### Terms and Definitions

Authentication is the process of confirming a licensee's declared identity.

Authorization is the process of allowing particular identities access to particular resources.

ARAP stands for Amateur Radio Access Point. ARAP is the method by which legacy radio signals can be intelligently packaged and transmitted through Phase 4 Ground equipment and systems. Legacy radio traffic is placed into subchannels.

Black List is a list of stations that are positively not authorized to transmit through the satellite. There are probably at least two levels of blacklist: stations that have merely failed to authenticate, and stations which are permanently banned regardless of their authentication status.

GEO stands for either geosynchronous earth orbit or geostationary earth orbit. Definition must be made explicit in the documentation in order to differentiate between the two orbit types.

Ground Control Station is a station that can command the satellite.

HEO stands for high earth orbit.

LEO stands for low earth orbit.

Misuse is communications that are illegal or damaging to the communications system. This includes but is not limited to Harmful Interference.

NBFM stands for narrow-band frequency modulation.

Operator Database is a database of authenticated and authorized Phase 4 communications operators. The Operator Database is composed of Operator Lines.

Operator Line is a line in the Operator Database that uniquely identifies the source of communications traffic in a Phase 4 system. The Operator Line consists of Operator Fields. [call\_sign:SSID:subchannel:token:timestamp]

Phase 4 Radio or Phase 4 Ground Terminal is equipment that complies with the Phase 4 Air Interface.

Satellite is any equipment that serves as the payload for any Phase 4 Ground system. This includes but is not limited to an orbiting satellite payload, satellite simulator (Groundsat), or terrestrial hub.

Stat-Muxing is the process of swapping in data opportunistically or algorithmically. For example, when channel utilization is less than 100%, telemetry or other data is inserted into the multiplexed downlink.

Subchannels are the designations for legacy radio traffic handled by Phase 4 Ground equipment and radios. Subchannels receive an English letter designation. They are “sponsored” by an authenticated and authorized Phase 4 Radio. The subchannel appears in the operator database as part of the operator field.

TTJ stands for Take This Job. These are google forms that outline specific Phase 4 Engineering and Support tasks and allow sign-ups and communications.

White List is a list of stations that are positively authorized to transmit through the satellite.