THE GYROLOG

THE GYRO CLUB OF EDMONTON
Club Charter No. 18, July 29, 1921

President-Jeffrey Wurzer
Past President-George Schuller
Secretary-Treasurer-Barry Walker
Directors- Jim Lepp, Sheldon Weatherby, Leon Lubin, Ron Odynski
Dunc Mills (Ex-Officio)
Database Administrator-Chuck Gerhart, Gyrolog Editor-Fred Schulte
Club Website: www.edmontongyroclub.com

June 2025

BIRTHDAYS: ***Warren Garbutt*** ***on the 9th, Tony Mazzuca on the 11th, Jim Lepp on the 17th.***

WEDDING ANNIVERSARIES: ***Ray and Donna Dallaire*****, 46 years on the 2nd, Ken and Barbara Willan, 59 years on the 4th; Larry and Carol Dobson, 58 years on the 17th, Ron and Marlene Ramsey, 65 years on the 24th.**

President Jeff Wurzer welcomed 16 Gyros and our guest speaker to the June 3rd luncheon meeting held at the Millwoods Golf Course Woodvale Clubhouse.
Val Pohl led the singing of Cheerio and **Doug Armstrong** presented Grace.

Walter Yakimets introduced our guest speaker, **Douglas Penney** who grew up on a farm southeast of Beaverlodge, Alberta. He attended the local country school and high school in Grande Prairie. Douglas graduated from the University of Alberta in 1962 with a B.Sc. Soil Science in 1962. He then worked for the Alberta Public Lands in Peace River, Edmonton, and St. Paul, 1962-1967. His next career was with the Alberta Department of Agriculture from 1968-2000 in soil fertility and agronomy.

Douglas also completed his M.Sc. Soil Science in 1973.
International experience included the Canadian International Development Agency (CIDA) Zambia/Canada Wheat Project, 1980-82; the UN Food and Agriculture Development Organization (FAO), Soil Fertility/Crop Nutrition in North Korea for one month. The UN/FAO, Balanced Fertilization, one to two months per year in China, 1993-1998. Agronomy Consulting 2001-2023.

Doug Penney began his presentation by stating that **we are experiencing a serious loss of agricultural land for food production.** In the Edmonton area people desire to live where they want. The development of housing on good agricultural land is a political response to these desires. There have been some restrictions to protect good agricultural land in the Fraser Valley of British Columbia, but this is an exception.
There is a 240-acre plot of number one black soil owned by the University of Alberta on the west side of 122 Street between Lansdowne and Grandview Heights that has been preserved for agricultural farming research purposes since the founding of the University. These University of Alberta Land Trust lands are currently under consideration for a residential community.

The **Lewis Estates community** in West Edmonton was developed on soil that is not +1 black, but it was perfect for growing potatoes. *Lewis Farms was founded in in the Winterburn area in 1932 and continues to grow seed potatoes south of Spruce Grove.* Root vegetables prefer lighter soils such as sandy loam.

How do we enhance our soil!

The practice of fallow (not planting a crop for one growing season) has long been considered an effective risk management tool for producers. In drier parts of the Prairies, fallow (also called summerfallow) helps to build up soil moisture reserves. This practice has also been used in wetter areas such as parkland to more effectively control problem weed infestations.
However, fallow has increasingly come under attack for contibuting to environmental degradation. The burial of crop residue associated with the use of tillage to control weeds leaves the soil more exposed to wind and water erosion, and increases organic matter loss. ***Crop residues*** *are the plant materials left behind after harvesting, including straws, husks, stalks, leaves and roots.*

Soil organic matter loss also contributes to production of carbon dioxide, one of the greenhouse gases. Under wet conditions, fallow can contribute to increased leaching of water below the root zone and increased water runoff. This can lead to increased salinization (primarily in drier areas), water erosion, and potential contamination of surface and groundwater with nutrients and pesticides (primarily in wetter areas).

Improved farming practices have resulted in a reduction of fallow acres. In wetter areas, improved weed control strategies such as diversified crop rotations, low soil disturbance seeding methods, reduced tillage and the judicious use of herbicides have reduced the need to fallow.

Organic Production

The world population now exceeds 8 billion. To maintain food products where will the nutrients come from? The recycling of animal and human waste has potential, but unless you can concentrate it, it is not economic!
Agricultural fields without manure have typically 10-20 ppm of nitogen/phosphorus. These elements exceed 100-200 ppm adjacent to cattle feedlots.

