

Mir's death date set

By Yuri Krash-Moscow contributing correspondent,
and Mike Thompson, WB8ERJ

Two Russian space agencies have agreed on March 6 as the official day for the de-orbiting of the Mir space station-its date with death.

According to the plan made by the Russian Aviation and Space Agency (Rosaviacosmos) and RKK Energia (Mir's operator), a

Progress M1-5 cargo ship with increased fuel capacity will be launched to Mir on January 18, at 1:56 a.m. Eastern Standard Time (06:56 GMT; 9:56 a.m. Moscow time).

The next day, a Progress M-43 cargo ship already at the station will be undocked from the outpost for a de-orbit set for January 23.

Meanwhile, the Progress M1-5 will take four days to complete its journey to Mir-twice as long as a conventional cargo flight to the outpost. The longer trip is designed to conserve the cargo ship's fuel for the robotic de-orbiting procedure, which will require a large amount of propellant. A four-day "chase" of Mir by a cargo ship was tested during a Progress M-43 flight to Mir in October 2000.

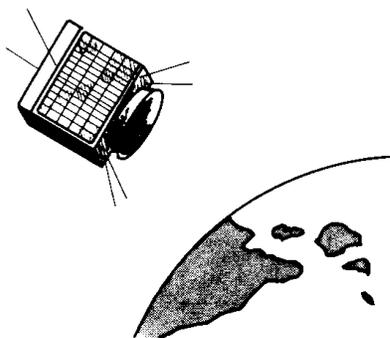
Instead of using its rather fuel-thirsty main engine, the Progress M1-5 will rely on its smaller engines for approach and orientation. The ship is set to dock to

Mir's Kvant module on January 22, at 3:00 a.m. EST (08:00 GMT; 11:00 a.m. Moscow time). If there are any problems docking, Russia will send up an emergency crew of cosmonauts to complete the procedure.

Mir's gyrodines, used to control the station's attitude, will be turned off on Feb. 10.

On March 4 and 5, the Progress will fire three pulses designed to brake the station's orbital velocity. The first two pulses will decrease Mir's speed by 23 feet (7 meters) per second each, while the third one will decrease the station's speed by 46 feet (14 meters) per second.

On March 6, the Progress will generate the final "killing pulse" which should decrease Mir's speed by 56.8 feet (17.3 meters) per second, slowing it enough to drop out of orbit and plunge into the Pacific Ocean later that day. *From the January issue of the Airwaves Journal, Scott Yonally, N8SY editor.*



AO-40 Report Suggests Damage To Antenna Systems

The latest information from the AO-40 recovery effort suggests that the satellite might have suffered antenna system damage when it went silent last December 13. The satellite stopped transmitting while ground controllers were testing the 400-newton propulsion system aboard AO-40.

Since the satellite's computer was reset and telemetry resumed December 25, the AO-40 ground team has been analyzing telemetry sent via the 2.4 GHz beacon--the only transmitter now operating.

AMSAT-DL Vice President and AO-40 team member Peter Guelzow, DB2OS, said this week that efforts to restart the 2-meter transmitter were unsuccessful.

The satellite was sending telemetry via the 2-meter transmitter when it went quit transmitting last month. Guelzow

(Continued on page 4)

Meeting Announcement

Or next meeting will be Wednesday, February 7th, in the cafeteria of the Alliance Community Hospital. Talk-in on the K8LTG repeater on 145.37 MHz.

Visitors are always welcome.

Officers

President

Jerry Wheeler, KG8RN
18 Stanley Ct.
Beloit, OH 44609
kg8rn@mail.cannet.com
330-525-7176

Vice-President

Larry Ashburn, KE8VE
1080 W. Beech St.
Alliance, OH 44601
ke8ve@raex.com
330-821-9808

Secretary

Dave Glass, W8UKQ
217 West Simpson St.
Alliance, OH 44601
w8ukq@juno.com
330-823-4855

Treasurer

Mary Ann Royer,
KB8IVS
6255 Sandalwood NE
Canton, OH 44721
kb8ivs@aol.com
330-492-0703

Trustees

James Lilley, N8XTJ
67 E. Columbia St.
Alliance, OH 44601

Jim Ferguson, K8LTG
115 E. Cambridge St.
Alliance, OH 44601
k8ltg@aol.com
330-823-3925

John Myers, KD8MQ
510 West Harrison Street
Alliance, OH 44601
kd8mq@qsl.net
330-821-5513

Editor

John Myers, KD8MQ
(see above)

Editorial

By John Myers, KD8MQ

Well, so far, so good. As I type these words, I've just completed my first week of college. It's been real busy. Now it's the weekend, and time for a deep breath.

