



Alan German & Chris Taylor
Ottawa PC Users' Group

October 29, 2025

Follow Up OPCUG social get-together

- Date: **Wednesday, Nov 26th**
 - starting at 7:00pm
- Location: **Big Rig in Gloucester Centre**
 - Blair & Ogilvie
 - <https://maps.app.goo.gl/8rdtztXyvbHVzVCt9>
 - driving: north on Blair off the 174 just east of the split
 - plenty of free parking
 - O-train: Blair station
- OPCUG making arrangements
 - each participant on their own for paying
- If planning to attend
 - email SuggestionBox@opcug.ca by **Wednesday, November 12th**





Google Password

- Today I tried to log into Google Groups: I was not able to (password invalid), until I reset my password
- I've had the same password for YEARS
- I noticed that my password was not strong
- Does Google sometimes force users with weak passwords to choose stronger passwords?





kagi.com

- Some people are raving about the paid search service
<https://kagi.com/>
- *Ask Leo - I've Stopped Using Google Search! Why you should consider it too*
<https://www.youtube.com/watch?v=K297opaBp8E>



- Has anyone in OPCUG ever used it?



Zip files

- This is probably too simple a question for most here...
- How do you create a zip file, then how do you open it?

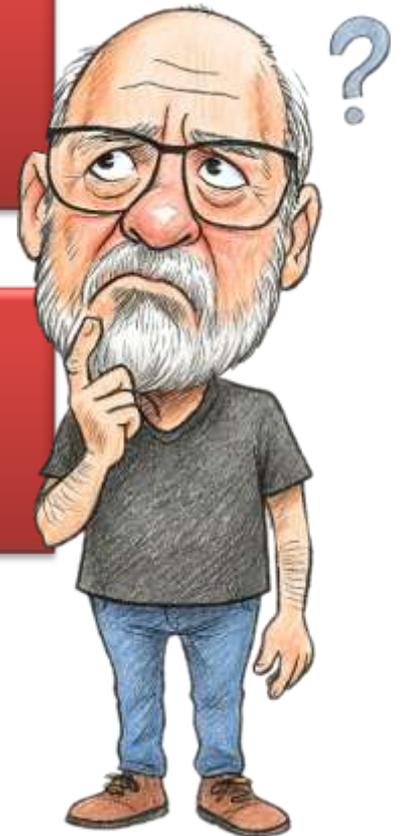
First

- a simple question may not be simple to all people
 - we all have things to learn

And...

- there may be nuances unknown even to those who *think* they know the answers!

Sherida Harris





What is a ZIP File

- A zip file is essentially a container
- Archiving
 - Bundle multiple files/folders into a single file
- Compression
 - Lossless compression to reduce file size
- Advantages
 - Convenient packaging for file distribution
 - Faster uploading/downloading
 - Multi-platform (Windows, Linux, MacOS)

History of File Compression

- David Huffman developed the Huffman coding algorithm in 1952
 - Provided the mathematical formulation for lossless compression
- Unix established the Compress utility (1970s–80s)
 - Used Lempel–Ziv–Welch (LZW) compression
 - Applicable to a single file
- In 1985, Thom Henderson, System Enhancement Associates (SEA), developed ARC, compressing individual files and storing them in one archive

Emergence of ZIP

- Phil Katz, the founder of PKWARE, developed PKARC but was sued by SEA for copyright infringement
- Phil Katz and Gary Conway created a new compression utility and released the specification into the public domain
- Robert Mahoney suggested ZIP for the name of the file format – indicating speed i.e. faster than ARC!
- PKZIP (now ZIP) became dominant



ZIP File Structure

- Local File Header *
 - metadata (e.g. compression method, checksum)
- File Data
- Data Descriptor (Optional)
- Central Directory
 - index metadata (e.g. file names, attributes, timestamps, pointers to file locations)
- End of Central Directory Record

** The initials "PK" still appear in every ZIP file header*

ZIP File Features

- CRC-32 checksums and file size metadata are used to ensure integrity when compressing/decompressing
- Files can be appended or removed by writing local headers and updating the central directory (index)
- The central directory allows files to be extracted individually without decompressing the whole archive
- Redundancy between local file headers and central directory records ensures accurate file recovery and fast access.

Additional Features

- Embedded comments
- Password protection/encryption
- Unicode filenames
- Large file (>4 GB) support
- Splitting archives (e.g. CD storage)
- Selection of compression algorithm (speed vs. level of compression)

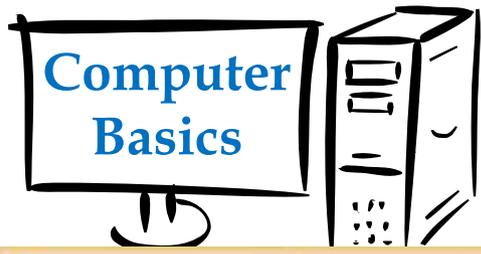


Non-Archive Files

- Microsoft Office files (e.g. docx, xlsx) and LibreOffice Office files (e.g. odt, ods) are really ZIP containers with XML and various resource modules
- Other similar files include:
 - APK (Android Package Kit)
 - IPA (iOS App Store Package)
 - CRX and XPI (Chrome and Mozilla extensions)
 - JAR, WAR, and EAR (Java applications)
 - XPS (XML Paper Specification)
 - APPX (Windows Store apps)

Zippping and Unzipping

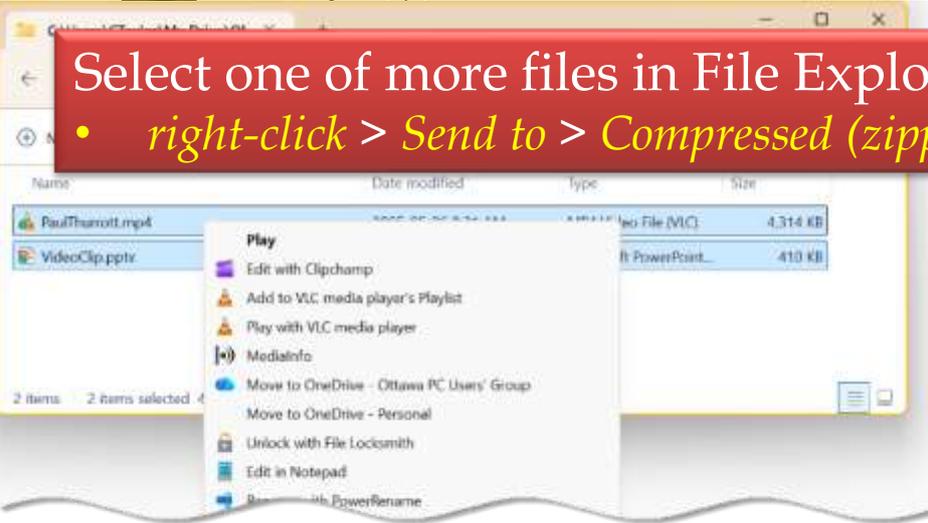
- Windows has ZIP file processing built in
- Linux Mint has a default Archive Manager
- Many third-party programs are available with extended capabilities
 - 7-Zip (free, open-source)
 - PeaZip (free, open-source)
 - WinZip (higher compression than 7z)
 - WinRAR (RAR has higher compression)



Creating a ZIP file in Windows 10 & 11

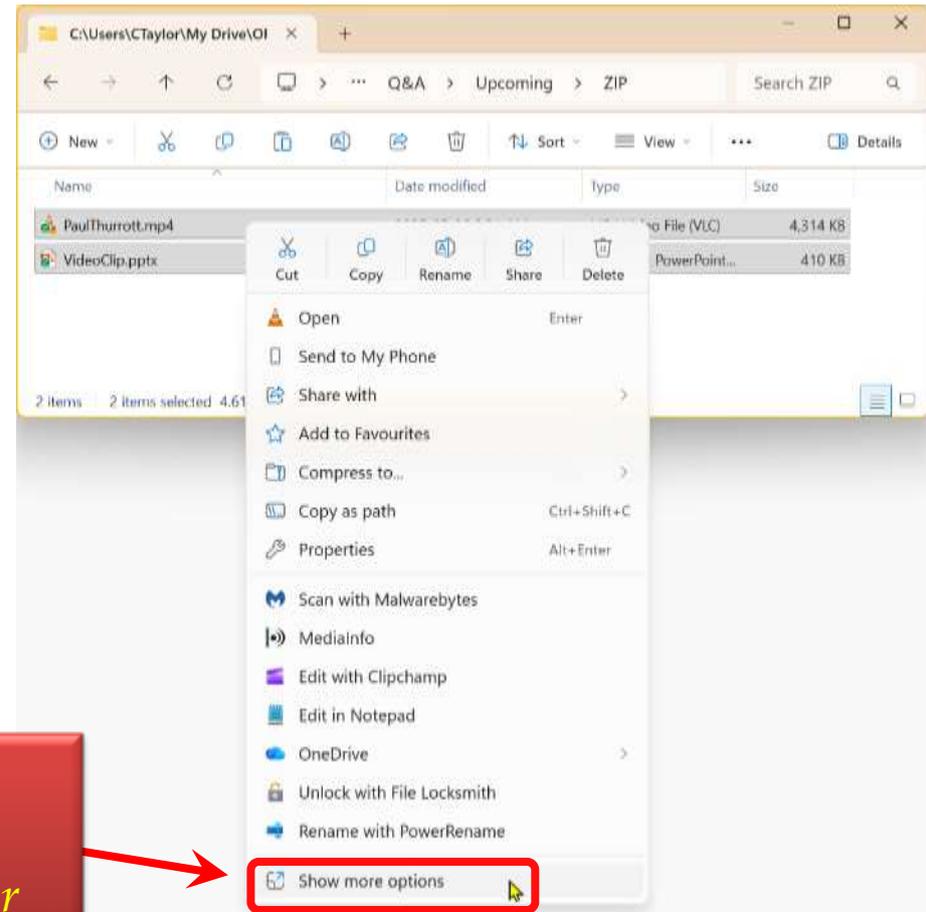
Select one of more files in File Explorer

