

## Syllabus for the Air Cadet Communicator Badge

1. To reach the required standard for the award of the Communicator Badge by the respective Region Communications Officer, an air cadet must complete the following training objectives to the satisfaction of his/her Wing Communications Officer. This involves completion of a minimum of 6 modules from the 11 available. The modules that will be taught from Wing to Wing around the Corps will vary according to materiel resources and available expertise. Two modules are compulsory with the other 4 selected by the individual from the remaining 9.

The modules are as follows:

- a. ACP31 Volume 6 – Communications. Compulsory
- b. Data Communications.
- c. Full VHF/UHF Operator. Compulsory
- d. Full HF Operator.
- e. ACP35 Volume 3 - Advanced Radio & Radar.
- f. ACP35 Volume 4 - Satellite Communications.
- g. Internet.
- h. HF Listener.
- i. Practical Exercises as defined in ACP 44.
- j. Officially Approved Amateur Radio Activities.
- k. The Army Cadet Force Signallers Badge. (equivalent to 2 modules)

When the cadet training for the badge has attained the required standard, the application form (example at page 7) is to be completed and despatched to the Wing Communications Officer for the issue of the badge and the achievement recorded in the Wings training records. For those cadets who have already achieved Senior & Staff cadet's passes in communication subjects, prior accreditation will be allowed in respect of Communicator Badge qualification. For the purposes of this award, CCF(RAF) detachments will be affiliated to the local Wing Communications Officer by arrangement through HQ Air Cadets TG3 and Sqn Ldr CCF.

2. The training objectives and enabling objectives for each module are defined as follows:

**a. ACP31 Volume 6 - Communications (Compulsory)**

Training Objective

To be able to demonstrate the use a simple Radio Transceiver and an awareness of current radio procedures.

Enabling Objectives.

- Satisfying the Squadron Radio Instructor that both a theoretical and practical knowledge has been obtained to the required standard. A simple practical radio test & a Basic Radio Exam set by the Squadron Communications Instructor.

**b. Data Communications**

Training Objective

To be able to demonstrate theoretical and practical knowledge of the Air Cadet Data Communications system.

Enabling Objectives.

- Identify and explain the functions of the component parts of a DataComms system i.e. the Power Supply Unit (PSU), Terminal Node Controller (TNC), Personal Computer, Transceiver (TCVR) and the software in use.
- Explain the function of a DataComms Node, and describe its operation as both a Node and Digipeater.
- Describe the functions of a Bulletin Board System (BBS), and the role of the Systems Operator (SYSOP).
- Demonstrate a good knowledge of Security of DataComms transmissions together with operating practices and procedures.
- Indicate which ATC channel is used on the Network, the maximum transmitter power permitted, and the protocol in use at the TNC.
- Relate who may operate a DataComms system, and what qualifications are required.
- List the various callsign suffixes used in DataComms transmissions.

- Demonstrate proficiency in DataComms operation, the operating practices and procedures, sending and receiving a message, sending and receiving bulletins at the BBS and the various functions of a DataComms Node.

**c. Full VHF/UHF Operator (Compulsory)**

Training Objective

To be able to operate VHF/UHF radio unsupervised to the satisfaction of the Unit Radio Instructor.

Enabling Objectives

To have a knowledge of:

- The Phonetic alphabet and Numbers
- Voice Procedures
- Prowords
- Communications Security
- Log Keeping
- Use and care of Batteries
- Safety in the Radio room & in the field

To be aware of:

- Type and equipment and frequencies in use on the unit
- Operating ranges of equipment in use
- Talk through operation (Community Repeaters)
- Phone patch
- Aerials
- Frequencies in use and Power Output restrictions

**d. Full HF Operator**

Training Objective

To be able to operate HF radio unsupervised to the satisfaction of the Unit Radio Instructor.

