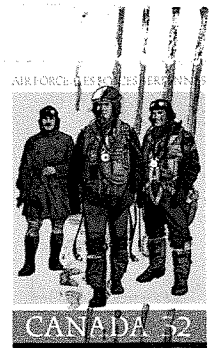


WINNICENTRICS  
P.O. BOX 174  
ST. JAMES P.O.  
WPG., MAN. R3J 3R4



SPECIAL EDITION.



MR. C. RUTKOWSKI  
560 LINDSAY STREET  
WINNIPEG, MAN.  
R3N 1N6

December/January  
1984 1985

WINNICENTRICS

Credits to:  
Winnipeg Free Press  
National Research  
Council Canada  
NASA. Space News

Members Star Party:

at Glenlea Observatory on Nov. 24. Help would also be appreciated in the afternoon of the 24th to put the Centre library in order.

December Meeting: Friday 14th, 8:30 p.m., Room 217 Lockhart Hall, U.of W. Mr. Alan Rahill will be showing some of his excellent slides and telling us how he took them.

January Meeting: Friday 11th, 8:30 p.m., Room 217 Lockhart Hall, U. of W. Annual Computer meeting. Members bring your home computer and demonstrate your astronomy programs.

Observatory News.....The Insurance claim for the Observatory has been processed and a Contractor will begin the \$3,000 worth of work on the main building within the next few weeks. While the observatory is being worked on, no bookings will be taken. The finished building will be left ready to accept the Centre's new 12ft. Ash Dome when purchased. Please bear with us until we once more have a functional observatory. Thank you.

Centre Election.....The following centre members were elected to Centre Council and Executive at the October Annual General Meeting.

President:	Mr. Stan Runge.	1st V.President:	Miss Brenda Belkin
2nd V.President:	Mr. Len Gamache	Treasurer:	Mr. Bud Fairley
Secretary:	Mr. Bernard Land	Councillors:	Mr. Lawrence Mlodzinski
National Rep.:	Mr. Guy Westcott	"	Mr. Ed. Hlady

All positions were affirmed by the membership present at the meeting and declared elected by acclamation.

November 9th Meeting: A very interesting and intriguing lecture was presented by Mr. Hans Thater. Hans explained how volcanoes could be used as windows to examine what is going on inside the planet. This was followed by guest speaker Mr. Jim Bernath from the Vancouver Centre. Jim described his recent trip to Florida to see the first Canadian launched into space and return.

Jim also displayed a large number of space-related items, among them a fuel tank from a Soviet Satellite and parts of the Canadian Shuttle arm. The highlight of the meeting was watching Jim hold a shuttle tile in one hand while he heated the other side of the tile to cherry red with a blow torch.

Jim's demonstration and talk was most amusing and educational to Centre members, 35 of which were in attendance. Jim is travelling across Canada doing his demonstrations at Universities and RASC centres. This is one RASC member who deserve more recognition than he gets. His stories and contacts with the space program are truly enlightening.

# Canadian astronauts plan Winnipeg visit

Manitobans will have a chance to see Canada's first astronaut, Marc Garneau, in person when he visits Winnipeg Nov. 22 and 23.

The provincial government, which is co-ordinating the visit, yesterday released a busy schedule, including receptions, meetings and seminars, for Garneau and his backup astronaut Robert Thirsk, a former Winnipegger.

Garneau, a 35-year-old armed forces commander, made Canadian history when he flew aboard the American space shuttle Challenger last month.

Thirsk, 31, who was one of six Canadians chosen for astronaut training in preparation for the Challenger voyage, is a graduate of John Taylor Collegiate in Winnipeg.

He will return to the high school Nov. 23 to present a film on training and space experiments and answer students' questions.

The two astronauts will present films on the Challenger flight and on space training and experiments at a public meeting Nov. 22 at the University of Manitoba's Tache Hall Auditorium from 8 p.m. to 10 p.m.

Only those with tickets will be admitted, but tickets are available free on a first-come basis at the Legislative Building's tourist office, just inside the main entrance.

Garneau and Thirsk will launch their Winnipeg visit with a news conference Nov. 22 at 12:20 p.m. at the Legislative Building and go on to city hall for a civic reception.

They will then return to the Legislative Building at 3:30 p.m. for a provincial reception hosted by Premier Howard Pawley and Education Minister Maureen Hemphill. Students who have won prizes at Manitoba and national science fairs will be guests of honor.

At the evening public meeting, Garneau will show his space flight film. As well, he and Thirsk will show a film on training and space experiments.

On Nov. 23, the two will attend a breakfast seminar beginning at 7:30 a.m. at the Holiday Inn Downtown. The seminar, called People and Technology, is sponsored by the Manitoba jobs fund.