- *right-click > Send to > Compressed (zipped) folder*

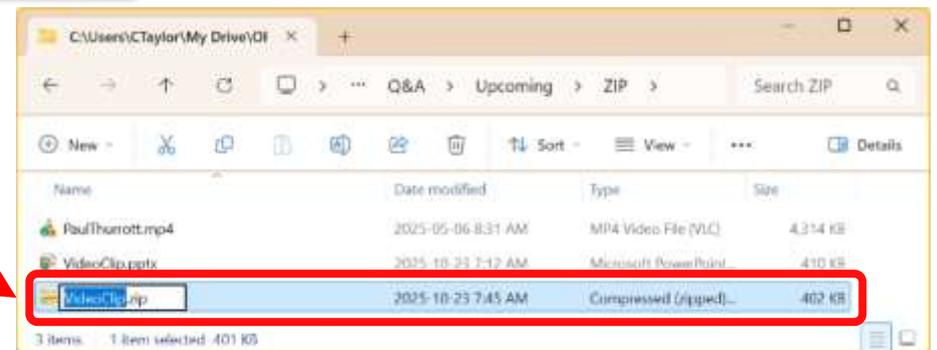


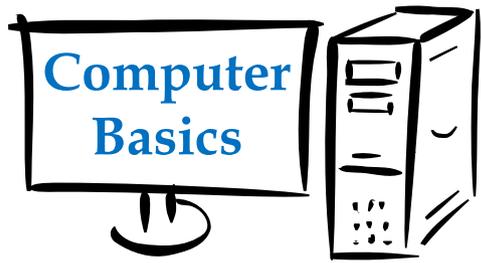
May need to use *Show more options*

- *right-click > Show more options*
 - to get *Send to > Compressed (zipped) folder*



Zip file created

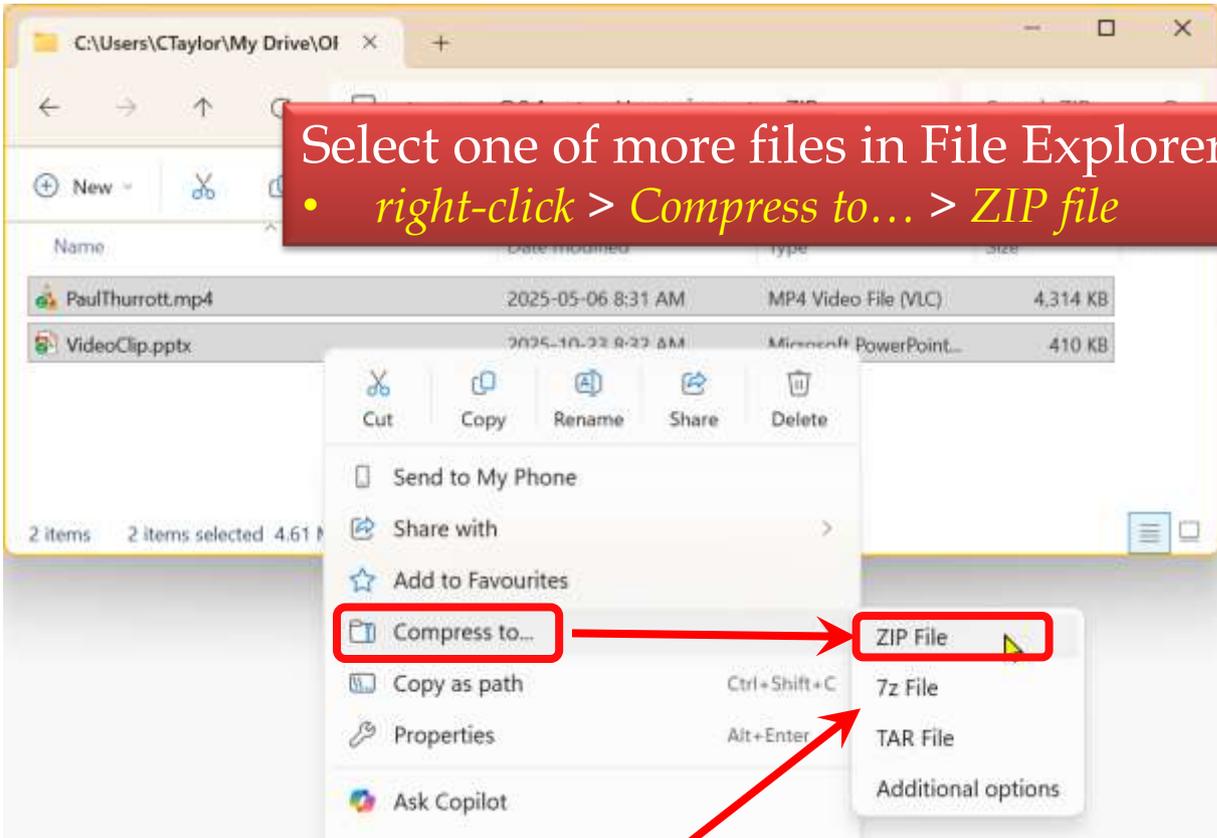




Creating a ZIP file in Windows 11 only

Select one of more files in File Explorer

- *right-click > Compress to... > ZIP file*



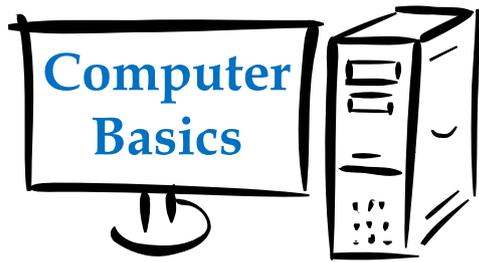
Won't be covering other available formats

- 7z
- TAR

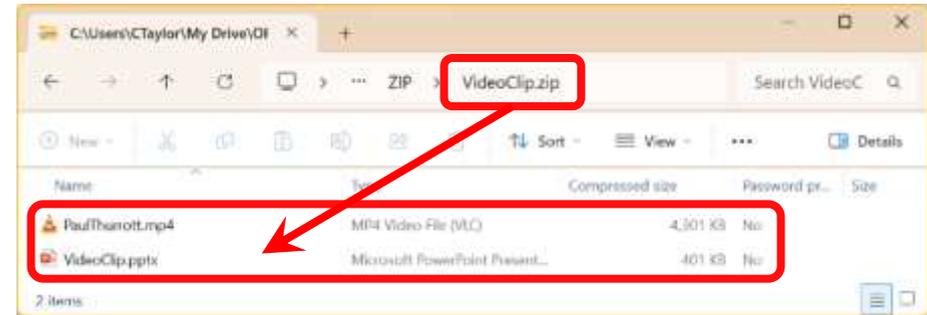
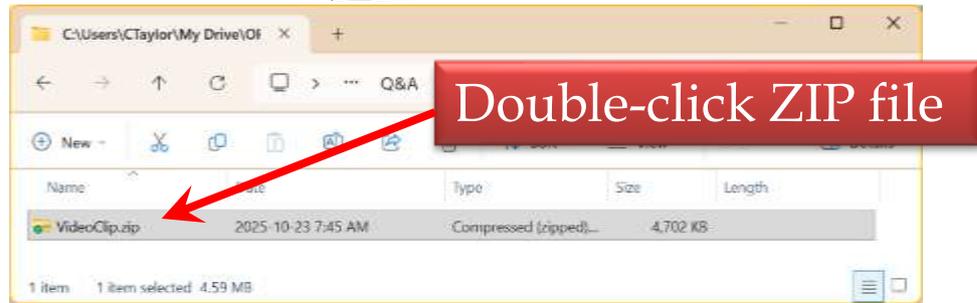
Avoid *Additional options*:

- *Retain symbolic links*
- *Retain hard links*

Unless you *really* know what you are doing



Using ZIP files



Opens in File Explorer
• as if it's a *folder containing files*

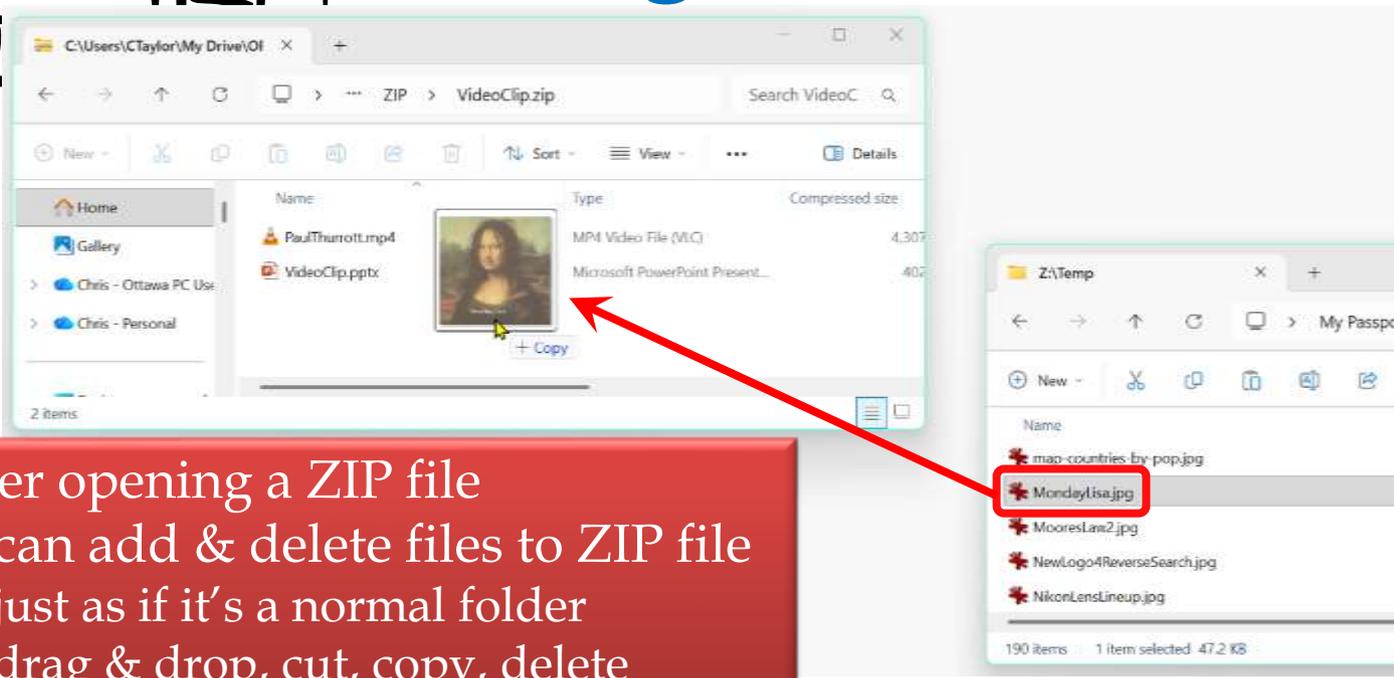
Important

- can access files within the ZIP simply by double-clicking them, but...
- there is a caveat we will come back to shortly

