

The Nature of the Amateur Services

the art of personal communications among an international fraternity of enthusiastic practitioners



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What is the Amateur Service?

- It is a radio communications service
- for the purpose of self-training, intercommunication & technical investigation
- and is performed by duly authorized persons interested in radio technology without monetary interests.

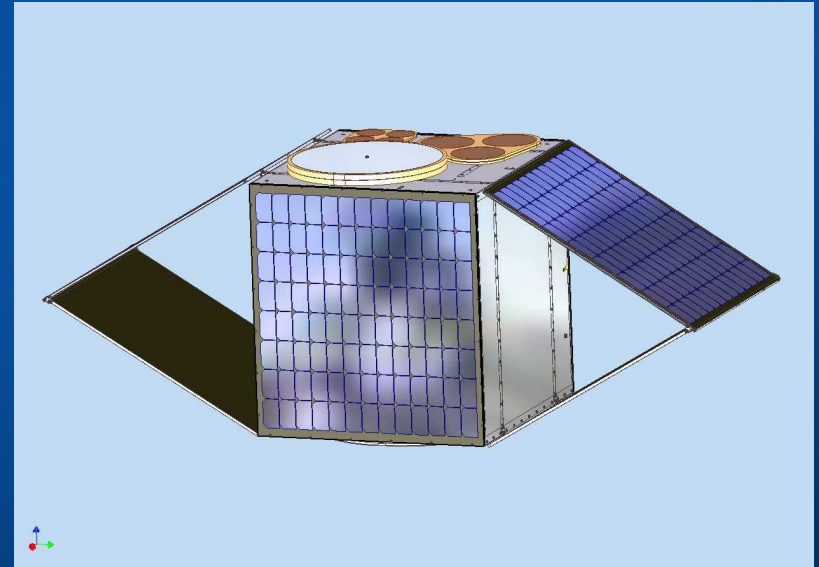


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What is the Amateur-Satellite Service?

- a radiocommunication service
- using space stations (satellites) and earth stations,
- for the same purpose as the amateur service



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National & International Resource

- public service - natural disasters
- develops source of electronic expertise
- develops nation's human resources
- contributes to radio technology
- explores radio wave propagation
- promotes international friendship
- projects a national image
- provides learning opportunity for all
- disciplined & self-regulating service



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National & International Resource

public service natural disasters



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Amateur Radio: Disaster Communications Resources



- Amateurs can communicate in the event of outage or overload of normal services.
- Amateurs are geographically dispersed and are able to reconfigure and adapt networks.



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Emergency Communications Van



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Contributes to and Demonstrates Electronic Innovations

- More than 50 amateur satellites
- Developed packet radio
- Automatic Packet Reporting System (APRS), usually utilizing Global Positioning System (GPS)
- Antenna designs
- Digital voice
- Software Designed Radio (SDR)



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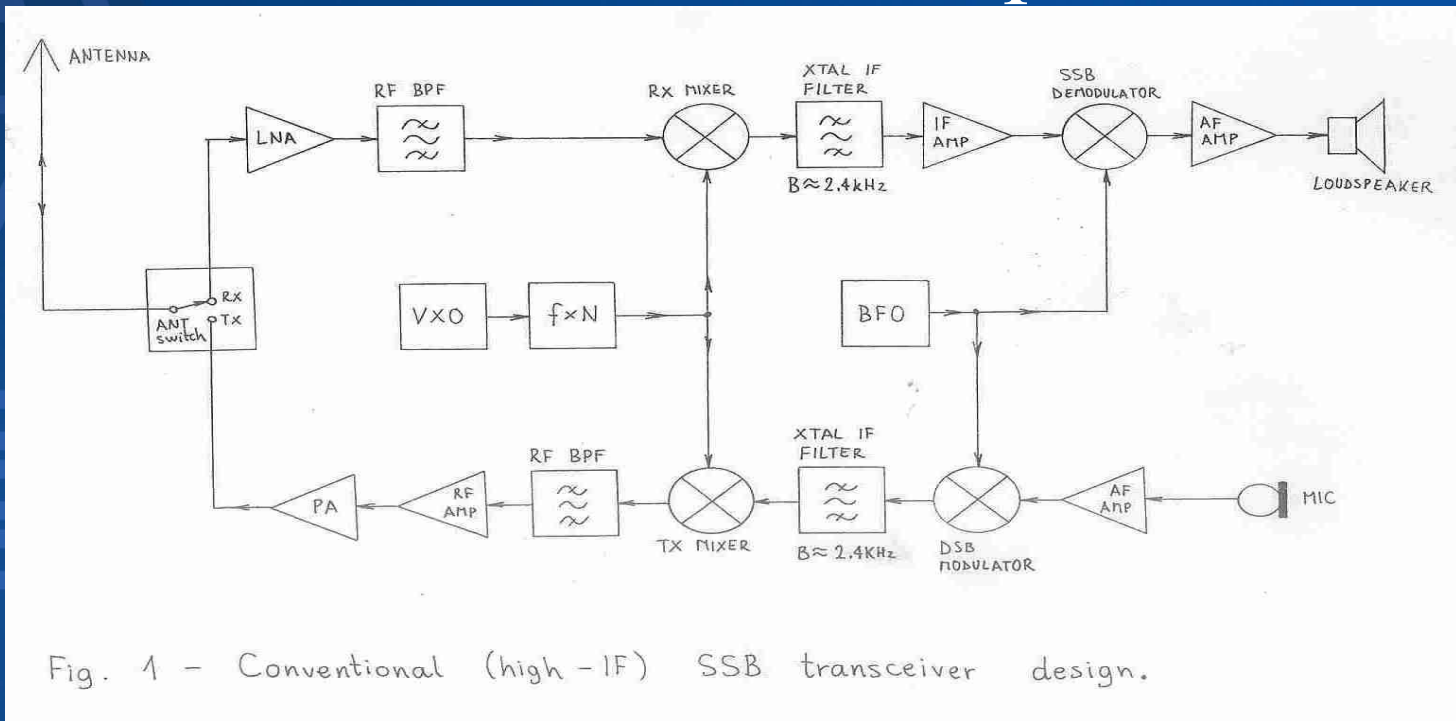
Develops a National Source of Electronics Expertise