Biosolids are a nutrient-rich organic material recovered through advanced human wastewater treatment processes. They contain nitrogen, phosphorus, potassium and essential micro-nutrients.

Since 1983, local farmers have been fertilizing their fields with biosolids by participating in the City of Calgary's Calgro™ land application program*. At its inception, this innovative program was the result of a joint initiative between the Government of Alberta and The City to establish best management practices for land application. Since then, Calgro has grown and maintained positive relationships with the local agricultural community.*

From April to late October, Calgro works on farmlands near the Shepard Lagoons in southeast Calgary. Biosolids are transported from the Shepard Lagoons to pre-approved agricultural land, where specialized equipment is used to subsurface inject biosolids 5 to 10 centimetres (2 to 5 inches) below the ground surface into the soil. Following provincial guidelines, soils that receive biosolids can be used to grow cereal grains, small oilseeds, dried legumes, forage crops, trees, and sod.

Jeff Wurzer thanked our speaker for his detailed presentation on agricultural lands and their value for food production. Doug was presented with a copy of *Giants of the Pacific Northwest The Hunt Family Totem Poles,* authored by Gyro Doug Armstrong.

Dunc Mills played an introductory tune on the xylophone and **Chuck Gerhart** welcomed 16 Gyros and two guests to the June 17 luncheon meeting held at the Millwoods Golf Course Woodvale Club House.
Allan Warrack introduced his guest, **Dr. Rod Macleod,** Professor Emeritus of History, University of Alberta.

Chuck spoke about the recent passing of 19 year member **Leon Lubin.** Leon served as President in 2009-10 and recent terms as Director. A minute of silence was observed to honour Leon.

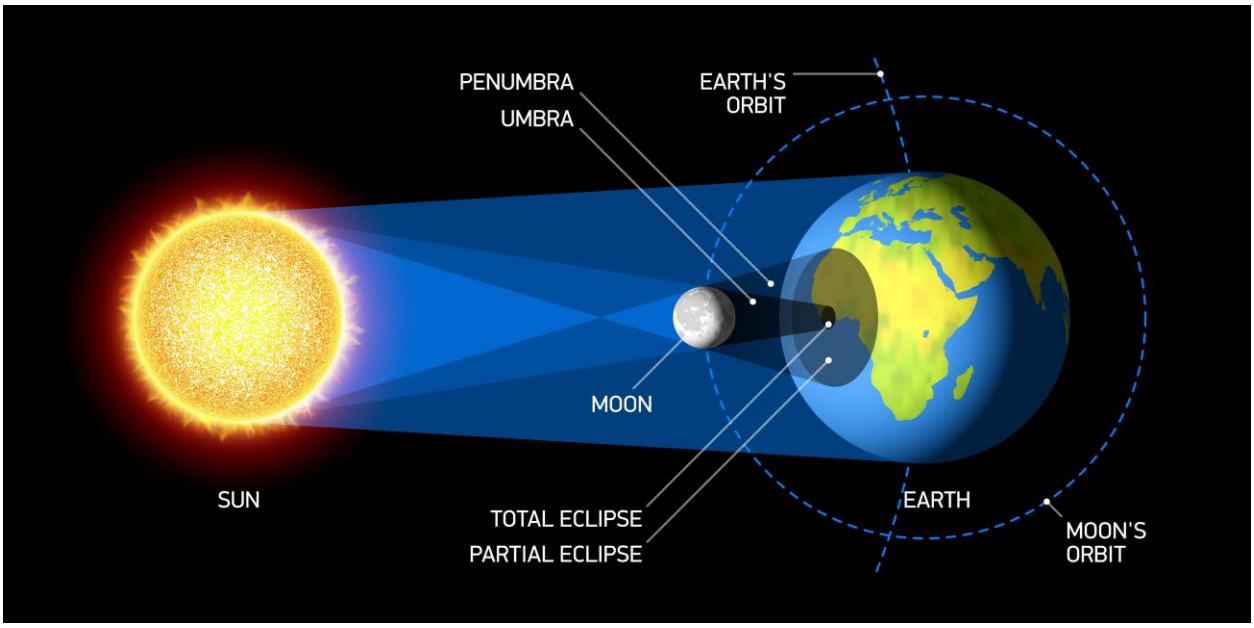
Sheldon Weatherby led the singing of Cheerio and **Chuck** gave Grace.