Better to copy all files to a regular folder and then access them in that folder

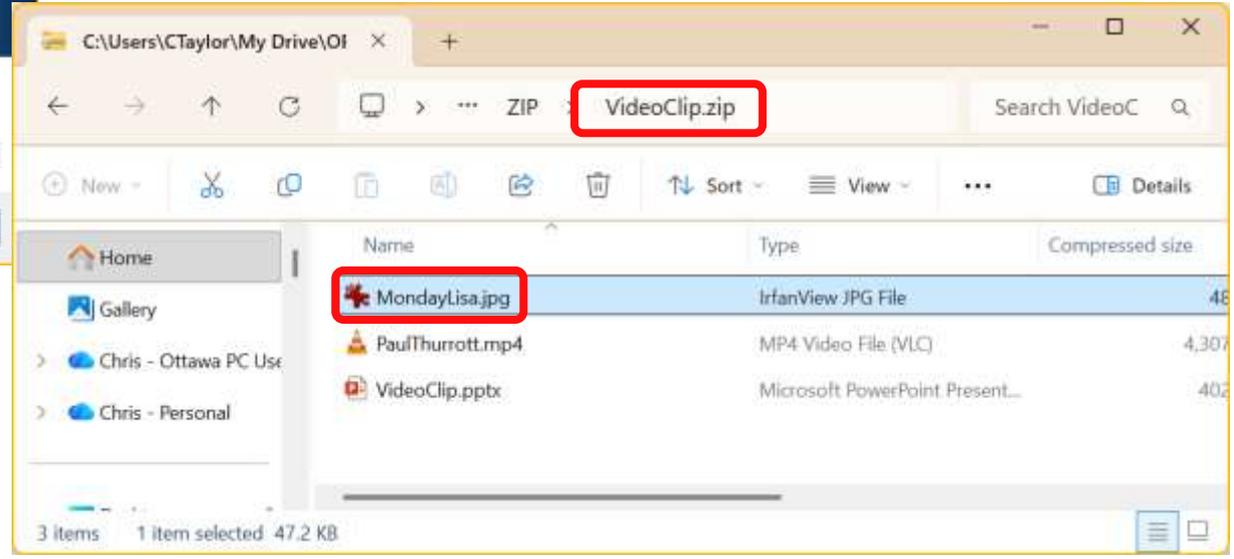
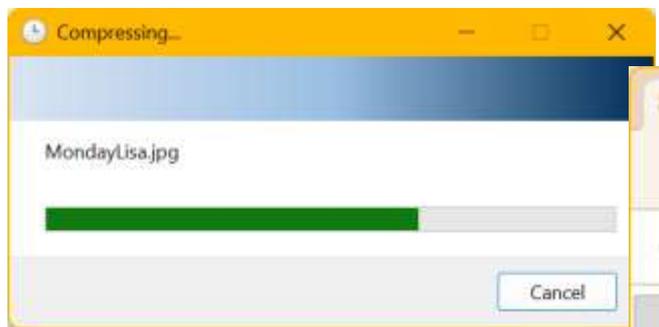


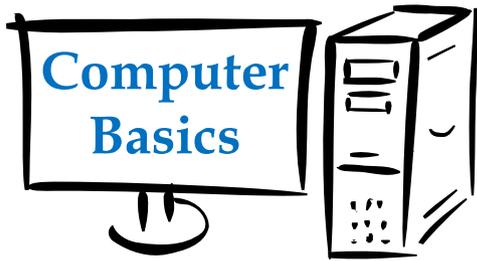
Using ZIP files



After opening a ZIP file

- can add & delete files to ZIP file
- just as if it's a normal folder
- drag & drop, cut, copy, delete

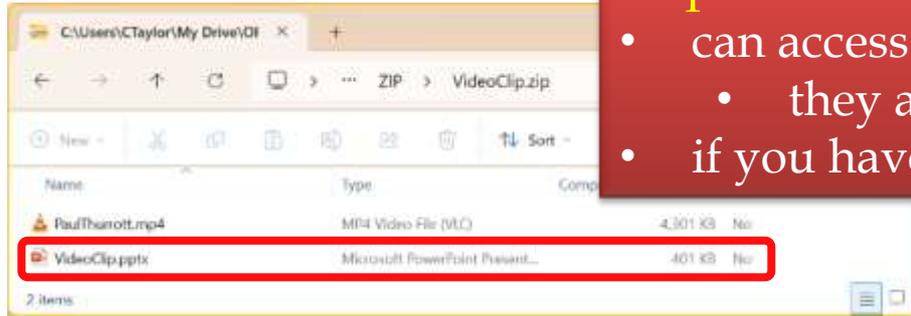




A problem...

Important

- can access files within ZIP by double-clicking them, but...
 - they are **copied** to a **temporary folder** and then run
- if you have file dependencies you can get errors

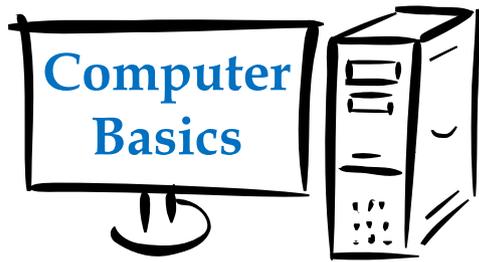


- VideoClip.pptx has a **linked** MP4 video file **PaulThurrott.mp4**
- double-clicking on **VideoClip.pptx** extracts **just that file** to a temporary folder and runs it



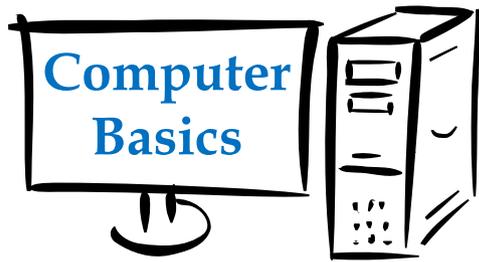
- when presentation is played, it can't find the **linked** video file **PaulThurrott.mp4** to play

Better to copy all files to a regular folder and then access them



Encrypted ZIP files

- Great for sensitive information
 - password required to access the files within the ZIP file
 - note: directory of files not encrypted: only the contents of files
 - without the password you can still see the names of files
- Windows ZIP handler cannot *create* encrypted ZIP files
 - can extract file from encrypted ZIP file created by other programs
 - ...sometimes



It gets worse

- Original ZIP specification
 - relatively weak encryption algorithm: *ZipCrypto*
- Later implementations
 - added options for strong encryption including AES (Advanced Encryption Standard)
- Windows not only can't create encrypted ZIP files...
- Windows ZIP handler can only extract files from encrypted ZIP files if using the original *ZipCrypto*

Bottom line

- if using encryption with ZIP files
- best to use a 3rd party program to handle ZIP files



7-Zip

7-Zip is a file archiver with a high compression ratio.

Download 7-Zip 25.01 (2025-08-03) for Windows x64 (64-bit):

Link	Type	Windows	Size
Download	.exe	64-bit x64	1.6 MB

Download 7-Zip 25.01 for another Windows platforms (32-bit x86 or ARM64):

Link	Type	Windows	Size
Download	.exe	32-bit x86	1.3 MB
Download	.exe	64-bit ARM64	1.5 MB

License

7-Zip is **free software** with **open source**. The most of the code is under the **GNU LGPL** license. Some parts of the code are under the BSD 3-clause License. Also there is unRAR license restriction for some parts of the code. Read [7-Zip License](#) information.

You can use 7-Zip on any computer, including a computer in a commercial organization. You don't need to register or pay for 7-Zip.