- Electronic devices & telecommunications systems proliferate in the world today.
- Radio amateurs train themselves in
 - electronics
 - radio wave propagation
 - telecommunications techniques,
- becoming a technical human resource for industry, government & the public.



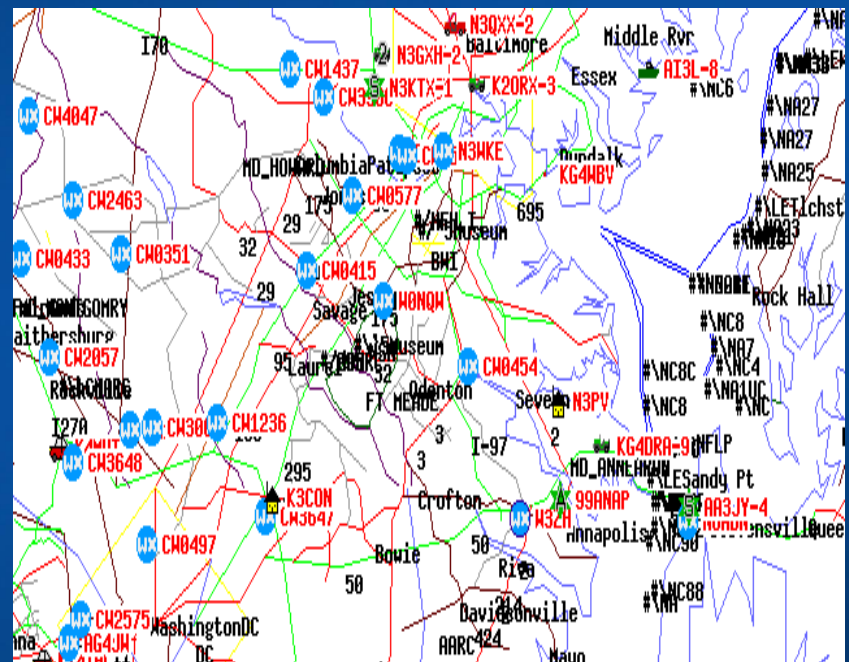
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National & International Resource of Technical Development



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GPS & Automatic Position Reporting System (APRS)



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Amateur Innovations

(Almost hidden antenna design)



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Amateurs Explore Signal & Propagation Phenomena

- Observe, measure and record signals
- Explore propagation modes, anomalies
 - meteor scatter
 - Earth-Moon-Earth (EME)
 - sporadic-E
 - Trans-equatorial spread-F
- Numerous HF, VHF, UHF beacons



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Amateurs Promote International Friendships and Understanding

- Amateur Radio offers opportunity for regular, direct, person-to-person international contact.
- Radio recognizes no political, geographic, ethnic, religious, age, culture, economic, or other barriers.
- Amateur Radio is a unique bridge among all peoples of the world.



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Amateurs Project the National Image

- Amateurs represent their country over the airwaves.
- When engaged in international contacts, they convey a positive image of their country as being friendly, progressive, and interested in the rest of the world.



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Amateur Radio Provides Learning Opportunities

- for all ages, especially the youth of the world, which can lead to professional jobs in electronics and telecommunications
- a productive outlet for older people
- for the physically handicapped - offers a unique window on the world



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Motivation for Youth



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A Self-Disciplined Service

- Training emphasises self discipline.
- Amateurs monitor & report problems.
- Peer pressure helps.
- Occasionally, administrations are called upon to assist in persistent cases of operating violation.



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Amateur Radio is a Growing Service

- There are nearly 3 million licensed radio amateurs worldwide.
- Amateur Radio continues to grow in both membership and technology advancement.
- Future telecommunications techniques and opportunities are unlimited.



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