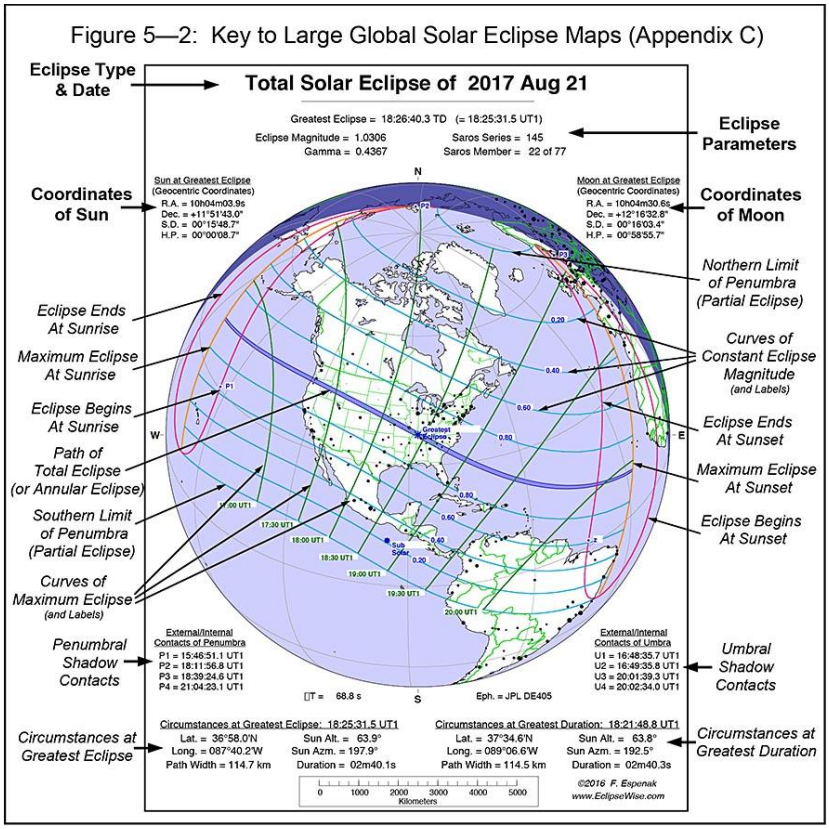
Fred Schulte introduced our guest speaker, **Dr. Douglas P. Hube.**

Douglas was born in St. Catherines, Ontario; he attended the University of Toronto from 1960-68 earning a BSc (Math, Phys, Chem), MA, PhD (Astrophysics). 1966-7 visiting Astronomer, Radcliffe Observatory, Pretoria, South Africa. 1967-68 Lecturer, Scarborough College, University of Toronto. 1968-9 National Research Council of Canada, Postdoctoral Fellow, Kitt Peak National Observatory, Tucson, Arizona. 1969-2001 Professor, Department of Physics, University of Alberta. 1965-1992 Guest Astronomer, Dominion Astrophysical Observatory, Victoria, BC. 1991 Guest Astronomer, Cerro Tololo Interamerican Observatory, Chile. **Founding Member (1977) and Chairman (1988-9) Edmonton Space Sciences Foundation.** National President (1994-96) and Honorary President (2018-23) of the Royal Astronomical Society of Canada. Fellow of the British Interplanetary Society and of The Royal Astronomical Society of Canada. **2003 Asteroid 65657 (1982 QB4) 'HUBE' by the International Astronomical Union.** Principal Areas of Published Research: Galactic Structure, Spectroscopic and Eclipsing Binary Stars. Meteoritics, Black Holes. Hobbies include Genealogy, Birding, Travel, Light Pollution Abatement and chasing Solar Eclipses. Professor Emeritus, Department of Physics (Astrophysics), University of Alberta. Married to Joan (1965) with two daughters anf four grandchildren.

Solar Eclipses - Past and Future – Highlights

An eclipse of the Sun occurs when the Moon, as observed from some locations on Earth, passes in front of the Sun. The Sun may be partially to totally blocked from view according to the particular circumstances.