The main features of 7-Zip

- High compression ratio in [7z format](#) with **LZMA** and **LZMA2** compression
- Supported formats:
 - Packing / unpacking: 7z, XZ, BZIP2, GZIP, TAR, ZIP and WIM
 - Unpacking only: APFS, AR, ARJ, CAB, CHM, CPIO, CramFS, DMG, EXT, FAT, GPT, HFS, IHEX, ISO, LZH, LZMA, MBR, MSI, NSIS, NTFS, QCOW2, RAR, RPM, SquashFS, UDF, UEFI, VDI, VHD, VHDX, VMDK, XAR and 7

7-Zip 25.01	2025-08-03
7-Zip 25.01	

7-Zip 25.00	2025-07-05
7-Zip 25.00	

7-Zip 24.09	2024-11-29
7-Zip 24.09	

7-Zip ChangeLog	
History of 7-zip changes	

Home

[7z Format](#)

[LZMA SDK](#)

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English

[Chinese Simpl.](#)

[Chinese Trad.](#)

[Esperanto](#)

[French](#)

[German](#)

[Japanese](#)

[Portuguese Brazil](#)

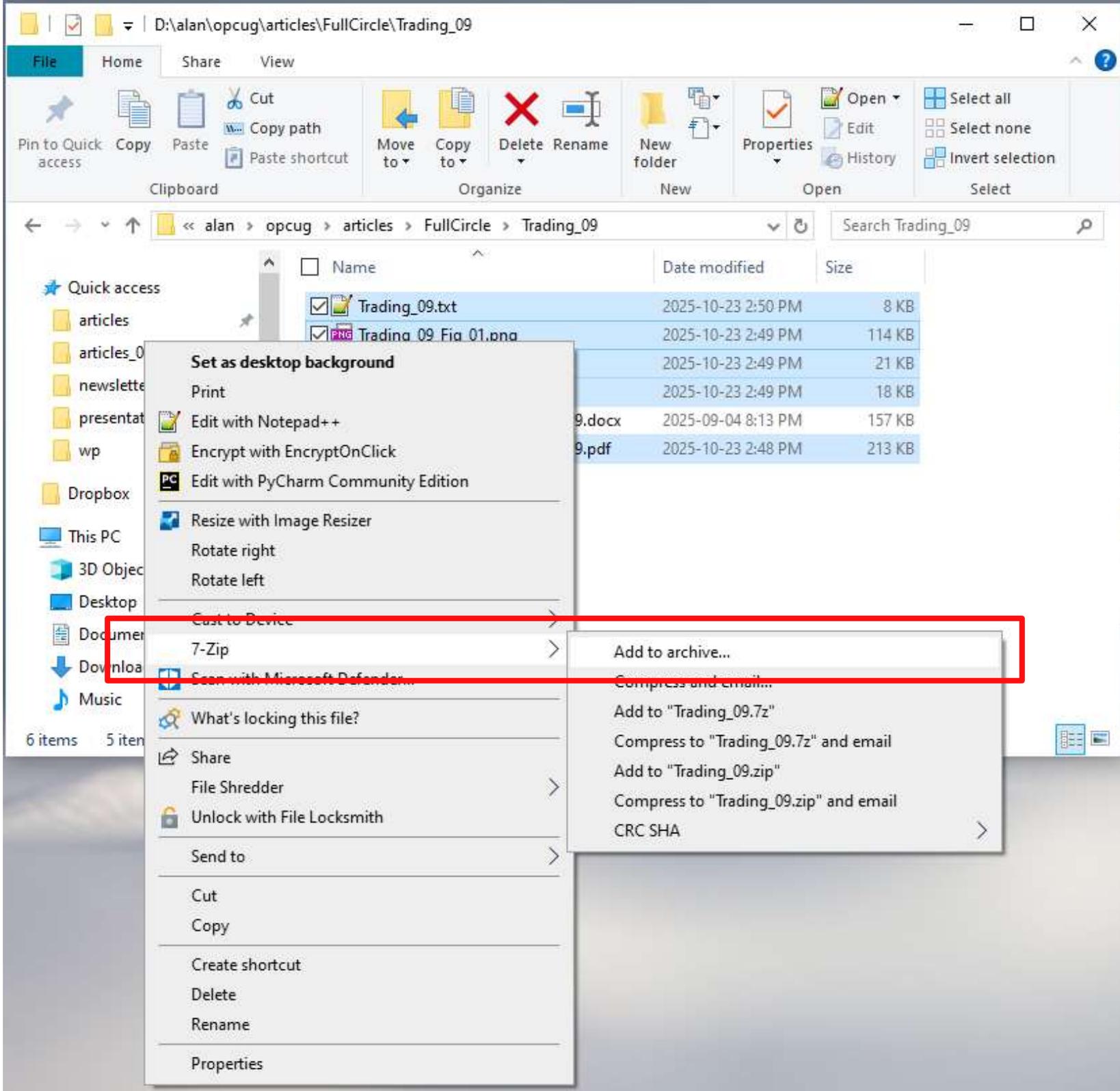
[Spanish](#)

[Thai](#)

[Vietnamese](#)

[7-max](#)

<https://www.7-zip.org>



D:\alan\opcug\articles\FullCircle\Trading_09\

File Edit View Favorites Tools Help

Add Extract Test Copy Move Delete Info

D:\alan\opcug\articles\FullCircle\Trading_09\

Name	Size	Modified	Created	Accessed	Attributes	Packed Size	Comment	Folders
TradingUpToLinux_FullCircle_09.docx	160 503	2025-09-04 20:13	2025-10-23 14:47	2025-10-23 14:48	A	160 503		
TradingUpToLinux_FullCircle_09.pdf	217 973	2025-10-23 14:48	2025-10-23 14:48	2025-10-23 14:52	AI	217 973		
Trading_09.txt	7 672	2025-10-23 14:50	2025-10-23 14:50	2025-10-23 14:51	A	7 672		
Trading_09_Fig_01.png	116 501	2025-10-23 14:49	2025-10-23 14:49	2025-10-23 14:49	A	116 501		
Trading_09_Fig_02.png	20 583	2025-10-23 14:49	2025-10-23 14:49	2025-10-23 14:49	A	20 583		
Trading_09_Fig_03.png	18 410	2025-10-23 14:49	2025-10-23 14:49	2025-10-23 14:50	A	18 410		

5 / 6 object(s) selected 381 139 18 410 2025-10-23 14:49:53

Add to Archive



Archive: D:\alan\opcug\articles\FullCircle\Trading_09\
Trading_09.zip

Archive format: zip

Update mode: Add and replace files

Compression level: 5 - Normal

Path mode: Relative pathnames

Compression method: * Deflate

- Options
- Create SFX archive
 - Compress shared files
 - Delete files after compression

Dictionary size: * 32 KB

Word size: 32

Solid Block size:

Number of CPU threads: 4 / 4

Encryption

Enter password:

Reenter password:

Show Password

Encryption method: ZipCrypto

Memory usage for Compressing: 272 MB / 13031 MB / 16289 MB * 80%

Memory usage for Decompressing: 2 MB

Split to volumes, bytes:

Parameters:

Options

OK Cancel Help

File Edit View Favorites Tools Help

Add Extract Test Copy Move Delete Info

D:\alan\opcug\articles\FullCircle\Trading_09\

Name	Size	Modified	Created	Accessed	Attributes	Packed Size	Comment	Folders
TradingUpToLinux_FullCircle_09.docx	160 503	2025-09-04 20:13	2025-10-23 14:47	2025-10-23 14:51	A	160 503		
TradingUpToLinux_FullCircle_09.pdf	217 973	2025-10-23 14:48	2025-10-23 14:48	2025-10-23 14:52	AI	217 973		
Trading_09.txt	7 672	2025-10-23 14:50	2025-10-23 14:50	2025-10-23 14:51	A	7 672		
Trading_09.zip	354 474	2025-10-23 15:04	2025-10-23 15:04	2025-10-23 15:04	A	354 474		
Trading_09_Fig_01.png	116 501	2025-10-23 14:49	2025-10-23 14:49	2025-10-23 14:49	A	116 501		
Trading_09_Fig_02.png	20 583	2025-10-23 14:49	2025-10-23 14:49	2025-10-23 14:49	A	20 583		
Trading_09_Fig_03.png	18 410	2025-10-23 14:49	2025-10-23 14:49	2025-10-23 14:50	A	18 410		

0 / 7 object(s) selected

7z D:\test\

File Edit View Favorites Tools Help

Add Extract Test Copy Move Delete Info

D:\test\

Name	Size	Modified	Created	Accessed	Attribute
Trading_09.zip	354 474	2025-10-23 15:04	2025-10-23 15:04	2025-10-23 15:06	A

1 / 1 object(s) selected 354 474 354 474 2025-10-23 15:04:54

 Extract : D:\test\Trading_09.zip



Extract to:

D:\test\



Trading_09\

Path mode:

Full pathnames

Eliminate duplication of root folder

Overwrite mode:

Ask before overwrite

Password

Show Password

Restore file security

OK

Cancel

Help

7z D:\test\

File Edit View Favorites Tools Help

+ Add - Extract ✓ Test → Copy → Move ✗ Delete ⓘ Info

D:\test\

Name	Size	Modified	Created	Accessed	Attribute
Trading_09		2025-10-23 15:12	2025-10-23 15:12	2025-10-23 15:12	D
Trading_09.zip	354 474	2025-10-23 15:04	2025-10-23 15:04	2025-10-23 15:06	A

0 / 2 object(s) selected

This PC > DataDisk (D:) > test > Trading_09



Search Trading_09



Name

Date



Trading_09.txt

2025-10-23 2:50 PM



Trading_09_Fig_03.png

2025-10-23 2:49 PM



Trading_09_Fig_02.png

2025-10-23 2:49 PM



Trading_09_Fig_01.png

2025-10-23 2:49 PM



TradingUpToLinux_FullCircle_09.pdf

2025-10-23 2:48 PM

Share

Photo Ephemeris celestial tool

Relative to the **date** and your selected **location**:

- Where and when the sun is rising and setting.
- Where and when the moon is rising and setting.
- The altitude angle of the sun and moon.
- The path of the sun and moon.

Free on the website or upgrade to PRO version. App now only available for Apple iOS (phone or tablet).

