MULTISTATION PRIVATE LINE TELEPHONE CIRCUITS FOR THE FEDERAL AVIATION AGENCY GLOSSARY OF TERMS

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1. GENERAL

1.01 The purpose of this practice is to define the more common terms used by the Federal Aviation Agency (FAA). An understanding of these terms by Telephone Company people will be of assistance in discussions when maintaining private line circuits.

1.02 The definitions and abbreviations in this practice were obtained from the FAA and are not necessarily complete in their scope. However, sufficient detail is included to provide an adequate working knowledge of the terms. The words which are italicized in the definitions indicate terms which are defined elsewhere in the practice.

1.03 The definitions and abbreviations are listed alphabetically. Where there is a standard abbreviation for a defined term, it is included with the definition.

2. DEFINITIONS OF TERMS

(1) ***Air Ground Site (RTR):*** This is the location of remote air/ground communications equipment. It may include transmitters and/or receivers as well as auxiliary equipment serving a ***control tower, center, station,*** Rapcon, etc.

(2) ***Airman's Guide (AIRGI):*** This is a CAA publication giving current information on all facilities used by the flying public.

(3) ***Airport Traffic Control Tower (ATCT):*** A control tower is used to provide for the supervision of air traffic within a radius of twenty miles from the terminal area.

(4) ***Air Route Traffic Control Center (ARTCC):*** This control center is operated by the FAA to provide supervision of air traffic within a specified control area.

(5) ***Air Traffic Clearance:*** This is authorization by the ***air traffic control*** for an aircraft to proceed under specified traffic conditions within a ***control zone*** or ***control area.*** The purpose of this is to prevent collision between known aircraft.

(6) ***Air Traffic Communications Station (ATCS):*** This is an airway radio, teletype or other communication station. The ***Airman's Guide*** uses the following Air Traffic Communications Station DESIGNATORS:

B — Scheduled broadcast station (broadcasts weather at 15 and 45 minutes after the hour; Air Force broadcasts, generally, 29 minutes).

D — Distantly controlled teletype.

J — L/MF (200-415KC) voice facility on other than range frequency.

T — Teletype.

V — Additional VHF voice feature on other than range frequency.

(7) ***Air Traffic Control:*** This is a service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic. The service is administered by ***air route traffic control centers*** and ***airport traffic control towers.***

(8) ***Approach Clearance:*** This is the clearance issued to the pilot of an aircraft making a flight subject to instrument flight rules. This authorizes the pilot to approach for a landing.

(9) ***Approach Sequence:*** Two or more aircraft vertically separated at the same holding point and awaiting an ***approach clearance*** are said to be in approach sequence.

(10) ***Carrier Controlled Approach System (CCA):*** This is an aircraft carrier radar system providing information by which ***aircraft approaches*** may be directed via radio communications.

(11) ***Circuit Permanently Keyed:*** When the circuit is permanently keyed, it means the condition of the "line" or other equipment is such that the transmitter cannot be returned to the unkeyed position. FAA transmitting equipment is usually operated unkeyed (no radiated signal). When the push-to-talk key of the system is energized, the transmitter is keyed (signal radiated) and ready for voice transmission.

(12) ***Civil Airway:*** This is a path through the navigable airspace of the United States. It is identified by an area on the surface of the earth, designated or approved by the Administrator of the Federal Aviation Agency as suitable for interstate, overseas or foreign commerce.

(13) ***Control Area:*** This is an airspace of defined dimensions designated by the Administrator of the FAA. It extends upwards from an altitude of 700 feet above the surface within which ***air traffic control*** is exercised.

(14) ***Control Zone:*** This is an airspace of defined dimensions designated by the Administrator of the FAA. It extends upwards from the surface and includes one or more airports. In these zones, rules in addition to those governing flight in the ***control areas*** apply for the protection of air traffic.

(15) ***Crossband:*** The term crossband applies to two-way communications in which a different radio frequency is used in each direction of transmission. The frequencies are in bands which are dissimilar from a propagation standpoint.

(16) ***Cross Channel:*** This refers to two-way communications in which different radio frequencies are used in each direction of transmission. The frequencies used are similar from a propagation standpoint.

(17) ***Customer's Control Communication Center (ARTCC):*** This is the ***air route traffic control center*** and is sometimes referred to as ARTC center or "center." It is the control and originating point for ***RCAG*** control and voice transmissions.

(18) ***Double Channel Duplex (DCD):*** This provides simultaneous communication between two stations. Separate radio frequency channels are used in each direction.

(19) ***Double Channel Simplex (DCS):*** This provides nonsimultaneous communication between two stations. Separate radio frequency channels are used in each direction.

(20) ***Essential Traffic Information:*** This information pertains to aircraft which are expected to be overtaken, passed or approached within a distance of less than 10 minutes in actual flight time of each other. Such aircraft are within a level of 1000 feet or less vertically above or below the aircraft being cleared.

