

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of) WT Docket No. 98-143
)
1998 Biennial Regulatory Review --) RM-9148
Amendment of Part 97 of the) RM-9150
Commission's Amateur Service Rules) RM-9196

REPLY TO COMMENTS

INTRODUCTION 1
REVIEW AND MODIFICATION OF RECOMMENDATIONS 2
ISSUES RAISED BY THE COMMENTERS 4
Is there a need for change in license structure? 4
How many operator license classes should there be? 6
Should the Amateur Extra and Advanced Classes be merged? 6
What should the names of the operator license classes be? 8
Should Basic Class operators be afforded QRP HF operating privileges? 9
Should transmitter power be used as upgrade incentives? 10
Should the radiotelephone subbands be expanded? 10
Should the Commission create a basic permit with no actual operating
privileges? 10
Should the Commission require Morse code tests to be based on solid
copy? 11
CONCLUSION 11
APPENDIX A - The Amateur Radio 2000 Plan

I. INTRODUCTION

1. Barnett Carwile "Jay" Jackson, Jr. ("Jackson") submits this reply to comments filed in response to the Federal Communications Commission's Notice of Proposed Rule Making ("NPRM") in the captioned matter. Jackson currently holds an Amateur Extra class amateur radio operator license and is the licensee of an amateur radio station, call sign W4VG.

Jackson was first granted an amateur radio operator license in 1968, and has held an amateur radio operator license continuously since 1972.¹ The opinions expressed herein are solely the view of Jackson, and do not necessarily represent the view or positions of any other person or of Jackson's employer.²

II. REVIEW AND MODIFICATION OF RECOMMENDATIONS

2. Jackson submitted comments in this proceeding on December 1, 1998.³ In these comments, Jackson suggests that the Commission amend Part 97 of its rules in such a way as to reduce the number of amateur radio operator license classes from 6 to 4, eliminate the 13 word per minute Morse telegraphy test, provide a contingent sunset provision for the 5 word per minute Morse telegraphy test, preserve the 20 word per minute Morse telegraphy test on an optional basis, reduce the number of written examination elements, make the requirements for the various classes of operator license more relevant to the needs of those operators, reduce the burden on VEs and VECs, provide for issuance of amateur radio station licenses directly to institutions, close an existing loophole that encourages the issuance of vanity call signs for bogus amateur radio "clubs", and improve enforcement.

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- 1 Jackson has held primary amateur radio station licenses bearing the following call signs: WN4KAG (1968-1970), WN4AJF (1972-1973), WA4AJF (1973-1979), AF4O (1979-1996), W4VG (1996-present).
 - 2 Jackson is currently employed as an electronics engineer by the Federal Communications Commission in the Commercial Wireless Division of the Wireless Telecommunications Bureau. Jackson has been an employee of the Federal Communications Commission continuously since July 1975. Jackson's current work responsibilities primarily involve policy matters concerning the Commercial Mobile Radio Services, in particular the Public Mobile services governed by Part 22 of the Commission's Rules. Jackson has in the past worked on matters affecting the Amateur Radio Service, for example, he was responsible for the amateur radio examination program between 1978 and 1981. Most recently, Jackson provided assistance to the Commission's Office of Engineering and Technology in developing OET Bulletin 65 Supplement B. However, Jackson was not involved in any way in the development of the *Notice of Proposed Rule Making* in this proceeding, and in fact was unaware of its contents until after it was publicly released. Jackson disqualifies himself from participating in this proceeding in any official capacity.
 - 3 Jackson submitted comments in this proceeding on December 1, 1998 through the internet using the Commission's Electronic Comment Filing System (ECFS). For unknown reasons probably having to do with incompatible printer drivers, the ECFS incorrectly transliterated section and paragraph symbols in Jackson's submission. Specifically, it appears that the paragraph symbol was converted to a lower caps ampersand and the section symbol was converted to a Russian letter E. Additionally, the ECFS repaginated the document which unfortunately causes the page numbers in the table of contents to be incorrect. Finally, Jackson made a typographical error in paragraph 27 of his comments. Where it reads "...the General Class operator license no longer unnecessary and is somewhat duplicative", it should have read "...the General Class operator license is no longer necessary and is somewhat duplicative." Jackson apologizes for these errors and any confusion that they may have been caused.

3. Jackson's comments outline a plan for transiting to a new simplified amateur radio operator license structure, with 4 classes.⁴ Numerous other commenters also submitted restructuring plans that involve reduction to 3 or 4 amateur radio operator license classes.⁵ Like these other plans, Jackson's plan retains the existing incentive licensing philosophy wherein each amateur radio operator may qualify for successively higher operator license classes having greater operating privileges, by meeting additional prescribed requirements.

4. After reading comments filed by others,⁶ Jackson is now persuaded to modify his restructuring plan in two minor respects. First, Jackson now believes that Basic and Intermediate Class operators should be limited to operation of transmitters having no more than 250 Watts peak envelope power output. Second, Jackson now believes that a Morse code testing requirement (at 12 wpm) is appropriate for the Expert Class, in addition to the substantial amateur radio achievement. The reasons for these changes are given in the discussion of issues raised by other commenters, *infra*. Jackson's plan, with these two improvements, is humbly referred to hereinafter as the "**Amateur Radio 2000 plan**", and a list of the rule changes needed is attached hereto as Appendix A. The major differences between the Amateur Radio 2000 plan and other plans that have been offered are as follows:

! The Amateur Radio 2000 plan provides for 4 operator license classes: an easy-to-earn basic license providing VHF/UHF operating privileges, an easy-to-earn intermediate license providing in addition substantial operating privileges in the high frequency spectrum, an advanced license, intended for experimenters, providing additional operating privileges in the less crowded portion of the high frequency spectrum where experimentation can be conducted, and an expert license providing all amateur radio privileges. Many of the other plans would merely retain without change the existing Technician, General and Amateur Extra Classes (counterproductively combining the Advanced and Amateur Extra Classes) and abolish the other classes. Although these other plans would reduce the number of operator license classes, they do not tailor the remaining classes to meet stated objectives of the operator licensing program.