### Enabling Objectives

To have a knowledge of:

- The Phonetic alphabet and Numbers
- A minimum of 10 sessions participation in the Sunday morning Network
- Undergo a written examination on Voice Procedures, Formal messages and Field Day exercises
- Communications Security
- Log Keeping and the regulations pertaining to log books
- Safety in the Radio room & in the field
- Layout of a HF Station

To be aware of:

- Type and equipment and frequencies in use on the unit
- Operating ranges of equipment in use
- Aerials
- The Frequency Spectrum
- Propagation
- Electrical Interference
- Block Diagrams
- Power output restrictions

### **e. ACP35 Volume 3 - Advanced Radio & Radar**

#### Training Objective

To be able to demonstrate an understanding of the principles of advanced radio and radar

#### Enabling Objectives

- A pass mark in the examination at Senior/Staff cadet level.

**f. ACP35 Volume 4 - Satellite Communication**

Training Objective

To be able to demonstrate an understanding of the principles of satellite communications.

Enabling Objective

- A pass mark in the examination at Senior/Staff cadet level.

**g. Internet**

Training Objective

Demonstrate knowledge and display a practical ability on the Internet.

Enabling Objectives

- Simple Website Construction
- Being proficient to send and receive Email & attachments
- Showing how to use Search Engines to find specific resources
- File Transfer Protocol
- Showing how to use Web Browsers

**h. HF Listener**

Training Objective

To demonstrate an understanding of the principles and practical aspects of HF communications.

Enabling Objectives

- A minimum of 12 sessions listening to the Sunday morning network.  
or
- SWL experience listening to HF broadcasts over a 12 session  
Minimum period, i.e. on a domestic / commercial HF receiver

Logs, any QSL cards received etc must be provided.

- To undertake a written examination to show a full understanding of the long-range procedures and exercises. Producing logs and messages received.
- A full working knowledge of the HF field day exercises.

- A working knowledge of HF operating & propagation.
- Aerials
- The Frequency Spectrum

**i. Practical Exercises**

Training Objective

To demonstrate a knowledge of practical exercises as defined in ACP 44.

Enabling Objectives

- Antenna design and construction
- Field day participation (i.e. setting up masts & mobile installations)
- Correctly wiring & fusing a 13 Amp Plug for a stated appliance.
- Correctly fitting BNC, PL259 and “N” Plugs onto Coaxial Cable
- Use of Multimeter (Measuring Current, Voltage, Resistance, etc)
- Basic Soldering.

**j. Officially Approved Amateur Radio Activities**

At the Wing Communications Officers discretion.

**k. The Army Cadet Force(ACF) Signallers Badge**

This qualification applies to those cadets of the CCF(RAF) who already hold the ACF Signallers Badge or former ACF cadets joining the Air Cadet Organisation. It is equivalent to and will be recognised as 2 modules.

**APPLICATION FOR THE ISSUE OF  
THE AIR CADET COMMUNICATOR BADGE**

**REGION** \_\_\_\_\_

**WING** \_\_\_\_\_

**SQUADRON** \_\_\_\_\_

<b>NAME:</b>	<b>DOB:</b>
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<b>ACP31 Vol6:</b>  <b>Date Completed</b>	<b>Compulsory</b>	<b>Data Comms:</b>  <b>Date Completed</b>
<b>Full VHF/UHF Cert:</b>  <b>Date Completed</b>	<b>Compulsory</b>	<b>HF Network:</b>  <b>Date Completed</b>
<b>HF Listener:</b>  <b>Date Completed</b>		<b>Internet:</b>  <b>Date Completed</b>
<b>ACP35 Vol3: Advanced Radio &amp; Radar</b>  <b>Date Completed</b>		<b>ACP35 Vol4: Satellite Communications</b>  <b>Date Completed</b>
<b>An Officially Approved Amateur Exercise</b>  <b>Date Completed</b>		<b>Practical Exercises:</b>  <b>Date Completed</b>
<b>ACF Signallers Badge</b>  <b>Date Completed</b>		<b>ACF Signallers Badge</b>  <b>Date Completed</b>

**Certified Complete**  
\_\_\_\_\_ **Squadron Communications Officer**

PLEASE FORWARD AFTER SIGNATURE TO THE WING COMMUNICATIONS OFFICER

**Certified Complete & Badge Issued**  
\_\_\_\_\_ **Wing Communications Officer**

PLEASE FORWARD AFTER SIGNATURE TO THE REGION COMMUNICATIONS OFFICER  
AND RECORD IN THE WING TRAINING RECORDS