most successful 7.0 hour mission yesterday, and to date we have flown off over 38 percent of our flight hours. Four more mission flights and the ferry home should do it. As during our previous project 2 years ago here, trying to get these accomplished can be a challenge. Dr. Ad Stoffelen from the KNMI Royal Netherlands Meteorological Institute, who is working with the European A-Scat data, flew with us yesterday. He was quite impressed with the crew and our operation plus the effort AOC made to get the flight off. He departed Friday - that's if anything is flying that day - so we were happy to get him on at least one flight. Stay tuned for more later.

Day 8, January 24, 2007

It is an eerie stillness that fills the night air here in St. John's as we await our next storm. Experiencing light snow flurries at the moment, but the menacing storm is looming no more than 40 km to the SE of us as depicted by radar. By mid-morning we expect to have blizzard conditions here with heavy snow and high winds. We had planned a hard down day tomorrow to reset the clock, but like the past hard down day, we will have to re-clock for another day. Instead, we will reposition the aircraft early tomorrow before the tempest reaches its full fury. At the moment we see no danger to the aircraft, but as in last week's decision, it pays to be prudent. Stand by for more info.

UPDATE: Well, we had an interesting morning. As advertised, we did have that blizzard, and it was a doozy. When we awoke this morning 10 cm of snow had already accumulated on top of what we had Sunday, and the winds were strengthening out of the northeast. We decided that it would be prudent to motor out to the FBO to at least look at our pride and joy, Kermit, to make sure it was faring okay in the storm. Everything looked fine, and even though the snow was going from moderate to heavy and the winds were picking up, the consensus was that we should leave well enough alone and not try to move the aircraft. Winds have probably maxed out for the day. The real icing on the cake is yet to come as this afternoon's forecast calls for ice pellets turning to freezing rain and then to rain with accumulations of 5 to 10 mm. Present temperature is +2C, falling to zero tonight. They say a picture is worth a thousand words, so please find attached a few (about 5) thousand words. Oh, and you might be wondering about the fire trucks? Well that's what greeted us upon our return to the apartment ... The fire alarm in the building had shorted out and the local fire department came to check us out. All was okay, so no worries. The

entire city of St. John's is shut down today, including the airport. The latter will probably reopen later today and the town will resume normal activities tomorrow. Hard down day tomorrow.

Day 9, January 25, 2007

Hard down day.

Day 10, January 26, 2007

After a hard down day yesterday, we came out to the airport early to fight the elements and launch Ocean Winds mission #3. Mother Nature had left her calling card of ice and snow on the aircraft, so we will be moving it to the de-icing area shortly to give Kermit a glycol bath. The accumulation does not appear to be too heavy, but we'll see when we get the bill.

The Primary Investigator, Paul Chang, has called for a 4-5 hour flight south of Newfoundland today in the system that is approaching the area here. We're keeping it short because that dreaded red screen appeared on the TV indicating that St. John's is due for another bout of heavy snow and high winds beginning around 1:30 PM (local). We want to get back in here and position the aircraft for the high winds which will come later today.

With a couple of burps and hiccups, Kermit was off the ground, which is surprising considering that we had to do the de-ice. There was some delay here as a regional jet squeezed in ahead of us. Nevertheless, Kermit is airborne, and again - many kudos to the maintenance staff. They worked long and hard this morning. Results of the flight to follow.

The extra effort and costs put forward for today's mission was worth every sore muscle and penny. The sixth mission into the storm that is pelting St. John's at this hour captured some of the best data of the project and maybe for the entire program flown out of St. John's over the past few years. As the storm was winding up over the ocean south of Newfoundland, hurricane force winds were encountered, thus achieving that ultimate goal of measuring surface vector winds in regions of high winds and heavy precip. The scientists were quite ecstatic with their measurements and the crew feels quite satisfied with their performance today. Kermit landed back at St. John's a mere 30-minutes before the storm hit with a band of heavy snow and the beginnings of high winds. The aircraft was left parked into the wind, so it is good position to weather the storm.

Tomorrow, Saturday, is no work day. The next mission will either be Monday afternoon or early Tuesday morning.

Day 11, January 27, 2007

No work day.