Sun's diameter ≈ 400 X Moon's diameter
Sun's distance from Earth ≈ 400 X Moon's distance from Earth
Apparent size of Sun ≈ Apparent size of Moon
Exact eclipses are possible
Ours is the only planet-moon pair within the Solar System where this is possible
… but that will not always be true

A solar eclipse does NOT occur at every New Moon
Why not?

The Motion of the Moon is surprisingly complicated:

1. **Its orbit is an ellipse ➔ distance from Earth changes**
2. **Its orbit is inclined to the orbit of Earth around the Sun**
3. **Its entire orbit swings around Earth every 18.6 years**

All of which are well-understood.

The conditions under which a solar eclipse might occur do *not* repeat yearly.

2 'eclipses seasons' per calendar year approximately 1 synodic month in length separated by 173.3 days.

There *must* be at least 1 solar and 1 lunar eclipse in every eclipse season

Predicting Eclipses

We know periods of rotation and revolution of Earth and Moon with high precision.

Celestial mechanics is well-understood.

Eclipse circumstances have been calculated with high accuracy for *thousands of years in the past* and *thousands of years into the future …*

The 3 bodies involved in eclipses – Earth, Sun and Moon – all revolve and rotate with fixed periods …

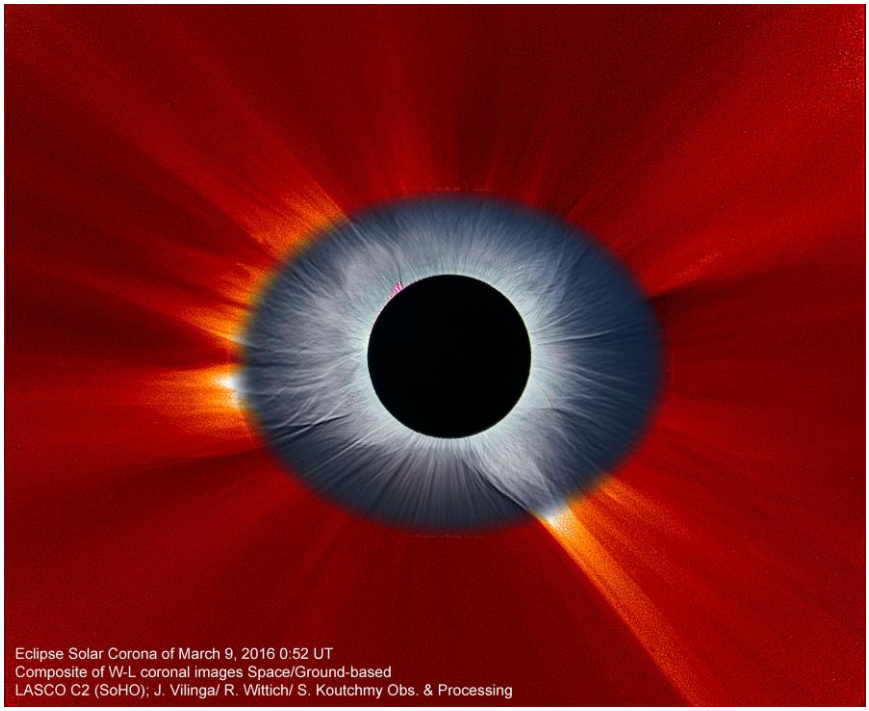
Their relative positions change with fixed periods.

There must be periodicities/patterns in the times of occurrence of eclipses.

Number of Eclipses Possible in a Calendar Year

- **There must be at least 4 eclipses each year: 2 of the Sun … both could be partial eclipses.**
- **+ 2 of the Moon … both could be penumbral and hence not noticeable.**
- **There may be as many as 7 eclipses in one year:**
- **5 of the Sun + 2 of the Moon or 4 of the Sun and 3 of the Moon.**

Total Solar Eclipse



Eclipses in 2025

1. **14 March – Total Lunar Eclipse visible from Alberta.**
2. **29 March – Partial Solar Eclipse visible from eastern Canada, Africa and Eurasia.**
3. **7 September – Total Lunar Eclipse visible from western Europe, India and eastern Asia.**
4. **21 September – Partial Solar Eclipse centred on southern Pacific Ocean.**