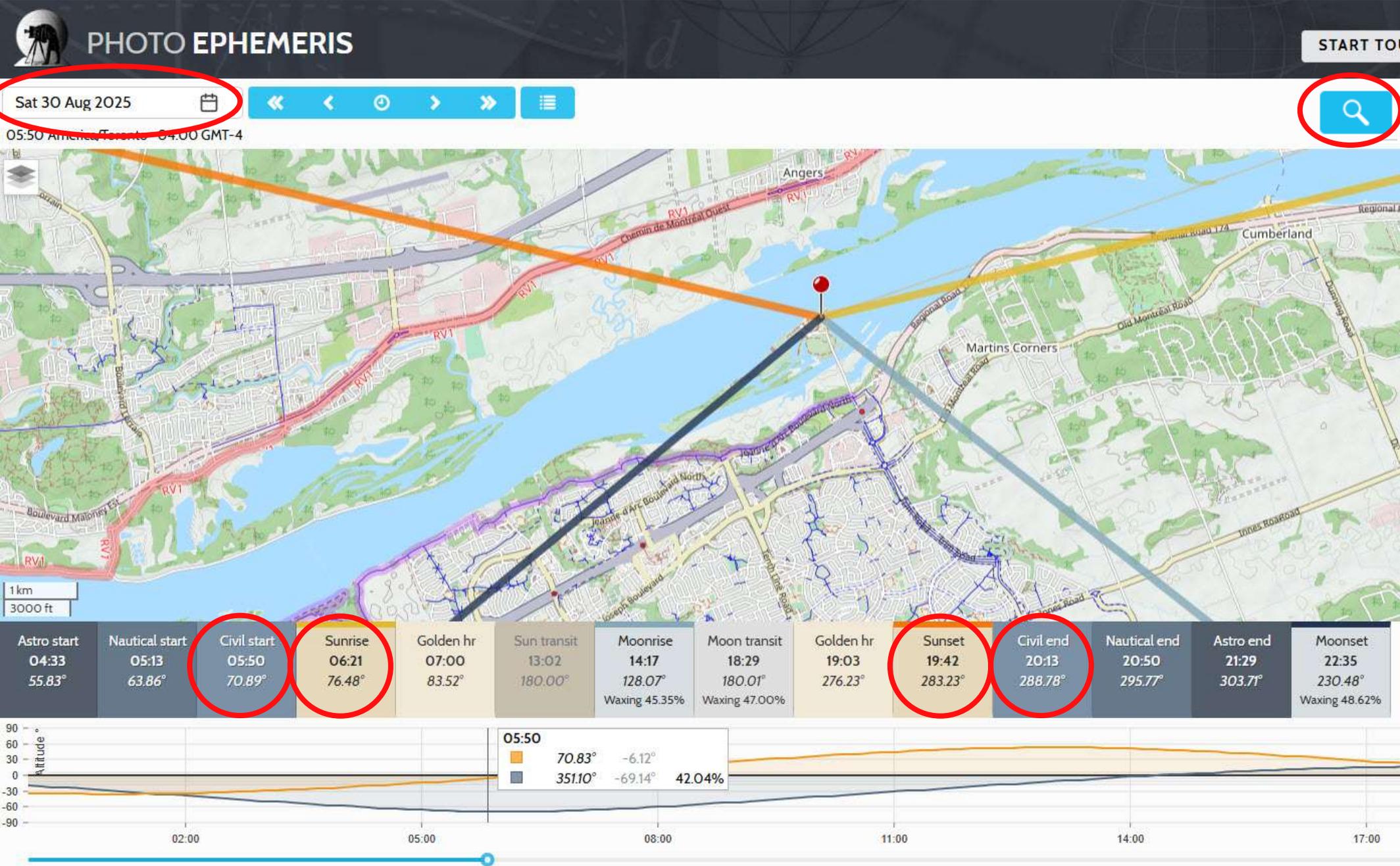
<https://photoephemeris.com>

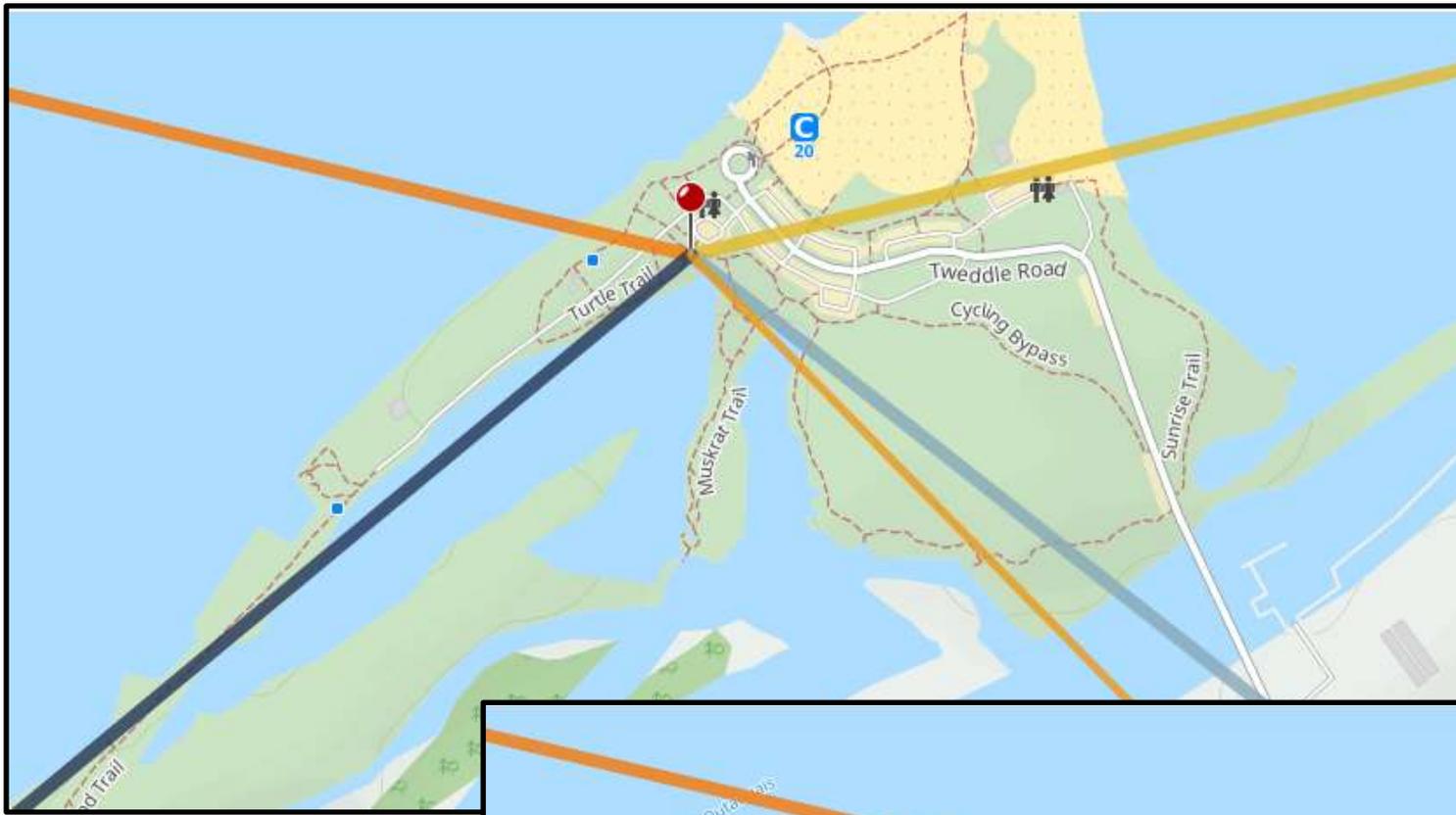
How to use the website

- Search first on the desired location.
- Select the date using the calendar.
- Click on sunrise, sunset, moon rise, etc.
- Drag the bottom slider for an exact time of day and to see transit path.

Note: A good android celestial app is Photopills <https://www.photopills.com/> for \$15CDN. See OPCUG article from 2020: <https://opcug.ca/Photography/AstronomyApps.pdf>

