

A photograph of a modern university building with large glass windows and a courtyard with people. The building is multi-storied with a mix of concrete and glass. In the foreground, there is a green lawn and a paved walkway. Several people are walking around the courtyard. A large, dark, geometric sculpture is visible on the left side of the image. The sky is blue with some clouds.

Welcome!

ZACHRY
ENGINEERING
EDUCATION
COMPLEX

W5AC October Meeting



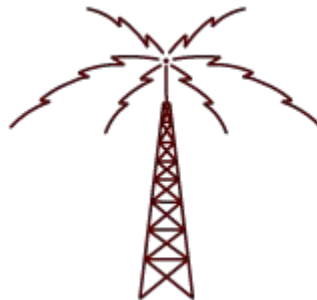
2024-10-10

Meeting Agenda

- Latest Activities
- Upcoming Events
- Leadership Updates
- Communication Mode Basics

Meeting is officially over

- Walk to McDonald's



W5AC

**Texas A&M University
Amateur Radio Club**

Membership Dues

\$27.00 Voting Licensed

(\$25 Cash / Check)

<https://tx.ag/joinw5ac>



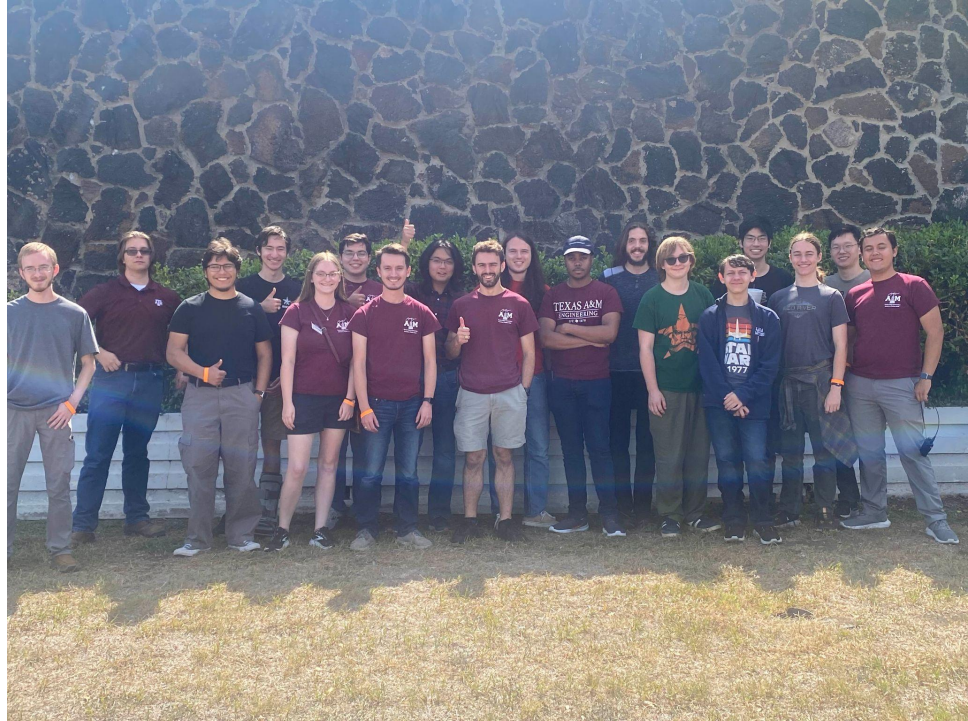
Latest Activities

A photograph of a modern university building with large glass windows and a courtyard with people. The text "Latest Activities" is overlaid in white. The building is a multi-story structure with a mix of concrete and glass. In the foreground, there is a green lawn and a paved walkway. Several people are walking around the courtyard. A large, modern sculpture is visible on the left side of the image. The sky is blue with some clouds. A green horizontal line is drawn across the middle of the image.

Baofeng Party



Belton Hamfest



Upcoming Events

The background image shows a modern university building with a large glass facade and a green lawn in the foreground. A green horizontal line is drawn across the middle of the image. The text "Upcoming Events" is overlaid in white. The building has a sign that reads "ZACHRY ENGINEERING EDUCATION COMPLEX". There are people walking on the lawn and a bicycle parked on the right.

Upcoming Events

Tape Measure Yagi Build Event

- Saturday, October 19th, 2:30-6:30 PM

School Club Roundup

- Monday, October 21st - Friday, October 25th

Shack Study Sessions

- Thursday, October 17th, 1:30-4:30 PM

Looking ahead to November:

- iEMSL Lab Open House - Friday, November 1st
- November Meeting - Thursday, November 14th



Tape Measure Yagi Antenna Building Workshop (Oct. 19th)

- \$28 to cover materials
- Sign Ups close Wednesday, October 16th
- Form in Discord coming soon!