The next few issues of the Zero Beat will be short, probably about six pages. But, I'll make up for it with the June issue, which will be ready to hand out at the Mall Show. It'll be available to the public, as well as Hams.

I've got a few ideas of what to include in that issue, but I need help. If you have an idea, please contact me.

I'd like to take a moment to thank those of you who've taken the time to forward your Web links to me. Thanks to you, I've discovered some great new links, while eliminating white space in the Zero Beat.

Well, who'd like to go on a fox hunt? Jim Ferguson, K8LTG is planning a spring fox hunt. I don't know about the rest of you, but I'm planning some new equipment. On the Homing in web site, I found plans for an offset attenuator, and a tape measure beam. Both have me itching to retire the three element folding quad, and step attenuator that I had been using..

We're planning a fox hunt clinic about a week before the hunt. With a practice transmitter on the air, this'll give us a chance to try out our equipment. The date & place will be announced.

Well, that wraps it up for another month. 73, & good DX
DE KD8MQ

Meetings

The Alliance Amateur Radio Club meets on the First Wednesday of every month, in the cafeteria of the Alliance Community Hospital. Talk-in is on 145.37 ®. Meetings begin at 7:30 PM. Visitors are always welcome.

Nets

Thursday is our "net night," with the following nets on tap:

Ten meters

CW @ 8PM on 28.400 MHz
SSB @ 8:30PM on 28.400 MHz

2 meters

9 PM on 145.37 MHz

Internet

If you'd like to check us out on the web, our E-mail address is:

W8lky@qsl.net

Our club home page is:

Http://www.qsl.net/w8lky

Newsletter Information

The Zero Beat is a publication of the Alliance Amateur Radio Club, P.O. Box 3344, Alliance, OH 44601

Unless otherwise noted, permission is freely granted to reprint portions of the Zero Beat, as long as credit is given to the author & source.

You can submit material to the Zero Beat either electronically, to kd8mq@qsl.net . I can read most word processor formats, but prefer your files to be in straight text, or Microsoft Word format.

We also accept handwritten copy. My address is to the left.

January Minutes

January 3, 2001

The regular meeting of the Alliance Amateur Radio Club was held at the Alliance Community Hospital on January 3, 2001, at 7:36 P. M., with Jerry Wheeler KG8RN, president, presiding. Secretary David Glass W8UKQ kept the minutes. There were 19 members present. The pledge of allegiance was given, and introductions were made.

The minutes of the last meeting were published in the newsletter. The report was approved upon motion by Bob K8RLS, seconded by Ray, K8DEN.

Mary Ann KB8IVS reported the treasury balances. The report was approved upon motion by Don K8OMO, seconded by Jim K8LTG.

Old business:

President Jerry KG8RN presented the permanent Ham of the Year plaque for 1999 to Dave W8UKQ. Congratulations then to Jerry who thanked the members for making him Ham of the Year for 2000.

Editor John KD8MQ talked about the latest newsletter format on the Internet and asked for comments and if anyone was not able to download it.

The Christmas party was discussed. The food was good, but the room was too small. John KD8MQ will check with Mike's Roadhouse to find what they may do for us on December 15th or 8th.

Harry W8PXX thanked the membership for their support and help to him.

The Mall Show will be May 26 and 27.

John KD8MQ requests that any publicity be kept and given to him for the archives and for advising the ARRL.

New business:

Don K8OMO called attention to a letter from Terry Russ N8ATZ requesting information from all Stark County clubs regarding any public service activities: names, calls, time, and event such as an emergency situation, Skywarn, etc. Any net information must be passed to the net manager, then on to Don who will transfer it to Terry N8ATZ.

Determination needs to be made if our nets are emergency, public service, training, or social.

Jim K8LTG and Don K8OMO worked the Straight Key Night.

The meeting adjourned at 8:22 P. M., upon motion by Jim K8LTG, seconded by Dave W8UKQ.