It is aimed at business, labor and environmental groups and the aerospace industry, but is open to interested Manitobans. The \$10 tickets are available through the Department of Industry, Trade and Technology.

The event will include a panel discussion involving science journalist Nadine Shannon; Dr. Jasper McKee, a University of Manitoba physics professor; Lyle Bryson, vice-president of Boeing of Canada; and Ed Robertson, deputy minister of Industry, Trade and Technology.

At 11 a.m. the two astronauts will conduct a series of briefings for military personnel at Winnipeg's Canadian Forces base.

At 2:25 p.m. Thirsk will go to John Taylor Collegiate, while Garneau will show his space flight film and answer questions at Silver Heights Collegiate.

They will inspect specialized technological work being undertaken at Bristol Aerospace at 3:30 p.m. before returning to Ottawa.



Jacqueline Garneau

"The whole thing has certainly changed our lives," says Jacqueline. "We still think of ourselves as ordinary people."

## Garneau Mission



# SKY CALENDAR JANUARY 1985

An aid to enjoying the changing sky

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p>Planets: Evening — Venus, in SW at dusk, is most brilliant "star" for nearly 4 hours after sundown. Mars, dim and reddish, is nearby; see diagrams. Morning: About 45 min before sunup, Saturn is in SE to S, to upper right of Antares. Mercury is to Antares' lower left first 3 weeks.</p> <p>Evening: 6</p>	<p>Tuesday, January 1, evening: Face southwest.</p> <p>Mars</p> <p>* Venus</p> <p>Evening: 7</p>	<p>New Year's Day Tue Jan 1, morning:</p> <p>Mercury</p> <p>Antares</p> <p>Evening: See box at left.</p> <p>Saturn</p> <p>Evening: 8</p>	<p>Evening: Face east.</p> <p>Pleiades ♀</p> <p>♁ Moon</p> <p>Hyades</p> <p>Quadrantid meteors best tomorrow 2-3 hours before sunup.</p> <p>Aldebaran</p> <p>Morning: 9</p>	<p>Morning: Mercury at gr elongation, 23° W of Sun. Evening: Pleiades ♀</p> <p>♁ Moon</p> <p>Hyades</p> <p>Aldebaran</p> <p>Thurs Jan 10, morning: WSW to W.</p> <p>♁ Moon</p> <p>Evening: 12</p>	<p>Fri Jan 4, morning:</p> <p>Mercury</p> <p>Antares</p> <p>SE</p> <p>Saturn</p> <p>Evening: Face SW.</p> <p>Mars</p> <p>Venus *</p> <p>Evening: 12</p>	<p>Evening: 5</p>
<p>Castor</p> <p>Full</p> <p>• Castor</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 6</p>	<p>• Pollux</p> <p>Moon rising</p> <p>ENE</p> <p>Jupiter beyond Sun today. Comet Halley same distance from Sun as Jupiter is (480 million miles).</p> <p>Morning: Moon in south</p> <p>♁ Moon</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 7</p>	<p>Tue Jan 8, morning:</p> <p>Mercury</p> <p>Antares</p> <p>SE</p> <p>Evening: See box at left.</p> <p>Saturn</p> <p>Evening: 8</p>	<p>Morning: Regulus</p> <p>♁ Moon in west</p> <p>Four hours after sunset: 9</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 9</p>	<p>Thurs Jan 10, morning: WSW to W.</p> <p>♁ Moon</p> <p>Evening: 12</p>	<p>Fri Jan 11, morning:</p> <p>Saturn</p> <p>Evening: Face SW.</p> <p>Mars</p> <p>Venus *</p> <p>Evening: 12</p>	<p>Evening: 5</p>
<p>• Pollux</p> <p>ENE</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 13</p>	<p>• Pollux</p> <p>Moon rising</p> <p>ENE</p> <p>Jupiter beyond Sun today. Comet Halley same distance from Sun as Jupiter is (480 million miles).</p> <p>Morning: Moon in south</p> <p>♁ Moon</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 14</p>	<p>Tue Jan 8, morning:</p> <p>Mercury</p> <p>Antares</p> <p>SE</p> <p>Evening: See box at left.</p> <p>Saturn</p> <p>Evening: 15</p>	<p>Morning: Regulus</p> <p>♁ Moon in west</p> <p>Four hours after sunset: 9</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 16</p>	<p>Thurs Jan 10, morning: WSW to W.</p> <p>♁ Moon</p> <p>Evening: 12</p>	<p>Fri Jan 11, morning:</p> <p>Saturn</p> <p>Evening: Face SW.</p> <p>Mars</p> <p>Venus *</p> <p>Evening: 12</p>	<p>Evening: 5</p>
<p>• Pollux</p> <p>ENE</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 20</p>	<p>• Pollux</p> <p>Moon rising</p> <p>ENE</p> <p>Jupiter beyond Sun today. Comet Halley same distance from Sun as Jupiter is (480 million miles).</p> <p>Morning: Moon in south</p> <p>♁ Moon</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 21</p>	<p>Tue Jan 8, morning:</p> <p>Mercury</p> <p>Antares</p> <p>SE</p> <p>Evening: See box at left.</p> <p>Saturn</p> <p>Evening: 22</p>	<p>Morning: Regulus</p> <p>♁ Moon in west</p> <p>Four hours after sunset: 9</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 23</p>	<p>Thurs Jan 10, morning: WSW to W.</p> <p>♁ Moon</p> <p>Evening: 12</p>	<p>Fri Jan 11, morning:</p> <p>Saturn</p> <p>Evening: Face SW.</p> <p>Mars</p> <p>Venus *</p> <p>Evening: 12</p>	<p>Evening: 5</p>
<p>• Pollux</p> <p>ENE</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 25</p>	<p>• Pollux</p> <p>Moon rising</p> <p>ENE</p> <p>Jupiter beyond Sun today. Comet Halley same distance from Sun as Jupiter is (480 million miles).</p> <p>Morning: Moon in south</p> <p>♁ Moon</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 26</p>	<p>Tue Jan 8, morning:</p> <p>Mercury</p> <p>Antares</p> <p>SE</p> <p>Evening: See box at left.</p> <p>Saturn</p> <p>Evening: 27</p>	<p>Morning: Regulus</p> <p>♁ Moon in west</p> <p>Four hours after sunset: 9</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 28</p>	<p>Thurs Jan 10, morning: WSW to W.</p> <p>♁ Moon</p> <p>Evening: 12</p>	<p>Fri Jan 11, morning:</p> <p>Saturn</p> <p>Evening: Face SW.</p> <p>Mars</p> <p>Venus *</p> <p>Evening: 12</p>	<p>Evening: 5</p>
<p>• Pollux</p> <p>ENE</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 30</p>	<p>• Pollux</p> <p>Moon rising</p> <p>ENE</p> <p>Jupiter beyond Sun today. Comet Halley same distance from Sun as Jupiter is (480 million miles).</p> <p>Morning: Moon in south</p> <p>♁ Moon</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 31</p>	<p>Tue Jan 8, morning:</p> <p>Mercury</p> <p>Antares</p> <p>SE</p> <p>Evening: See box at left.</p> <p>Saturn</p> <p>Evening: 32</p>	<p>Morning: Regulus</p> <p>♁ Moon in west</p> <p>Four hours after sunset: 9</p> <p>Morning: Moon, not quite at Last Quarter phase, is just over half full.</p> <p>♁ Moon in SSW</p> <p>Spica</p> <p>Evening: Venus at greatest elongation, 47° E of Sun; visible almost 4 hours after sunset.</p> <p>Mars</p> <p>* Venus (well up in SW at dusk)</p> <p>Moon, at First Quarter, is 90° (¼ circle) east of Sun in afternoon and evening sky.</p> <p>Evening: Mars * Venus</p> <p>Venus-Mars closest, 1.5° apart.</p> <p>Evening: 33</p>	<p>Thurs Jan 10, morning: WSW to W.</p> <p>♁ Moon</p> <p>Evening: 12</p>	<p>Fri Jan 11, morning:</p> <p>Saturn</p> <p>Evening: Face SW.</p> <p>Mars</p> <p>Venus *</p> <p>Evening: 12</p>	<p>Evening: 5</p>