School Club Roundup!

- If you are new to ham radio or HF, please reach out!
- Signup link:



Join the Calendar

tinyurl.com/calendarw5ac

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|---|---|--|--|--|---|---|
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| <ul style="list-style-type: none">12am Insomniac Ne2pm Digitally Speak | <ul style="list-style-type: none">12am Insomniac Ne8pm W5AC Weekly | <ul style="list-style-type: none">12am Insomniac Ne8pm W5BCS Weekly | <ul style="list-style-type: none">12am Insomniac Ne8pm TUARC Weekly | <ul style="list-style-type: none">12am Insomniac Ne6pm License Exam7pm October Gener | <ul style="list-style-type: none">12am Insomniac Ne | <ul style="list-style-type: none">12am Insomniac Ne |
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| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| <ul style="list-style-type: none">12am Insomniac Ne2pm Digitally Speak | School Club Roundup | | | | | <ul style="list-style-type: none">12am Insomniac Ne |
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Leadership Reports



A photograph of a modern university building with a glass facade and a large metal sculpture on the left. The text "Leadership Reports" is overlaid in white. A green horizontal line is positioned below the text.

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Secretary's Report - Braxton N5REV

- Meeting minutes from June Special Election

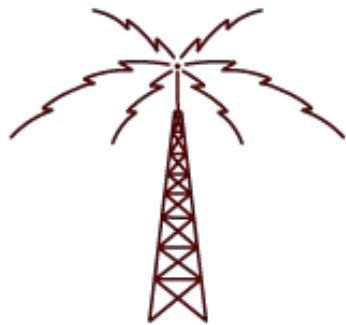


Treasurer's Report - Elliott N5ESX

- As of 10/10/2024
 - General (00000) – \$211.35
 - Marketplace (30000) – \$390.88
 - Foundation (99999) – \$1346.74

Repeater Administrator's Report- Ian AE5ID

Historian's Report - Dave W5QZ



W5AC

**Texas A&M University
Amateur Radio Club**

Communication Mode Basics

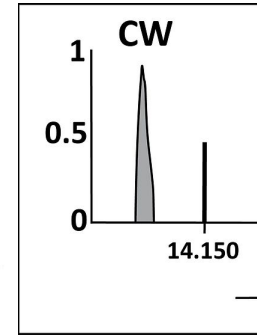
The background image shows a modern university building with a large glass facade and a prominent concrete pillar. In the foreground, there is a green lawn and a paved walkway where several people are walking. A large, dark, geometric structure is visible on the left side of the frame. The sky is blue with some clouds. The text 'Communication Mode Basics' is overlaid in white, centered horizontally.

CW (Morse Code)

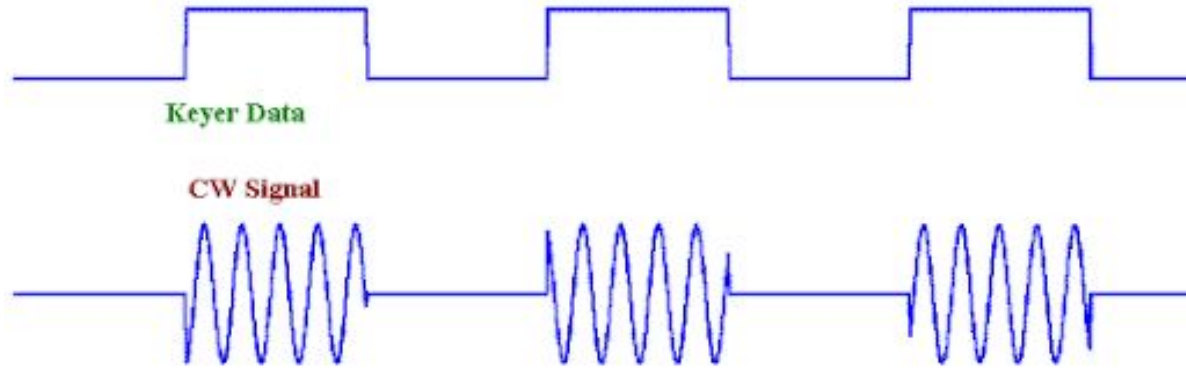
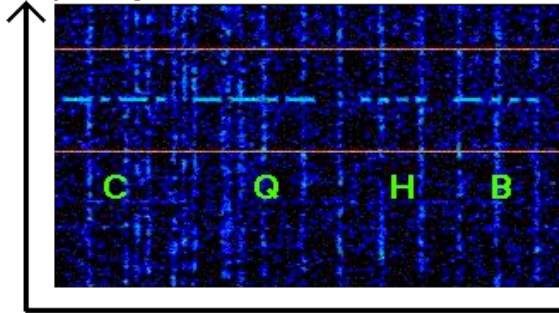
- Continuous/Carrier/Constant Wave