Duration of Totality

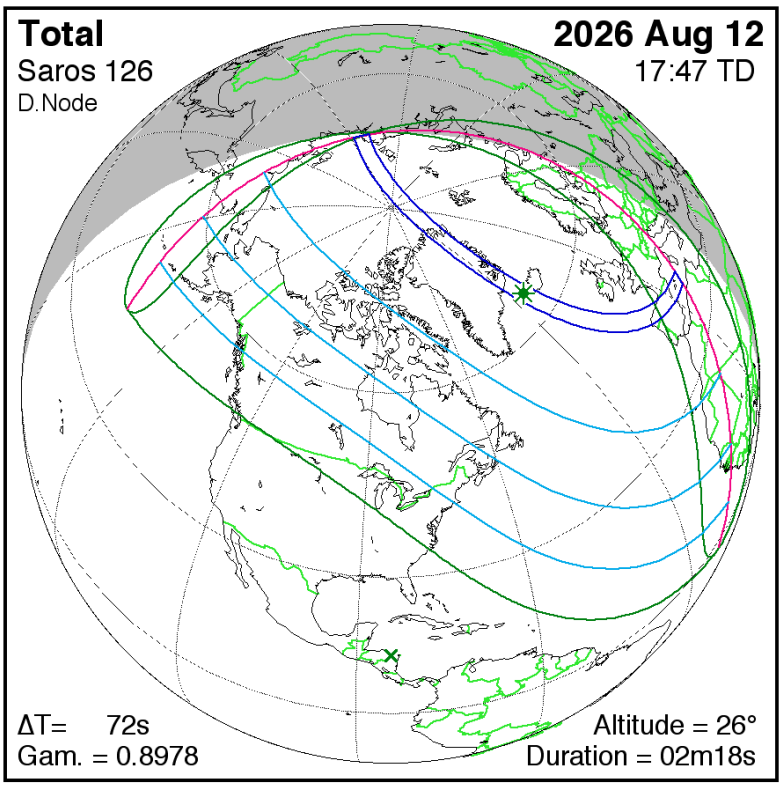
The *longest* duration of totality is approximately 7m 30s.

The *shortest* duration of totality can be a *few seconds.*

***Typical* duration of totality is 2 to 3 minutes.**

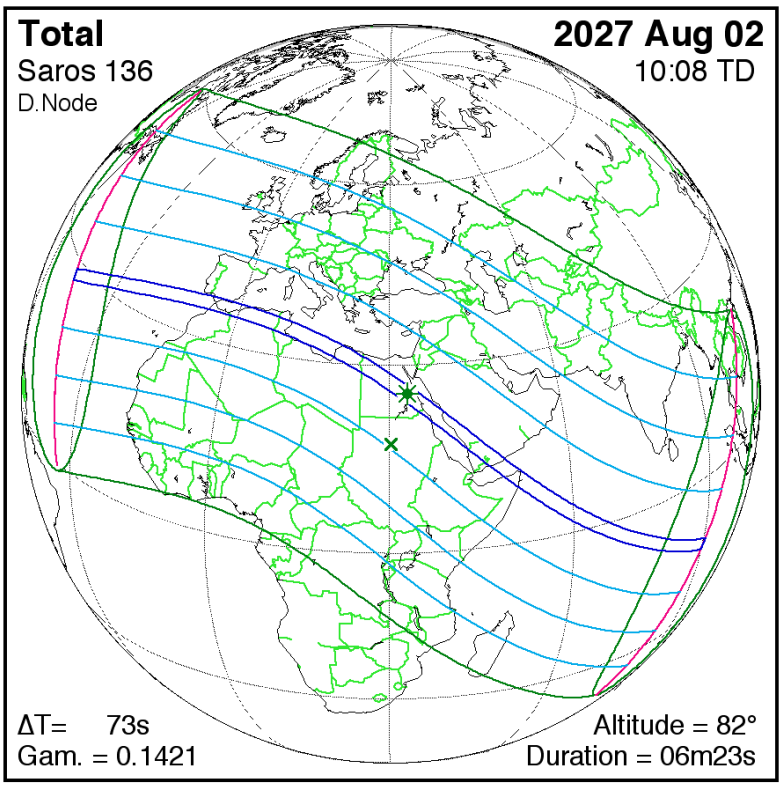
A solar eclipse can *begin as annular*, *become total* and *end as annular*.