Respectfully submitted, Dave Glass W8UKQ, Secretary

Flight Delays

There is the story of a passenger on Britain's Imperial Airways, a company which pioneered air travel between England and Australia in the mid-1930's. "If you have time to spare, go by air" was the popular expression of the day. Airliners were both slow and incapable of flying long distances. One of the very first flights took off from Croydon Airport near London and flew to northern France where it was delayed extensively due to bad weather. When it arrived in the south of France, one of the engines had failed and it was necessary to wait for another engine to be shipped by sea from England. There were further delays along the route in Rome, Cairo, the Middle East, etc. until finally the flight progressed as far as Singapore. At this point a lady passenger asked the manager in Singapore if he thought the flight would arrive in Australia in the next few weeks because she was expecting a baby shortly. "My dear lady," he replied, "you should never have commenced your trip in that condition." She replied, "I didn't."

Special FCC Advisory

This is a special advisory from the Federal Communications Commission. The FCC is requesting that any hams who discover illegal radio gear being advertised for sale on the various on-line auction sites such as E-Bay send this information to them at a new electronic address. This is

FCCINFO@fcc.gov

Using this e-mail address will help expedite investigation of information provided.

From newslines Jan 19, via the Ham-history reflector

AO-40 (Continued from page 1)

said telemetry seemed to indicate that the VHF transmitter was working during the test, but no signal was heard. Additional tests are scheduled

Guelzow reiterated this week that while the 2-meter, 70 cm and 1.2 GHz receivers are working on the high-gain antennas, none of them will receive signals using the omnidirectional antennas. "Either the omni antennas are damaged or the cabling or the antenna relays," Guelzow concluded.

The satellite's 70-cm transmitter--problematic since launch--will be tested on both the high-gain and omnidirectional antennas once the spacecraft's spin rate has been reduced and AO-40's heat-dissipation mechanism--the so-called "heat pipes--start working again.

Guelzow said that AO-40's attitude control system is fully functional--something that would be critical to keeping the satellite in orbit on a long-term basis. Guelzow explained that because the sun angle is now about 60 degrees, the sun sensor's electronics are temporarily disabled.

"Without sun and attitude information, no magnetorquing can be performed, thus no further attitude or spin change was done," he said. AO-40 team leader Karl

Meinzer, DJ4ZC, is developing a software fix that does not rely on data from the sun sensor.

Guelzow expressed the hope that once the sun angle and antenna-pointing capabilities have been established, the ground crews will have a better chance to check out the status of the 2 meter and 70 cm transmitters through "better-controlled and suitable experiments." He indicated that AO-40's arcjet thrusters and the reaction wheels also will undergo testing as soon as possible.

Meinzer recently expressed confidence that, despite its problems, AO-40 will be functional in the future--although its mission likely will be different from the one planned prior to launch. AMSAT-UK's Richard Limebear, G3RWL, has suggested that AO-40 could at least be used for "some kind of 400 baud PSK digital communication" via one of the onboard computers. Limebear said that if the IF matrix is functional, then, SSB or CW via a linear transponder would be possible. "If AO-40 reaches such a state, we will get as much or more than AO-10 and AO-13 offered, only on more state-of-the-art frequencies," he concluded

From the ARRL Letter, Vol 20, No. 3, Rick Lindquist, N1RL editor.

You know you've been a ham too long if:

Part three

- You've memorized the contest dates for the rest of the millennium, but you still forget your relatives' birthdays.
- Ham Radio Outlet has offered you partial ownership and a permanent parking space at their store because you visit so often.
- You have bought out the frame store down the street with frames for your awards.
- You set up your own \$3000 web server with \$100 a month internet access to search the web for new awards to get.
- Your ham radio station is worth more than your house.
- You have trouble running all your mobile antennas in from the roof of the car.
- You melt your own crystals for that 80-year-old rockbound chirp-sender of a transmitter.
- Radio Shack gives you a 50% discount on the Parts section because you come so often.
- You've been president of four amateur radio clubs for forty years, gone to four hundred meetings, and met four thousand people.