Advantages

- Simple equipment
- Minimal power needed



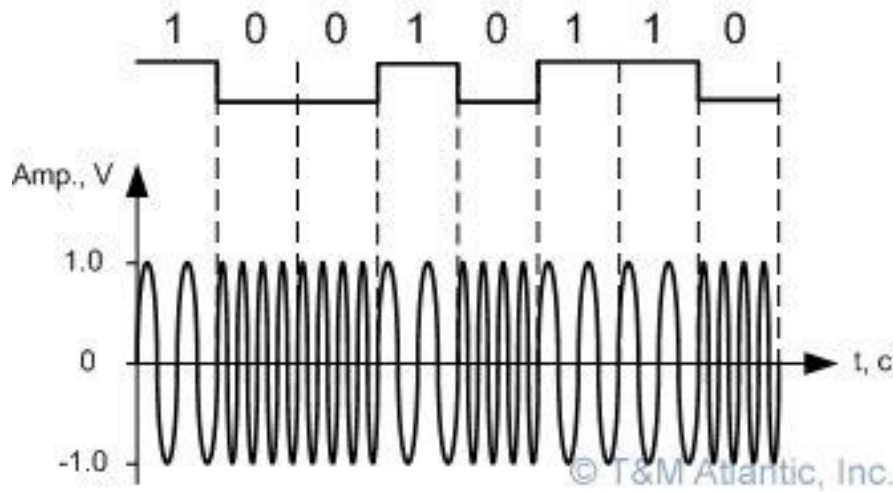
Frequency



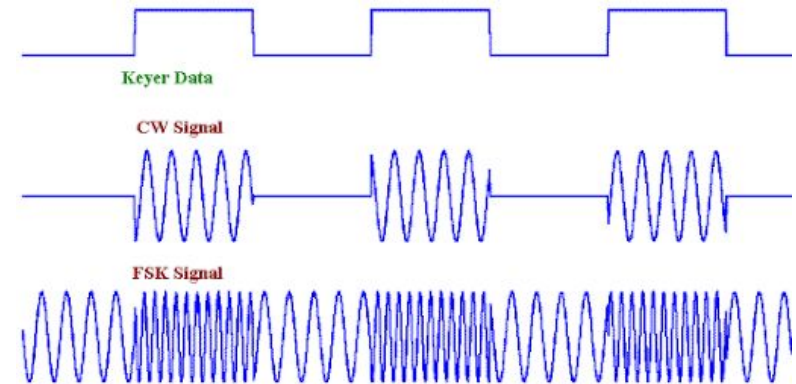
FT-8:

FSK

- Frequency Shift Keying
- Slightly shifts frequency to transmit digital data

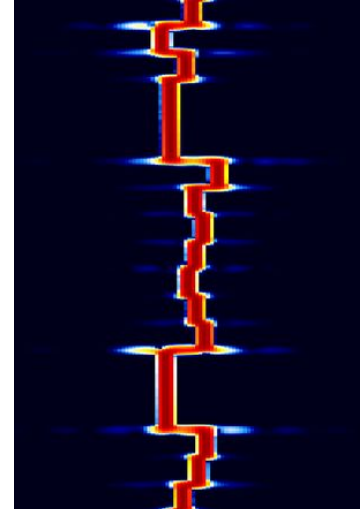


Frequency shift keying (FSK)