www.EclipseWise.com/eclipse.html



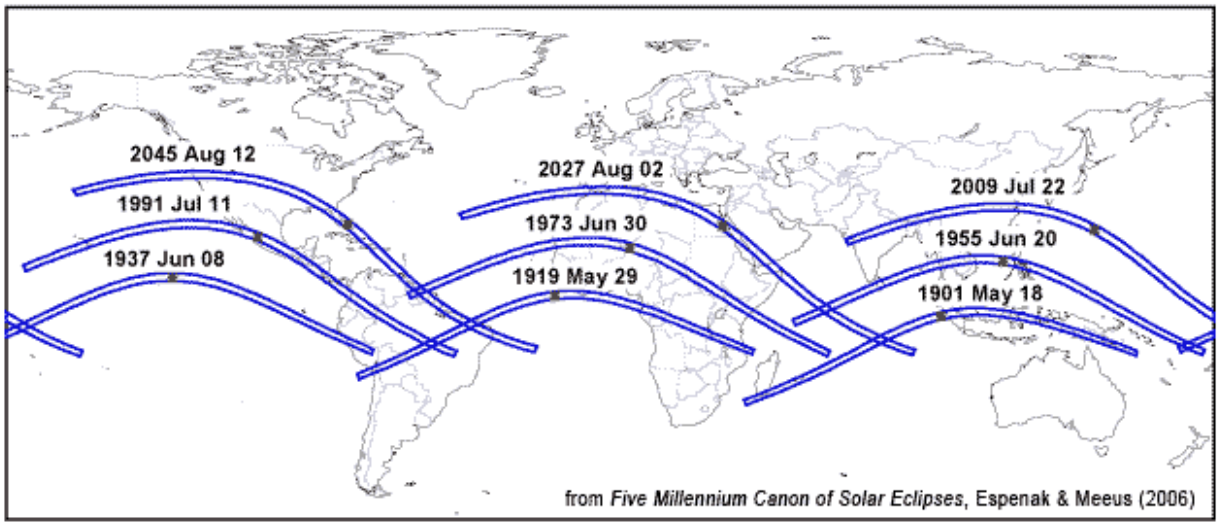
Thousand Year Canon of Solar Eclipses

www.EclipseWise.com/eclipse.html



Thousand Year Canon of Solar Eclipses

Figure 1 — Eclipses from Saros 136: 1901 to 2045



Chuck Gerhart thanked Dr. Hube for his fascinating presentation.

Dr. Douglas P. Hube

Dunc Mills reported on the Gyro International Convention-Alaskan Cruise. **Governor Ted Ewanchuk** of the Sherwood Park Gyro Club took on the lion's share of the work. There were 138 Gyros and ladies on the cruise.

Ned Barber is our new International President, **Dunc Mills** is the 1st Vice-President and **Trevor Slaney** the 2nd Vice-President. This will be the last year of 11 Districts. In July 2026, there will be three Districts, each with a Governor.

It is with regret that we acknowledge the sudden passing of **Leon Lubin** on **June 3rd.**

Leon was born in Rosthern, Saskatchewan in 1934 and spent his early years in Blaine Lake. Both his parents emigrated from Russia, his father after serving in W.W.I and his mother at the tender age of 13. They met in Winnipeg and later moved to Blaine Lake where his father operated a General Store until he retired.

Leon attended elementary school in Blaine Lake and finished high school in Saskatoon. He then **completed a B.A. in Science at the University of Saskatchewan.** While at university he was affectionately known as "Senator Lubin". "He was one of the infamous cutups of the day who ensured that campus

life had an abundance of spirit, pranks, and intrigue. On numerous occasions, Leo and his cohorts reminded everyone that there was more to campus life than having one's nose buried in a book." (quote from Fall Green and White, University of Saskatchewan). Among other activities, he was sports editor of the campus newspaper, on the Men's Athletic Board and Director of Varsity Varieties. Interestingly, after graduation, for much of his career, he was closely involved in promoting and administering educational programs.

Initially, after graduation, Leon worked at **Investors Syndicate in Saskatoon.** He maintained his connection with the campus through the Greystone Theatre, performing in a production which won a place in The Dominion Drama Festival. It was at this time **Leon started dating Jo-Anne.** Jo-Anne and Leon were married in Saskatoon in 1965.
Following the birth of their first child, Suzanne, the couple moved to Edmonton where Leon was enrolled in the Master of Business Administration Program (MBA).