Day 12, January 28, 2007

It was a lazy day in St. John's for the Ocean Winds crowd. The weather started out only partly cloudy, but soon became overcast and a bit gloomy. It looked and felt like snow, but only a trace fell. Not to worry - we have two storms lurking offshore ready to pounce on snow-weary St. John's. The first is scheduled in tomorrow and the second on Tuesday. Amounts ranging from 15 to 30 cm. are forecast. Be that as it may, the PI has called for a mission Monday evening. It will

be relatively short, 4-5 hours, but will require a good bit of work again and perhaps a second deicing before it can be launched. We are moving forward with the plan to do the mission, knowing that there are a few "topays" in the road ahead.

Day 13, January 29, 2007

Greetings from St. John's where we experienced another snow day. We had a mission planned for tonight, but Mother Nature sort of ruled that out. The TAF for our return time indicated below mins, so we took a snow day instead. So did just about everyone else up here. We are awaiting the second game of a double header with a new storm due in later tonight. Fortunately, the winds haven't been too strong this time, so we do count our blessings. The plane is well covered with snow; however, something to be reckoned with. The PI just called for a mission tomorrow afternoon, so we'll go through the drill of at least planning and assessing, if not the execution of the mission itself. The assessment will look mainly at value of the mission versus cost to do it. At any rate, we'll get to the FBO a bit early to have a look-see. And we'll go through our usual drill with Nav Canada in Gander.

Day 14, January 30, 2007

Well, we gave it the old college try, but after long and careful consideration, the PI elected to cancel today's mission. We were faced with some long delays in preparing the aircraft for flight, primarily because we needed to get a suitable heater to thaw out the engine. We are expecting to have above freezing temperatures on Saturday, at which time every effort will be made to take care of these problems, along with blowing out some of our pressure lines which have created a data problem. We are down tomorrow but will see what can be done at the aircraft on Thursday. The PI see no other events of interest this week.

Day 15, January 31, 2007

Hard down day.

Day 16, February 1, 2007

Thursday brought a beautiful day to St. John's. Bright, clear skies hung with us for most of the day, although temperatures were down in the teens to low 20s. With a fairly stiff wind out of the west, working with the airplane on the ramp at St. John's International was a bit less than pleasant. The maintenance crew et al were out at the plane this morning with the intent of having it towed from its spot of several days to allow clearing of the ramp where we park. Push and pull with our might using the Canadian Reserve's tug, Kermit wouldn't budge - frozen solidly to the tarmac. Because of environmental restrictions, we couldn't use glycol to melt the ice, nor could we use salt. The only solution available to us to thaw out the gear was hot water and anti-freeze, both acceptable on the ramp. So we did, and it did, and Kermit was moved aside, the ramp cleared of the remaining drifted snow and finally repositioned in a more favorable position. Most of the snow and ice that had kept us down on Tuesday was removed today and Kermit is ready for action. We may have to do a light deicing.

We are planning a mission tomorrow afternoon for 4-5 hours in duration, and all things being equal, that should be a go. But, as you know, all things aren't equal here in the North country. The 48-hour forecast has a new system moving into the Maritimes on Saturday morning bringing winds in excess of 65 kts. which as you know is hurricane force Cat. 1. So, we have a

conundrum on our hands which will be addressed tomorrow morning. If the forecast still holds for Saturday morning, we'll probably have to arrange to evacuate to an alternate safe location. Whether we do a mission en route with the full crew or evacuate with a minimum crew remains to be seen. None of these options may be required if the forecast changes. Stay tuned for the next saga of play time in the North.

Day 17, February 2, 2007

The flight planned for today is still a go. the latest weather forecast for here isn't great but appears to be within our limits. Currently in St. John's, the weather is beautiful with clear skies and a temperature of about 25F. Precipitation is on the way; however, with light snow forecast turning to rain - sometimes heavy - this evening. Winds gusting to 35 kts are posted during the forecast period.

From the frozen, snowy tundra of Newfoundland, Kermit launched off into a moderate snowstorm, heading to the fertile grounds of another low pressure system approaching Newfoundland and Labrador. In spite of having to deice (see below), 42 broke ground ten minutes ahead of schedule. In spite of the bad weather, which set in about 90 minutes before takeoff, all went well.

Tomorrow, Saturday, there will be some work done on the aircraft as it will be one of the few days where temperatures are well above freezing. We need to blow out some lines, and warmer weather is required for that. No flights scheduled for Saturday or Sunday.