Time

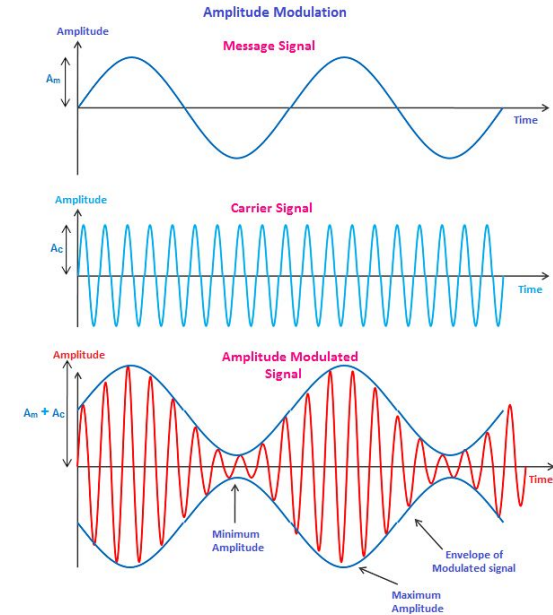
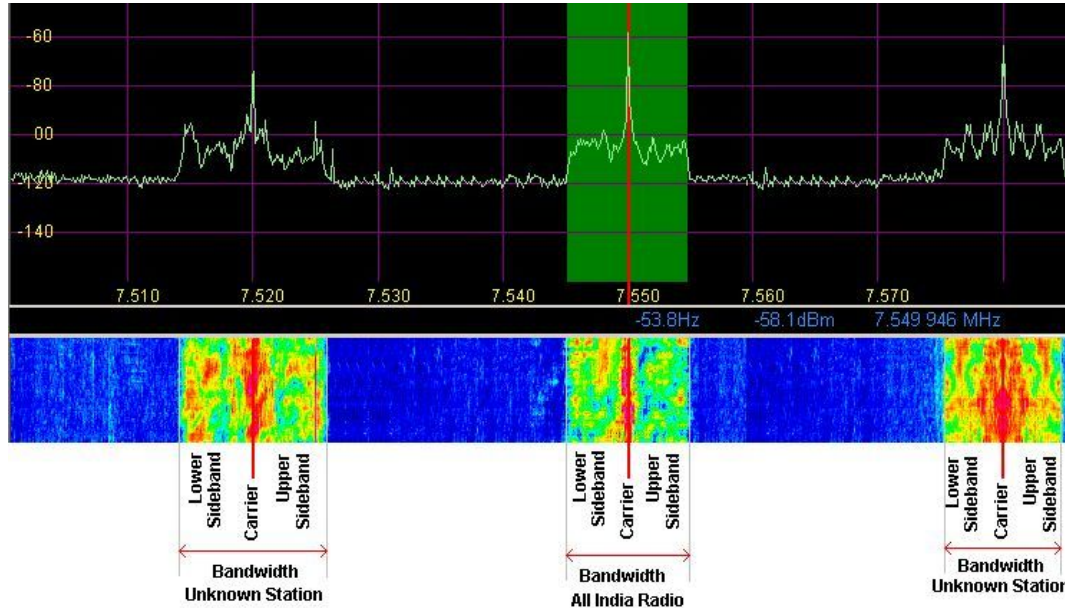
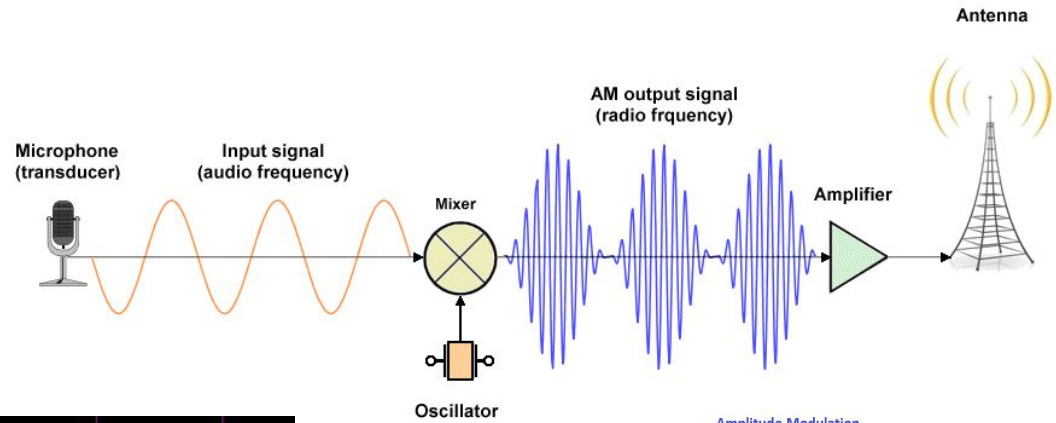
Frequency