He graduated in 1972 and worked for the Edmonton Public School District. as a Project Associate **co-developing a decentralized budgeting model which integrated the educational and financial aspects of planning in schools and central administration**. The program has since been implemented in many school districts in the United States and other parts of the world. Leon went on to become Supervisor in the Personnel Department. His final assignment was as Director of Support Staffing.
Following his tenure with the school system, Leon continued in the educational field to become the Executive Director of the newly implemented **Alberta Heritage Scholarship Fund.** In this position, he was responsible for the implementation, coordination, delivery, and evaluation of 35 scholarship programs established under the $100 million Scholarship Fund. During this time, he also served as a Public-School Board Trustee, Vice Chair of the Edmonton Board of Health, Vice President of the Junior World Basketball Championships and was on the Board of Directors for the United World Colleges. Leon had little time to smell the roses.

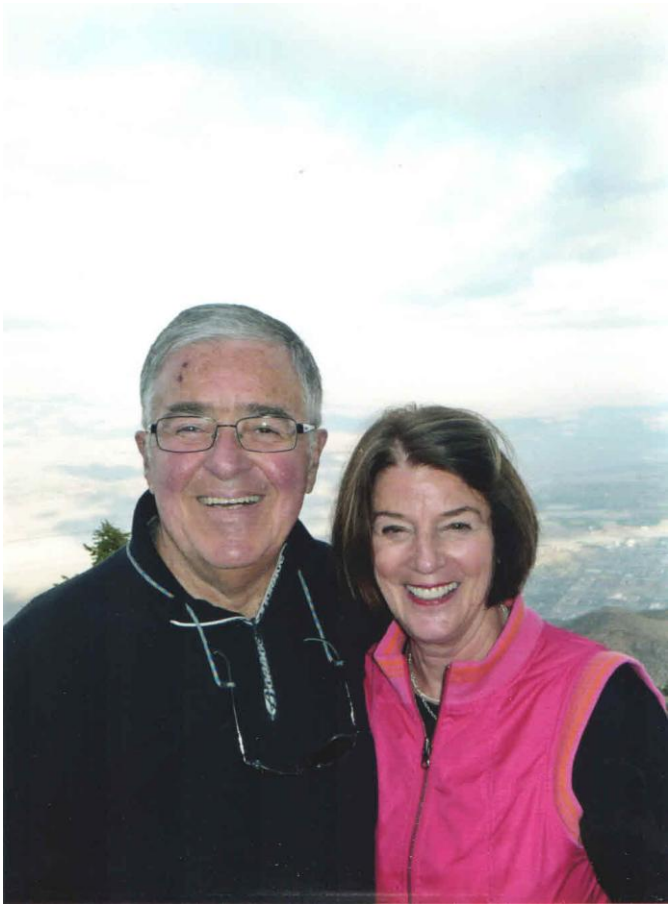
Upon his first stab at retirement, he was recruited to head up the **Alberta Motion Picture Association.** Much of his energy was focused on lobbying the Provincial Government to replace the incentives which were eliminated during the cutbacks of the late 1980's. Some 7 years later, the mission was successful, and the industry once again became an economic and artistic success.

Over the years, Leon continued to meet new challenges as an Appeals Commissioner for the Workers Compensation Board, Chair of the City of Edmonton Taxi Commission, and Chair of the Board of Referees-Employment Insurance

Commission. For the past 25 years, he served as the Alberta Director for the Forum for Young Canadians, a Foundation dedicated to bringing students from across Canada to Ottawa to learn about the process of government.

Leon and Jo-Anne have enjoyed spending time with their two children, Suzanne and Michael, who are both lawyers, as well as with their four grandchildren, Felix and Cleo and Claire and Grace.

Leon and Jo-Anne were introduced to Gyro by Walter Yakimets in 2006 and Leon served as President in 2009-10.



Leon and Jo-Anne

'Fast Fred'

UPCOMING EVENTS

River Hawks Baseball, RE/Max Field, Wednesday July 2, 7:05 PM. If you want a parking spot, be there at 6:00!
Team Leaders: Dunc Mills/Sheldon Weatherby