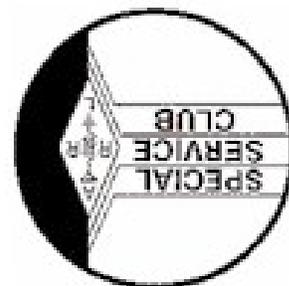
(from Tom, KB1EVZ via E-Ham.net)



February 2001

Monthly Planner

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																																		
<table border="1"> <thead> <tr> <th colspan="7">January</th> </tr> <tr> <th>S</th> <th>M</th> <th>T</th> <th>W</th> <th>T</th> <th>F</th> <th>S</th> </tr> </thead> <tbody> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> </tr> <tr> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> <td>27</td> </tr> <tr> <td>28</td> <td>29</td> <td>30</td> <td>31</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="7">March</th> </tr> <tr> <th>S</th> <th>M</th> <th>T</th> <th>W</th> <th>T</th> <th>F</th> <th>S</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> <tr> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> </tr> <tr> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>25</td> <td>26</td> <td>27</td> <td>28</td> <td>29</td> <td>30</td> <td>31</td> </tr> </tbody> </table>				January							S	M	T	W	T	F	S		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				March							S	M	T	W	T	F	S					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	<p>1</p> <p>Tri-county News & information Net - see page two</p>	<p>2</p>	<p>3</p>
January																																																																																																								
S	M	T	W	T	F	S																																																																																																		
	1	2	3	4	5	6																																																																																																		
7	8	9	10	11	12	13																																																																																																		
14	15	16	17	18	19	20																																																																																																		
21	22	23	24	25	26	27																																																																																																		
28	29	30	31																																																																																																					
March																																																																																																								
S	M	T	W	T	F	S																																																																																																		
				1	2	3																																																																																																		
4	5	6	7	8	9	10																																																																																																		
11	12	13	14	15	16	17																																																																																																		
18	19	20	21	22	23	24																																																																																																		
25	26	27	28	29	30	31																																																																																																		
<p>4</p> <p>Winterfest 2001 (Noars)</p>	<p>5</p>	<p>6</p> <p>7:00 PM Pioneer AR Fellowship VE Exams Ronald D Lieving (330)724-5981</p>	<p>7</p> <p>7:30 PM Alliance Club Meeting</p>	<p>8</p> <p>Tri-county News & information Net - see page two</p>	<p>9</p>	<p>10</p>																																																																																																		
<p>11</p> <p>Mansfield Hamfest</p>	<p>12</p>	<p>13</p>	<p>14</p>	<p>15</p> <p>Tri-county News & information Net - see page two</p>	<p>16</p>	<p>17</p>																																																																																																		
<p>18</p>	<p>19</p>	<p>20</p>	<p>21</p>	<p>22</p> <p>Tri-county News & information Net - see page two</p>	<p>23</p>	<p>24</p> <p>9:00 AM Canton ARC/Massillon ARC VE exams Gary L Kline (330)837-2927</p>																																																																																																		
<p>25</p> <p>Cuyahoga Falls ARC Hamfest http://www.cfarc.org</p>	<p>26</p>	<p>27</p>	<p>28</p>																																																																																																					



Alliance Amateur Radio Club
P.O. Box 3344
Alliance, OH 44601

Tractors

By Samantha Molesky

Tractors. When you hear that word, if you are like me you automatically think of the farmer plowing the fields and planting crops. Believe it or not, there are actually those that collect them. These tractors will not see fields anymore except to exhibit in its restored beauty. The only planting it will do is in the mind of its owner. People buy them fix them in original parts, build special sheds for them (that probably cost more than the house they live in), and store them.

When people buy things

and fix it up, you think that it will be in newer parts and make it perform better and/or faster. Not these collectors, they scour flea markets, tractor shows, some obscure little town tracking down a part that was originally made for this particular tractor of this particular year, and model. Everything is specific or it will not do.

I see nuts, bolts, filters, axles, carburetors, wheels, seats, signs, all sifting around because it might come in handy. You can't throw it away. It belonged to a tractor. Just have to wait around to

find out what tractor needs it.

Every season starts with a tractor show and 60 shows out of a possible 100 that is drivable in the U.S. is considered a good season.

Can you see how these tractor enthusiast and amateur radio enthusiasts are a lot alike? They probably are the same people. So the next time you go to a flea market, ask someone if it is a power booster for a radio or a power booster for a tractor that they are looking for.