AM

AM = Amplitude Modulation

One of the first modulation forms



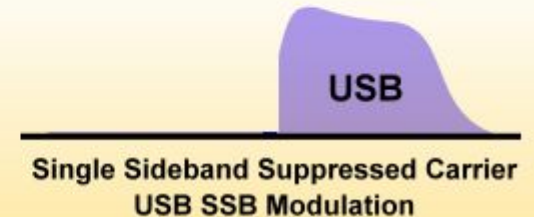
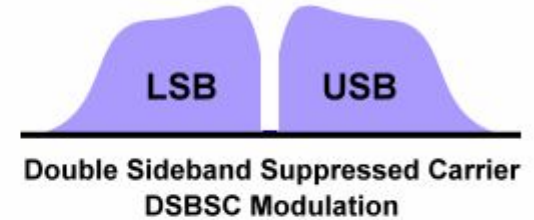
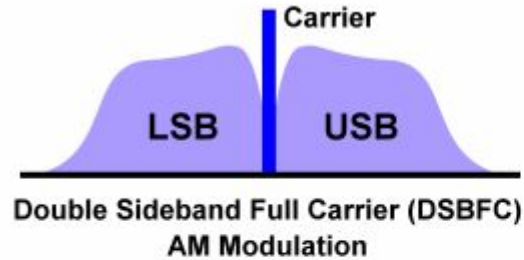
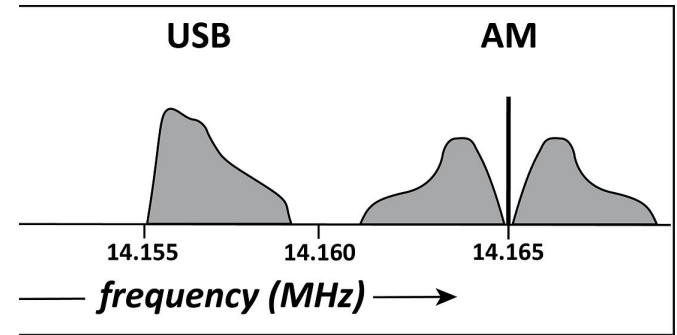
SSB

SSB = Single Side Band

- USB = Upper Side Band
- LSB = Lower Side Band

Advantages:

- More efficient
- Don't transmit carrier

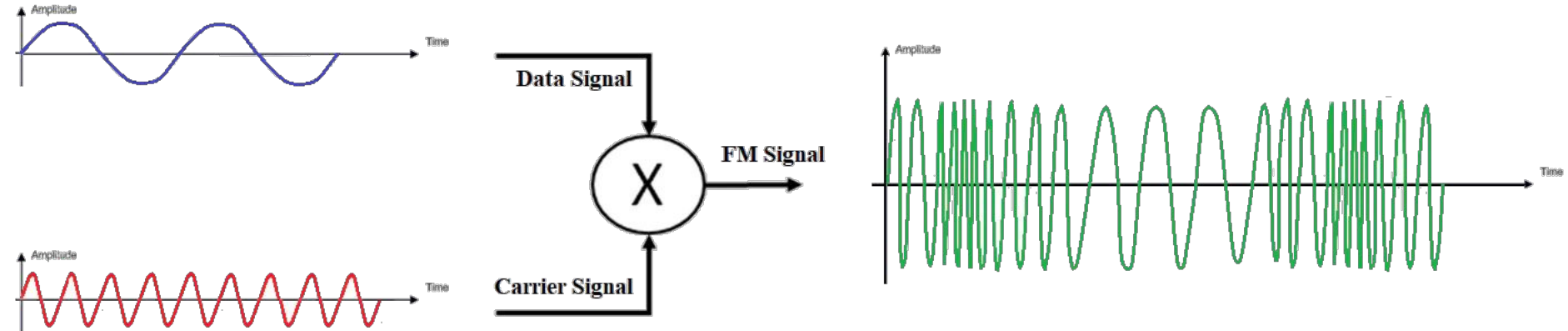
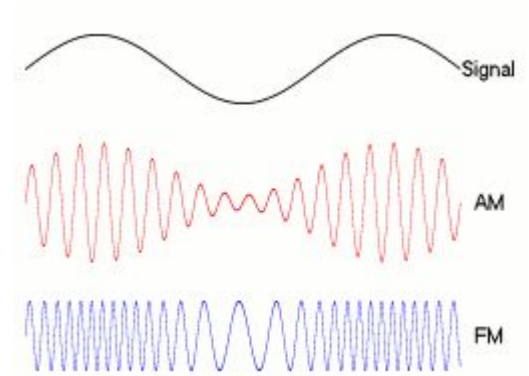


FM

Instantaneous Frequency Modulation

- Many UHF/VHF radios use FM

1 method: Feed input signal into voltage controlled oscillator





Dinner!

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