Petrie Island, Orleans

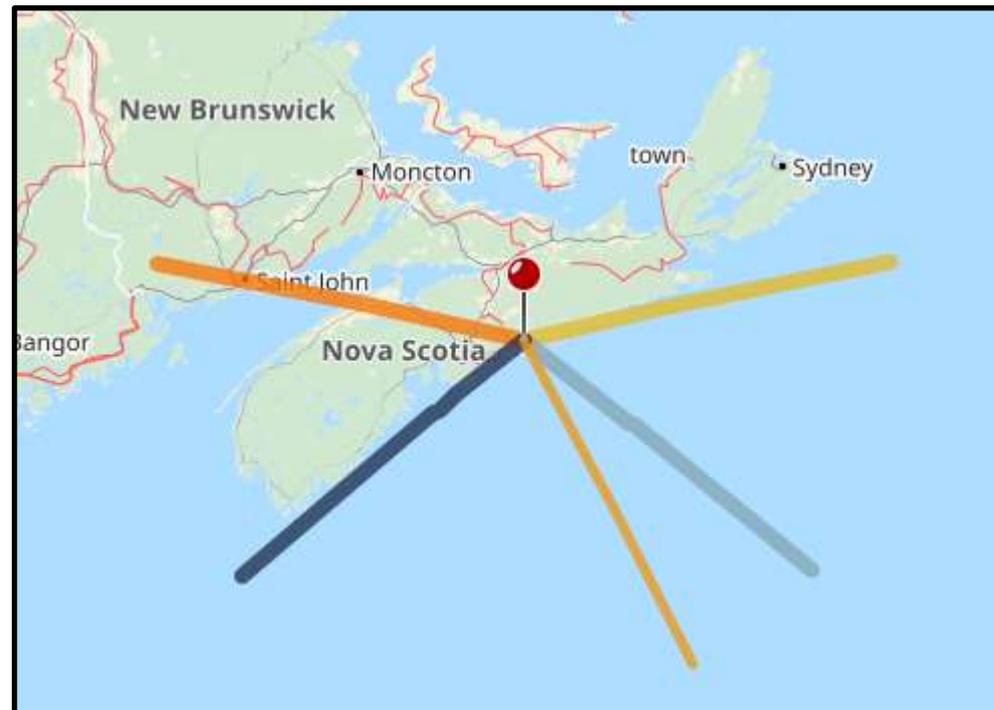




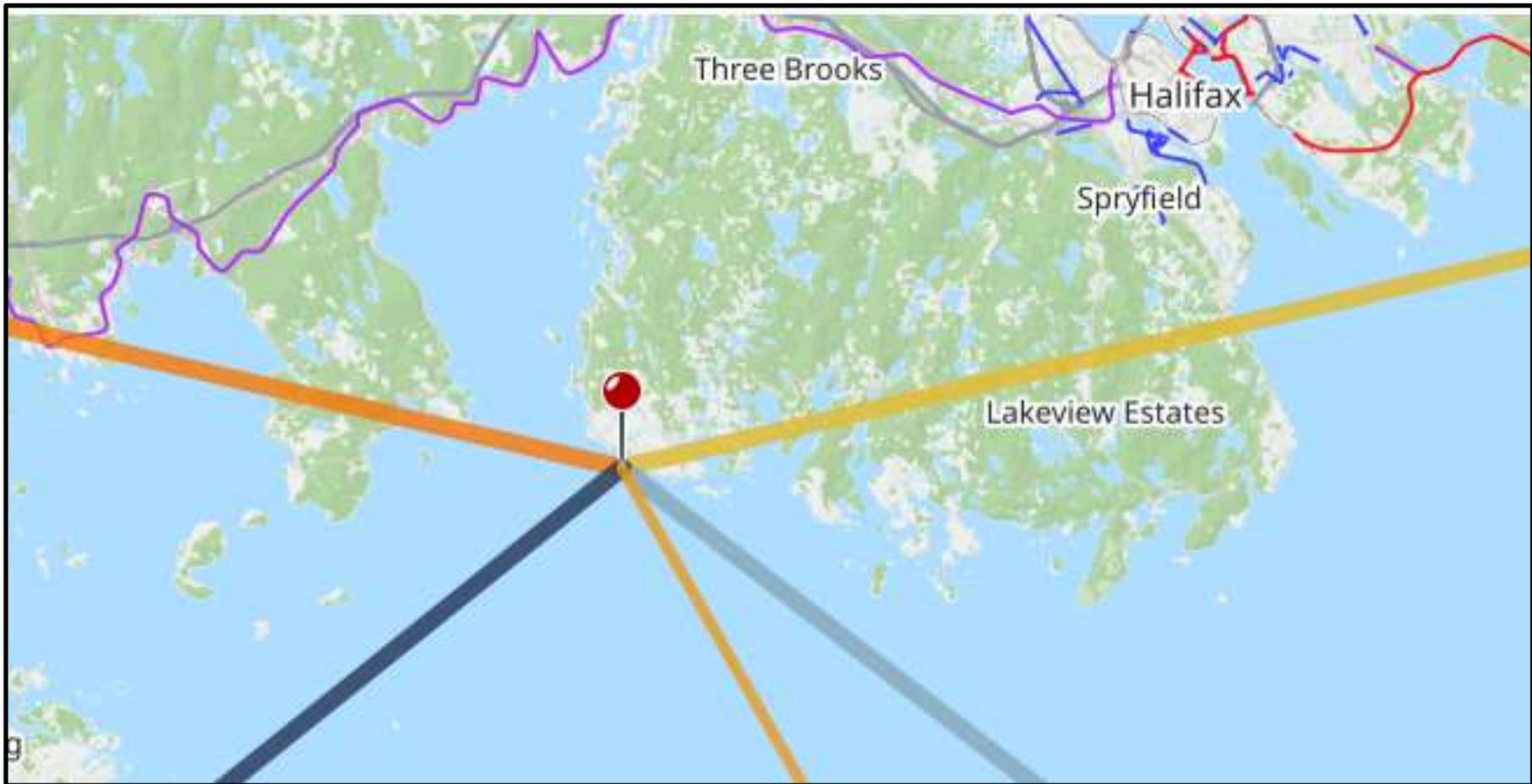
Click on red pin and drag it to new location.



Instead of entering
Peggy's Cove in
Search box, scroll
out and drag the pin.



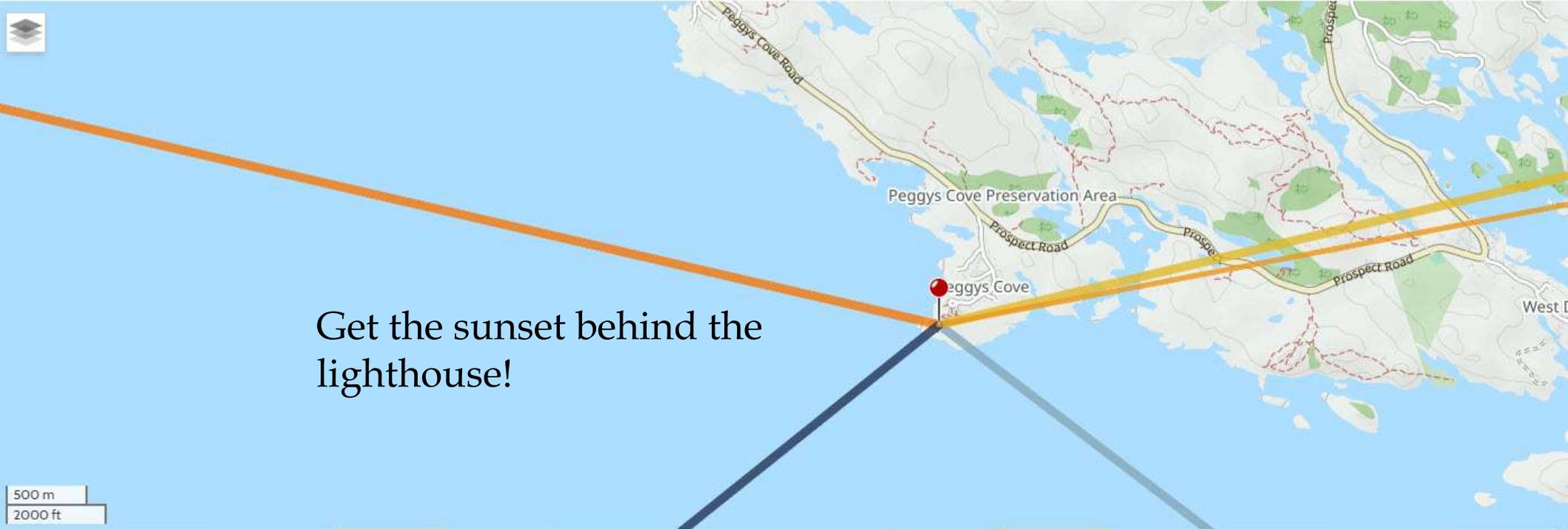
Scroll in and drag the pin to the exact location



Peggy's Cove, NS

Sat 30 Aug 2025 📅 ⏪ ⏩ ⏴ ⏵ ⏶ ⏷ ⏸ ☰

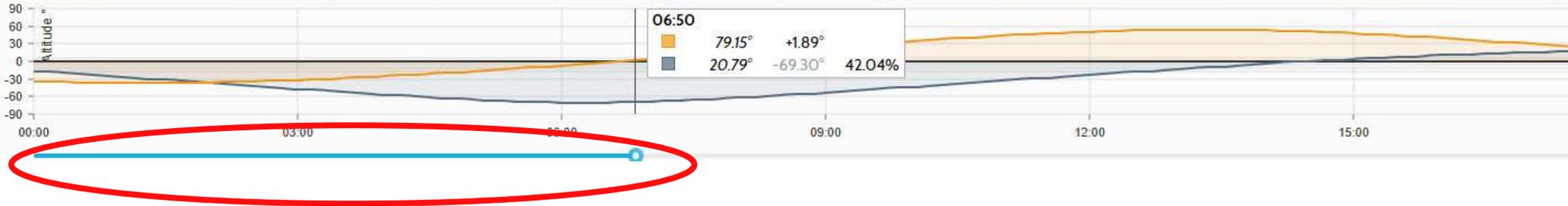
06:50 America/Halifax -03:00 GMT-3



Get the sunset behind the lighthouse!

500 m
2000 ft

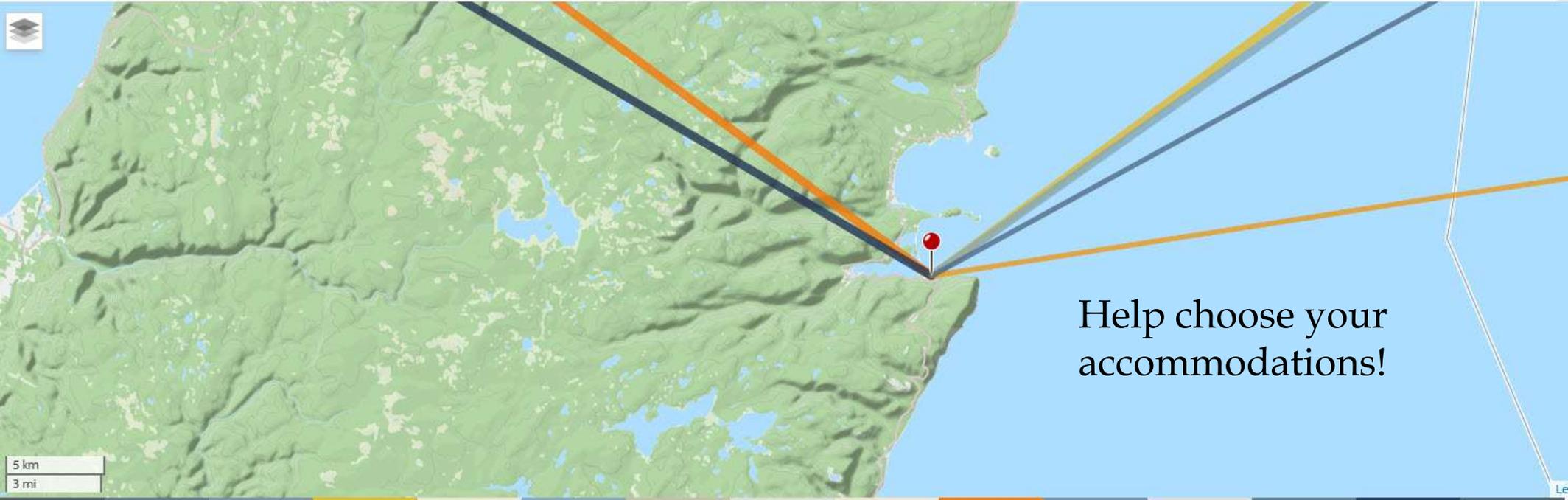
Astro start	Nautical start	Civil start	Sunrise	Golden hr	Sun transit	Moonrise	Moon transit	Golden hr	Sunset	Civil end	Nautical end	Astro end	Moonset
04:51	05:29	06:06	06:36	07:15	13:16	14:24	18:41	19:16	19:55	20:25	21:01	21:39	22:52
56.89°	64.57°	71.34°	76.72°	83.51°	180.00°	127.12°	180.01°	276.24°	283.00°	288.35°	295.07°	302.68°	231.42°
						Waxing 45.00%	Waxing 46.68%						Waxing 48.34%



Ingonish, NS

Fri 27 Jun 2025 📅 ⏪ ⏩ ⌛ ⏴ ⏵ ☰

07:50 America/Halifax -03:00 GMT-3



Help choose your accommodations!