Day 18, February 3, 2007

From my last report you are aware that Kermit got off the ground 10 minutes early yesterday after a sterling effort by the crew on preflight. Plane and crew flew a mission south of St. John's, mostly in the warm sector of the low that brought us another several inches of snow followed by heavy rain. Temperatures at flight level (3,000 ft.) were about 50 degrees F., so a little problem was encountered with the attack and sideslip probes. They were able to catch two satellite overpasses during the mission in an environment where the winds were 40-50 kts. The most challenging part of the flight came at the end with the approach and landing. Kudos go to Carl Newman, in the left seat and Mark Nelson for a safe professional landing.

The mission was 5.7 hours in duration, bringing flight total to five, including the ferry/calibration done en route to St. John's from MacDill, and 32.8 hours. The storm that passed through here last night left us with some moderately strong southwesterly winds gusting between 30-40 kts., but Kermit was positioned pointing south in front of the FBO, so it's in a good position. Temperature is currently +3C, and it will be rising to +6C (43F) this afternoon. With this 'balmy' weather present, we are using the time to take care of some maintenance that can best be accomplished when the temperature is above freezing.

No flights planned for today or Sunday. And, from the forecast, it looks like Monday will not be a candidate for a flight either.

Day 19, February 4, 2007

No work day.

Day 20, February 5, 2007

There's a 950 mb low forecast to be at about 53N 41W tomorrow evening which looks like the next potential target for Paul Chang. It looks like it will require an evening flight, but we'll have to see what he wants. Today is a hard down day. We didn't take it yesterday because there were high wind warnings up for the area and we wanted to make sure that we had crews available to move the aircraft if necessary. Turns out we didn't because Kermit had been parked in a good direction following its last flight. The airport did have winds gusting to 52 kts. yesterday.

Day 21, February 6, 2007

It was a near picture perfect day here in St. John's, with partly cloudy skies for most of the day and temperatures that have risen from 9F to 11F where it currently hangs. Winds gusting into the 30s made the wind chill negative, but what the heck, it's cold everywhere, so we should count our blessings. Paul Chang, the Ocean Winds PI, decided he wanted to fly this afternoon, but after seeing Kermit this morning following a rather heavy snow-fall last night, we didn't give the flight much of a chance. But, as has become the norm, the crew responded to the challenge and promptly at the scheduled departure time, Kermit was seen taxiing away from the deicing pit snow and ice free and preparing for takeoff on a long 8-hour mission. Paul had targeted two merging lows with storm and hurricane force winds located a few hundred miles northeast of here.

Day 22, February 7, 2007

Kermit arrived back to a snowy St. John's after a 7.5 hour successful flight well northeast of here. That completed Mission #5 for Ocean Winds, and the total time for this project now stands at 40.3 hours. We have another flight scheduled for tomorrow night SE of here of about the same length as last night. The models are not very encouraging for a weekend flight. Tomorrow we will reposition the aircraft to the FBO and begin our pre-flight. Once we complete the pre-flight and plane-side briefing, we will most likely taxi once again over to the de-ice pit for another round of the deliciously looking orange juice.

Day 23, February 8, 2007

No report.

Day 24, February 9, 2007

In an interesting day of flying, Kermit completed a 7.9 hour flight last night from a rapidly deepening low ESE of St. John's. For starters, it was unnecessary to deice the aircraft as all accumulated snow from the previous day and evening had blown off, leaving Kermit's surfaces clean. This was the result of having left the aircraft across the field in an open area where Mother Nature did the work rather than the orange juice of the deicer. The system that the aircraft was able to sample was located almost 3-hours away from St. John's, but going there was worth the trip. In what the PI Paul Chang has indicated as one of the most productive missions ever flown, the aircraft engaged a rapidly deepening low with flight level winds often exceeding 90 kts. and surface winds consistently in the 80 kt. range. While the aircraft was embedded within the system, data were collected during two satellite overpasses, one by the NASA QuickScat and the other by the AScat instrument aboard the European METOP satellite. I guess you could call that a 'twofer.' There is another system passing ESE of here today packing winds forecast to be as

high as 100 kts. Since no other worthy candidate storm is forecast until mid-week, we will fly this system today.

The plan to reposition to MacDill has been made and is predicated on the desire of the PI to do a mission en route back to home base. One day this weekend will be hard down, and Kermit will go to Halifax on Monday so that IMP can have a good look at our current platform. We will also have a chance to see N44RF. Tuesday will be the pack-up day, and we are looking at the mission-repositioning flight to occur on Wednesday as of now. This could slip to Thursday, the originally scheduled return date, but most of us are pulling for a return on Valentine's Day.