(21) ***Fixed Communications:*** This pertains to telecommunications between fixed points on the earth's surface.

(22) ***Flight Plan:*** This is specific information filed either verbally or in writing with the ***air traffic control*** and pertains to the intended flight of aircraft.

(23) ***Green Lamp:*** This is an "OK light" and indicates the operation is normal.

(24) ***Ground Control Point Remote A/G Facility:*** A/G equipment is considered to be remote when it is located in a separate building from the parent equipment by a distance sufficient to normally necessitate backup transmitters, receivers and antennas at the parent equipment.

(25) ***Local Traffic:*** This pertains to aircraft operating in the ***traffic pattern*** of the landing area concerned.

(26) ***Long Range Navigation (LORAN):*** This is a pulsed navigation aid which operates between 1800 and 2000 KC. It defines lines of position within its area of coverage which are based on the difference in time of travel of the radio wave from a master station and a simultaneous transmission from a slave station in a network. The airborne equipment has a picture tube and measuring circuit which determines the time differences. These are compared with time difference lines

drawn on a map. The intersection of two or more lines of position establishes a navigational "fix."

(27) ***Loop-Back Test Circuit:*** These circuits may be provided at AIRINC air-to-ground communications systems. The circuits consist of relay control equipment at the STC (serving test center) which remotely operates a radio transmitter.

(28) ***Permanent Carrier or Lockup:*** This indicates that the "carrier on" lamp at the communication center is on permanently.

(29) ***RCAG:*** This is a remote air/ground communication facility having a transmitter and/or receivers and auxiliary equipment serving an ***ARTC*** center. Voice frequency dialing is used for remote control. The system was formerly called a Peripheral Air/Ground Communications Station.

(30) ***Red Lamp:*** This is an "alarm light" and indicates something is wrong.

(31) ***Reporting Point:*** This is a geographical location in relation to which the position of an aircraft is reported.

(32) ***Single Channel Simplex (SCS):*** This provides nonsimultaneous communication between stations using the same frequency channel.

(33) ***TC-COAM:*** This is an abbreviation for tone control circuits which are customer owned and maintained. It refers to two types of tone control which mean the same thing.

(a) TC — tone control channeling

(b) VF — voice frequency control

(34) ***Traffic Pattern:*** This pertains to the flow of aircraft operating in the vicinity of an aircraft during specified wind conditions as established by appropriate authority.

(35) ***White Lamp:*** This is a signal light requesting "attention."

3. ABBREVIATIONS

ARSR — Air Route Surveillance Radar

ASDE — Airport Surface Detection Equipment

ASID — Automatic Station Identification Device

ASR — Airport Surveillance Radar

CAB — Civil Aeronautics Board

CNTR (CENTER) — (See ARTCC in definitions)

DF — Direction Finder

DME — Distance Measuring Equipment

EEM — Electronic Equipment Modification

EFI — Electronic Facility Instruction

H — Homing Facility of less than 2KW power output

HH — Homing Facility of 2KW or more power output

IATCS — International Air Traffic Communication Station

ICAO — International Civil Aviation Organization

IFR — Instrument Flight Rules

ILS — Instrument Landing System

INSAC — Obsolete (replaced by ATSC in definitions)

MANOP — FAA Manual of Operations

MEDIS — Message Diversion

MH — Homing Facility of less than 50 watts output

MODI — Maintenance Operations Division Instruction

MRL — Loop-type Low Frequency Radio Range

NOTAM — Notice to Airman

OFACS — Obsolete (See IATCS)

PAR — Precision Approach Radar

Peripheral — Obsolete (See RCAG in definitions or RAGF below)

RAGF — Remote Air/Ground Facility

RAPCON — Radar Approach Control

RATCC — Radar Air Traffic Control Center

SERVICE "A" — A teletypewriter circuit for the collection and dissemination of aviation Weather Data and NOTAMS.

SERVICE "B" — A teletypewriter circuit for messages concerning aircraft movement and control.

SERVICE "C" — A teletypewriter circuit used for collection and dissemination of synoptic weather data.

SERVICE "O" — A teletypewriter network used for collection and dissemination of international weather data.

SMRA, SRA — Adcock type low frequency range.

SMRL — Simultaneous loop-type, low frequency radio range.

SECO — Sequential Control — Special teletypewriter equipment which transmits messages automatically upon receipt of proper symbols from circuit.

TACAN — Tactical Air Navigation

TOWAC — Combined ATCS and ATCT (see definitions)

TVOR — Terminal VOR

VFR — Visual Flight Rules

VOR — VHF omni-directional range

VORTAC — VOR and TACAN installed at same site.

VOT — VOR emitting fixed bearing signal. Used to check calibration of airborne equipment.

"Z" MARKER — Station location marker at L/MF range facility operating on 75MC.