Astro start 02:20 18.23°	Nautical start 03:37 35.51°	Civil start 04:30 46.33°	Sunrise 05:10 53.73°	Golden hr 05:57 62.10°	Moonrise 07:13 54.97° Waxing 5.18%	Sun transit 13:04 180.00°	Moon transit 15:18 180.01° Waxing 6.98%	Golden hr 20:12 297.86°	Sunset 20:59 306.22°	Civil end 21:38 313.62°	☾ Crescent 21:56 288.50° A 8.63%	Nautical end 22:31 324.41°	Moonset 23:07 300.40° Waxing 8.94%	Astro end 23:48 341.59°
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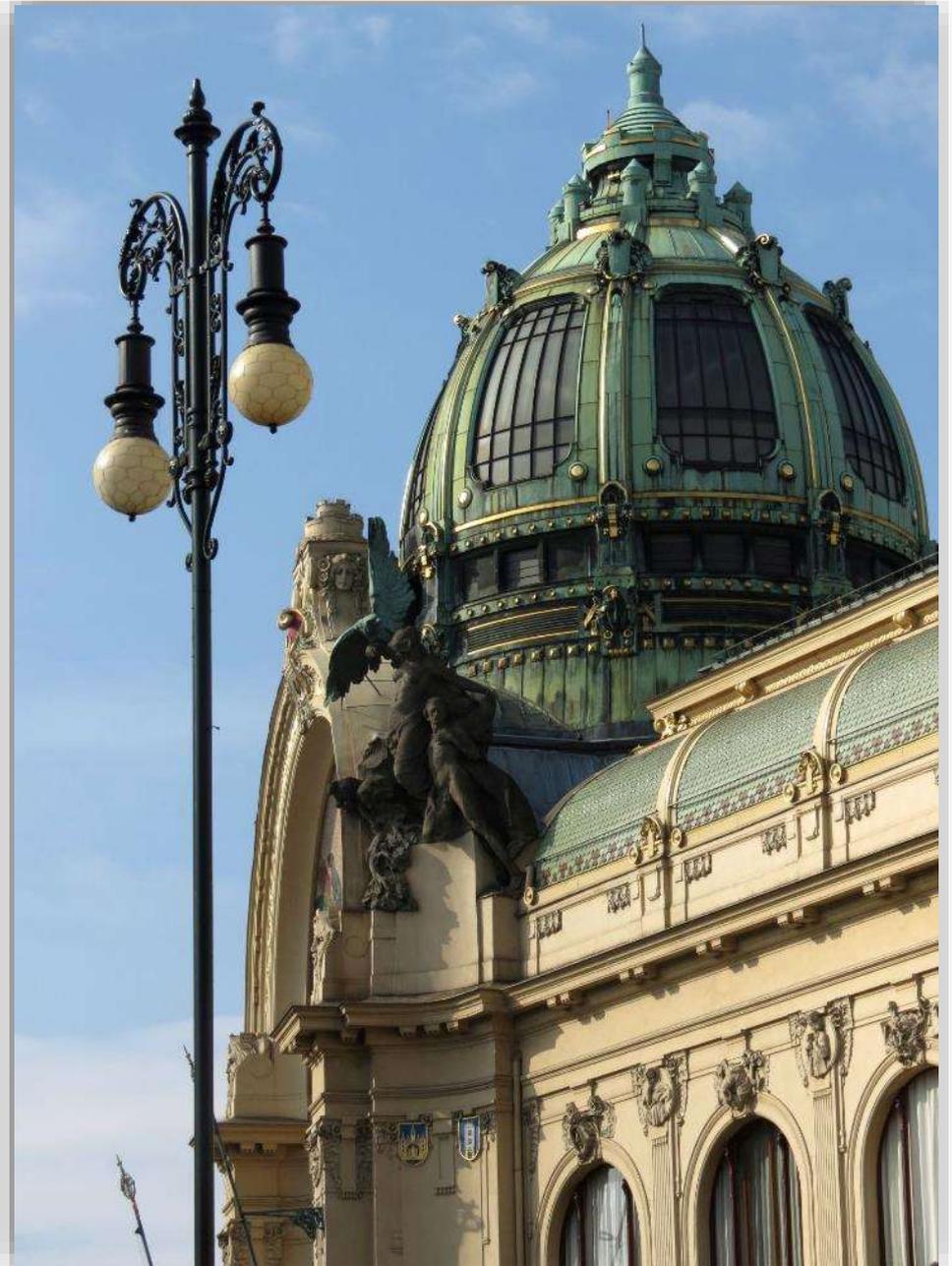
From Ingonish accommodations



Anderson Road, Ottawa



Choose your time for buildings



Choose your time for birds!

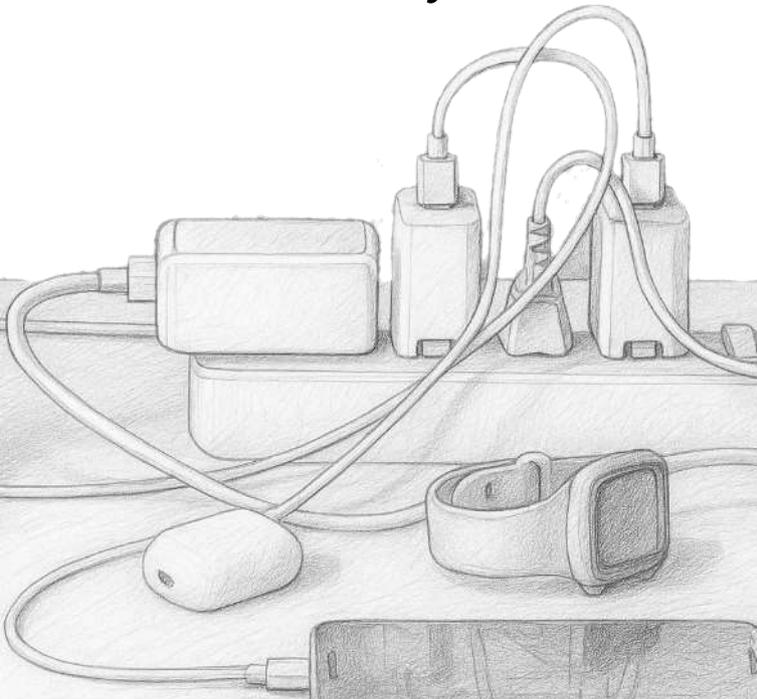
Backlit so no details



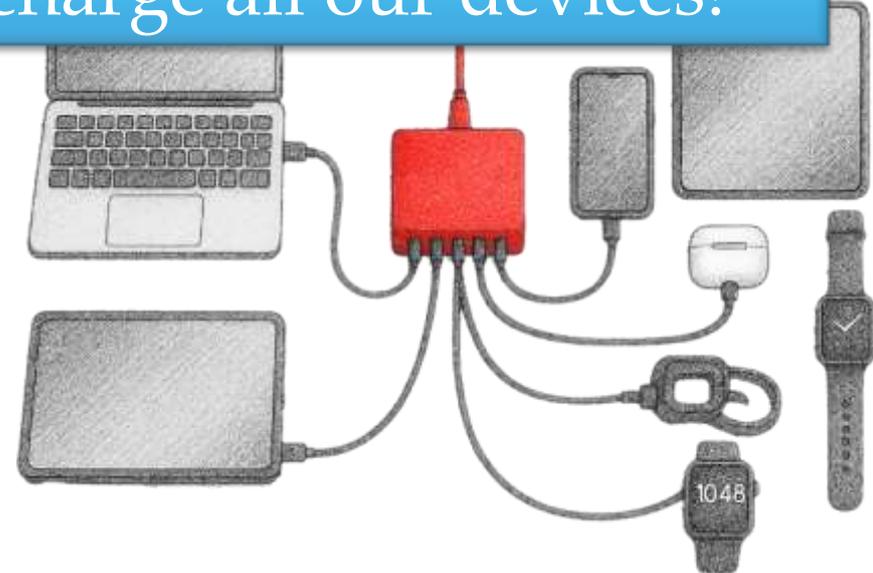
Share

USB charging

- How many different chargers do you have?
 - for phones, tablets, laptops, watches, flashlights, etc.
 - charge a single device each
 - different connectors, output voltages and amperages
 - many obsolete – too weak to charge a modern device



What we need is a single charger that can charge all our devices!



