Fly Me to the Moon
The Trials and Triumphs of the Apollo Guidance Computer
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OLLI Presentation – Summer 2025

On-line resources – audio and video

There is a ton of material available on-line about the Apollo Guidance Computer and the Apollo program in general. Here are some particularly interesting things I found when researching this OLLI presentation. They are listed in order I would recommend them (best first)

13 Minutes to the Moon – BBC Podcast series
https://www.bbc.co.uk/programmes/p083t547

> This is a series of podcasts – audio only – all about Apollo 11's eventful final approach to the lunar surface. Recorded in 2019, it includes a lot of material specifically about the Apollo Guidance Computer, but also includes other background information. It is very well done, and includes a lot of interviews with key players in both the development of the computer and the events surrounding its use during the descent to the lunar surface.
> There is a second series of podcasts, apparently, about the Apollo 13 mission, which I have not yet gotten around to listening to: https://www.bbc.co.uk/programmes/p083wp70

Apollo 11: The Complete Descent
https://www.youtube.com/watch?v=xc1SzgGhMKc

> This is the complete NASA video, much of which was used during the presentation. I've watched it numerous times, and it is thrilling every time!

Apollo 11 landing from PDI to Touchdown
https://www.youtube.com/watch?v=RONIax0_1ec

> This is a similar NASA video. The main difference is that it only has the audio between mission control and the astronauts, rather than also including the chatter among the mission controllers in Houston.

Light Years Ahead: The 1969 Apollo Guidance Computer
https://www.youtube.com/watch?v=B1J2RMorJXM

> This is the YouTube video that inspired me to do this OLLI talk. It is about an 80 minute lecture given by an interested engineer from Cisco at some meeting of high-tech engineers. If you watch it, you'll see that I followed his outline pretty closely, and borrowed some of his graphics as well. While it is an interesting and fun presentation, as I did further research, I discovered that he took creative license with some of the facts. (To his credit, he admits to this during his talk.) I've tried to be as accurate as I could. It doesn't seem to me that the real story needs any embellishing!

The Computer That Got Us to the Moon – The Apollo Guidance Computer
https://www.youtube.com/watch?v=J-5aT2zSfSA

    This is a 30 minute video with a fast-talking young woman explaining *a lot* about the Apollo Guidance Computer and overall guidance system. It covers a lot of material, and is just a little exhausting to watch, because you want her to pause and take a breath, but she never does. :-)

The Apollo Guidance Computer, Part Two: David Scott
https://www.youtube.com/watch?v=NVHPunas4E4

    This is a recording of a lecture given in 1982 by David Scott, an astronaut who flew on a Gemini mission with Neil Armstrong, as well as on two Apollo missions (Apollo 9 and Apollo 15). He was also directly involved with the development of the Apollo Guidance Computer. His talk is about 35 minutes, and is quite engaging.

The Apollo Guidance Computer, Part One: Eldon Hall
https://www.youtube.com/watch?v=PbX8OtPe3eY

    This is a recording of what I suppose was more of the primary talk at the same event at which David Scott spoke. This lecture at about an hour is by the lead designer of the Apollo Guidance Computer hardware at MIT. While it is interesting, and historically significant, it is a bit on the dry side, and many of the slides he shows are not very clear.

MIT Science Reporter - "Computer for Apollo" (1965)
https://www.youtube.com/watch?v=ndvmFlg1WmE

    This is a video of a television program from 1965 describing the ongoing work at MIT building a revolutionary computer to be used in the upcoming Apollo missions. It is interesting in its authenticity – being the actual TV show from 1965 – but is a bit tedious to watch (at least in my opinion).

Core Rope Memory Built and Explained - F-Js Physics - Video 169
https://www.youtube.com/watch?v=WBHdNpAC7X4

    One of the interesting and unusual technologies used in the Apollo Guidance Computer was its "Core Rope" Read-Only Memory. This video does a nice job of explaining what this basic technology is all about, and generally how it works. However, the actual Core Rope Memory in the AGC was not built quite like it is explained here. A more accurate (and much harder to understand) description of the actual AGC Core Rope Memory is included in this episode of the "Apollo Guidance Computer Restoration" series of videos: https://www.youtube.com/watch?v=hckwxq8rnr0

Apollo Guidance Computer Restoration
https://www.youtube.com/playlist?list=PL-_93BVApb59FWrLZfdlisi_x7-Ut_-w7

    A lengthy video series about a fascinating project to restore a surplus Apollo Guidance Computer to working condition in 2018 & 2019. Highly technical, with much detail about how the computer actually works, and the challenges of trying to bring this 50+ year old machine back to life.