Robert C. Victor, Jenny L. Pon, Robert D. Miller

Subscription: \$5.00 per year, from Sky Calendar, Abrams Planetarium, Michigan State University, East Lansing, Michigan 48824-1324. ISSN 0733-6314

**Magnitudes:** Venus -4.3 to -4.6; Mercury (Jan 1-23) -0.2 to -0.3; Saturn +0.6 to +0.5; Mars +0.9 to +1.0. **Motions:** The Sun and planets are all moving eastward against background stars. The Sun, going 32°, crosses from Sagittarius into Capricornus Jan 19. Mercury is 11° from Antares on Jan 1 (see diagram) and reaches greatest elongation, 23° W of Sun, on Jan 3. By Jan 18 Mercury is 30° E of Antares and 19° W of Sun, and within the next week disappears into the solar glare. Venus reaches greatest elongation, 47° E of Sun, on Jan 21. Sliding through Aquarius into Pisces, Venus moves 32°, and thus closely matches the Sun's rate of motion. Nearby Mars goes 24°. On Jan 1 Mars is 8° to the east of Venus, ahead of Venus in the zodiac. Venus slowly overtakes Mars, and passes 1½° to the north of it on Jan 28. Jupiter is in conjunction with Sun Jan 14. Saturn goes 2.4° in Libra, and ends January 6° W of Beta Scorpii.