Chris Taylor is **not** an electrical engineer

- he accepts **no** responsibility for a *negative outcome*

Share

Physical connection

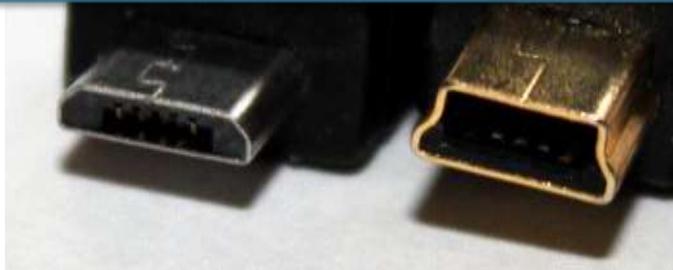
Most modern devices: USB Type-C



Some older devices: USB Type-A



Some very old devices: USB Micro-B, Mini-B



...and others

Share

Charging power requirements

- **Smaller devices**
 - phones, portable hard drives, smartwatches, headlamps...
- **Low power requirements**
 - typically 4.5 Watts or less
- **Larger devices**
 - laptops, tablets...
- **Higher power requirements**
 - commonly up to about 100 Watts
 - may be as high as 240 Watts

Share

Power capability/requirement

USB-A	Voltage	Max. current	Max. power
USB 1.0/2.0 (low power)	5V	100mA	0.5W
USB 2.0 (high power)	5V	500mA	2.5W
USB 3.0/3.1 (SuperSpeed)	5V	900mA	4.5W
USB specialized	5V	1.5A, 3.0A	7.5W, 15W

USB-A devices all use 5V and draw only the current they need

USB-C	Voltage	Max. current	Max. power	Notes
Basic/non-PD	5V	15A, 3A	7.5W, 15W	
Power Delivery (PD)	5V	3A	15W	standard
	9V	3A	27W	
	15V	3A	45W	
	20V	3A, 5A	60W, 100W	5A cable for 100W
PD EPR (extended power range)	28V	5A	140W	EPR cable/charger reqd.
	36V	5A	180W	
	48V	5A	240W	highest officially supported

- non-PD devices all use 5V and draw only the current they need
- PD devices and chargers negotiate voltage and current

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Safety

- **Worried**
 - charger outputting higher power than device is designed to take
 - would it catch fire, melt down, or destroy device being charged?
- **No worries**
 - non-PD devices all use 5V and draw only the current they need
 - PD devices and chargers more sophisticated
 - power supplier (source) advertises the power levels it can provide
 - power consumer sends a request for the power level it needs
 - power supplier supplies the agreed voltage and current
- **GaN (Gallium Nitride) chargers most sophisticated**
 - built-in protections for over-voltage, over-current, short-circuit, and temperature control, protecting charger & device
 - even high-wattage GaN chargers (100W or more), low-power devices control the charging process to prevent damage

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Gallium Nitride (GaN) chargers

- Better efficiency & heat management, higher power capabilities, & smaller size than silicon chargers
- GaN 1 (introduced 2018)
 - high efficiency, **basic thermal management**, **output 30W to 60W**, compact
- GaN 2 (introduced 2020)
 - **improved thermal management** (cooler & safer)
 - **output up to 100W**
 - more compact than GaN 1
 - for mainstream: **smartphones, laptops, & tablets**
- GaN 3 (introduced 2022)
 - high efficiency – **ultra-fast charging** & minimal energy loss
 - **advanced thermal management** – sustained high power w/o overheating
 - **outputs exceeding 140W total (when multiple ports in simultaneous use)**
 - ultra-compact – highest power density & smallest footprint
 - for **everything up to high wattage devices**
- GaN 3 Pro (introduced 2023–2024)
 - further optimizing performance, power delivery, & device protection

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Risk using non-e-marked cables

- No embedded chip that communicates cable's power capabilities to the charger and device
- May experience unstable charging
 - voltage drops/resets, slower charging speeds or interruptions
- Charger may supply more current or voltage than the cable can safely handle
 - can cause the cable to overheat, due to excessive current flow
 - increase risk of damage to both the charger and the connected devices due to lack of proper power negotiation
- Bottom-line
 - certified e-marked cables tested to ensure safe power delivery
 - safer choice especially for high-wattage GaN chargers
 - any charger that can provide 100 watts or higher
 - be sure to use e-marked cable if connected device draws 100+ watts

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What I use

- High-powered, multiport GaN chargers
- e-marked cables rated for 240 watts
- My favourite charger: Topadre **140 W**
 - 3 USB Type-C (**max 100W**) + 2 USB Type-A
 - \$40 @ Amazon.ca
 - <https://www.amazon.ca/Charging-Station-Display-Charger-Compatible/dp/B0D2QV77VR>
- Topadre also sells **240W** model
 - 4 USB Type-C (**max 140W single port**) + 2 USB Type-A
 - \$80 @ Amazon.ca
 - <https://www.amazon.ca/Charger-Display-Desktop-Charging-Station/dp/B0D8KPD6VN>

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Topadre – \$40 @ Amazon.ca

<https://www.amazon.ca/Charging-Station-Display-Charger-Compatible/dp/B0D2QV77VR/>



Each USB Type-C port

- 5, 9, 12, 15 V @ 3A
- 20 V @ 5A

USB-C1/C2/C3:5/9/12/15V = 3A, 20V = 5A

USB-A1/A2:5/9/12/20V = 3A

USB-A1+A2:12W+12W

USB-C1/C2+C2/C3:95W+45W

USB-C1/C2/C3+A1A2:100W+36W

USB-C1/C2/C3+A1+A2:100W+12W+12W

USB-C1+C2+C3:65W+45W+30W

USB-C1/C2+C2/C3+A1/A2:65W+45W+25W

USB-C1/C2+C2/C3+A1+A2:65W+45W+12W+12W

USB-C1+C2+C3+A1/A2:65W+30W+20W+25W

USB-C1+C2+C3+A1+A2:65W+30W+20W+12W+12W

Charging on all 5 ports at same time?

- 3 USB Type-C – 65W, 30W, 20W
- 2 USB Type-A – 12W, 12W

- Digital display showing total output (all connected ports)
- Max. power output 140 W (read the fine print!)
- 3 USB Type-C ports (max output single port: 100 W)
- 2 USB Type-A ports (max output 60 W – most devices 4.5 W)
- Detachable 5-foot power cord
 - I don't like chargers with prongs that plug directly into outlet

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NotebookLM

 NotebookLM
Understand **Anything**

- ADVANTAGES

- Free
- Fast learning curve makes it easy to get started
- Allows easy analysis of large documents
- Can analyze lyrics from a song and text from an audiobook
- No page limit: Restrictions apply to word count and file size, not to the number of pages
- Interactive learning tool with quizzes and flashcards
- Automatic source citations show where the information came from in your documents
- Hallucinations reduced by only using sources you add

<https://notebooklm.google>

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NotebookLM

 **NotebookLM**
Understand **Anything**

- ADVANTAGES (cont'd)
 - “Discover sources” allows it to find sources on the Internet or search for relevant info in your Google Drive
 - It can be deliberately restricted to access only the information of the uploaded source
 - Helps organize ideas and spark new insights
 - Can share notebooks with others for team analysis
 - Audio Overview, Interactive Podcast Generation, YouTube Video Overview, Mind Map, Reports
 - Support for multiple document formats PDF, MP3, TXT, Google Docs, Slides, webpages, YouTube videos
 - Doesn't use up space on your Google Drive

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NotebookLM

 **NotebookLM**
Understand **Anything**

- DISADVANTAGES
 - Requires a Google account and internet connection
 - Limited customization
 - Quality of the output relies on the quality of the input sources
 - Potential for amplifying biases present in the source material
 - Privacy concerns if you add source documents with sensitive material
 - Google could decide to change or cancel NotebookLM at anytime
 - May slow down when close to the size limits
 - Restricted to 50 documents of 200MB each with 500,000 max. word count
 - Limited to 100 notebooks per user account
 - Need a Google One AI Premium subscription to get the paid version

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Housecreep

- Just in time for All Hallows Eve I give you a Wikipedia style web listing site of properties known to have dark histories
- Especially of interest to folk looking to research a possible home purchase, this is a collection of places where various criminal activities were known to have happened
- There are even a few possible hauntings included but not too many as nobody wants to verify these.
- A US based site, you can search by city; Canadian cities are included
- Check out your neighborhood before doing any trick or treating this season!

<https://www.housecreep.com/>



Stewart Bruce



**Any other:
Questions
Comments
Shares?**

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Loonie Links



- Highlighting Canadian sites with information of interest to Canadian consumers
- Can you help fulfill our motto *Users helping users?*
- Do you know of Canadian sites with interesting info?
- You could speak to the items or just submit the info for inclusion at a future Q&A

SuggestionBox@opcug.ca



OPCUG PRESENTATIONS AT THE OTTAWA PUBLIC LIBRARY

Quick PC Tips: Enhancing Capabilities and Performance with Free Tool

Chris Taylor

Orléans, Thursday Oct 30, 2025 at 6:00pm

Restoring Old Photos

Lynda Buske

Cumberland, Saturday Nov 1, 2025 at 2:00pm

Artificial Intelligence (AI): fun and useful tips

Chris Taylor

Sorry this event is full

But...

Greenboro, Tuesday Nov 4, 2025 at 2:30pm

<https://booking.biblioottawalibrary.ca/en/program?text=pc+users>

November Meeting



Home Automation - An Introduction

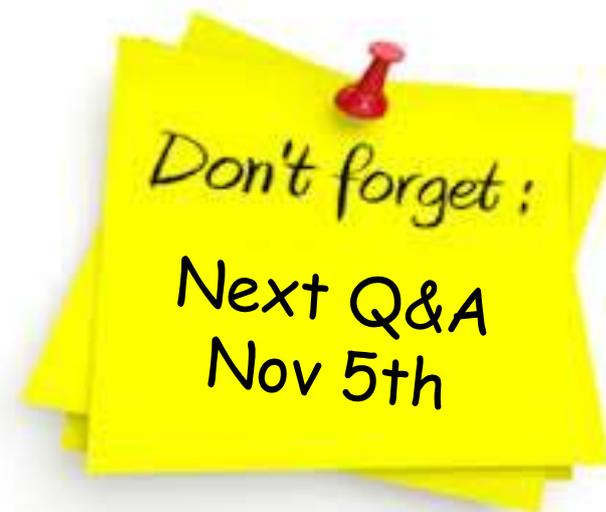
Bill James

Computer Club of Oklahoma City

November 12, 2022

7:30 pm





**Send your questions,
answers, and topics
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SuggestionBox@opcug.ca