4 For the details and rationales of Jackson's original plan, please refer to Section III of Jackson's comments.

5 Some commenters suggest even fewer classes. For example, Wayne Green W2NSD/1 suggests reduction to one license class. See Letter from Wayne Green to the WT Docket 98-143 file dated November 10, 1998.

6 Because thousands of comments have been filed in this proceeding, and because of the time of year, it was not feasible to read all of the comments prior to the reply comment deadline. Jackson read as many as he could at home, given the constraints of family responsibilities. The Commission should have prescribed a shorter comment period and a longer reply comment period.

! The Amateur Radio 2000 plan abolishes the Novice and Technician Plus classes, but it also creates a new Intermediate Class having lesser frequency privileges than the existing General Class but more than the existing Technician Plus. Most of the other plans also abolish the Novice and Technician Plus Classes, but they do not create an operator license class to address upgrade stagnation by bridging the gap between the existing Technician Plus and General Classes.

! The Amateur Radio 2000 plan names the resulting four amateur radio operator license classes as follows: Basic, Intermediate, Advanced, Expert. Most of the other plans retain the existing inappropriate or non-descriptive names (e.g. "General", "Technician"), or substitute generic labels such as letters (e.g. Class A, Class B). Descriptive names for the classes provide a sense of accomplishment and encourage licensees to upgrade.

! The Amateur Radio 2000 plan eliminates Morse code testing at speeds greater than 5 words per minute (wpm) for all classes other than the Expert Class. Many of the other plans retain a medium speed (10-13 wpm) Morse code test for the General or Advanced Class. It is the existing medium speed (13 wpm) Morse telegraphy requirement for the General Class license that is killing upgrading beyond the Technician Plus Class.⁷

! The Amateur Radio 2000 plan alters the written exam syllabi such that the Basic and Intermediate Class tests would comprise only questions relevant to operating an amateur radio station, and the Advanced Class test comprises only questions relevant to amateur radio technology and experimentation. Most of the other plans retain the current practice of requiring all of the written tests to cover all operating and technical topics, and trying to make the particular questions "more difficult" at each successive class level.

! The Amateur Radio 2000 plan requires proof of a substantial amateur radio achievement in lieu of an additional written examination as the requirement for the Expert Class operator license. Most of the other plans would require passing extremely difficult, lengthy or comprehensive examinations for the highest class.

III. ISSUES RAISED BY THE COMMENTERS

⁷ This point is echoed by many commenters. The 5 wpm slow speed Morse telegraphy test for Technician Plus, albeit perhaps an unnecessary hurdle for beginners, is not really the problem. It is the 13 wpm medium speed Morse telegraphy test for the General Class that is the big problem. See e.g. comments of Ed Griffith, KC6WCT at page 2; David Finley, N1IRZ at pages 5-6 (curiously, Finley correctly recognizes the problem, but then proposes to keep a medium-speed Morse telegraphy testing requirement for the "General Purpose" license at page 7); comments of Gordon West, WB6NOA at Summary; comments of ARRL at para. 27.

5. Is there a need for change in license structure? The current amateur radio operator licensing class structure is causing problems, the most serious of which is stagnation of the service caused by insufficient upgrading from Technician and Technician Plus to General, causing all of the service growth to occur in the entry level Technician and Technician Plus classes. The existing operator classes made sense when they were created, but that society and technology have changed over time and the amateur radio licensing program must also evolve if it is to be effective in meeting the goals established for the service. Edward E. Mitchell of Ham Radio Online ("Mitchell") in Section 3 of his comments, eloquently describes how advances in technology necessitate change in the way technology-based endeavors such as amateur radio are conducted, with older techniques being retired in favor of new, more effective practices.

6. Most of the commenters agree that an overhaul of the amateur radio operator licensing structure is needed. However, it is imperative that this be undertaken in a careful and thoughtful manner, with established goals for the Amateur Radio service in mind. The American Radio Relay League ("ARRL")⁸, in its comments, set forth six objectives for amateur radio license restructuring.⁹ These objectives are:

- ! No privileges of existing licensees should be reduced.
- ! Testing should be related to privileges, and should place greater emphasis on operating practices and on current technologies.
- ! The number of license classes should be reduced.
- ! The entry level license should be attractive to potential amateurs, and especially to younger people.
- ! Experimentation should be supported and encouraged.
- ! Rules that result in the underutilization of parts of some amateur bands should be removed.

7. These are for the most part worthy objectives and ARRL is to be commended for suggesting them. However, there are other objectives that should also be given consideration:

- ! Operator licenses should not be automatically upgraded to a higher level without any requirement for experience (period of licensing at a lower level) or for passing a

⁸ As a matter of disclosure, Jackson is a life member of the ARRL, but does not participate in formulating or necessarily agree with its positions on amateur radio issues.

⁹ Comments of ARRL at page 13, para. 14.

commensurate examination.¹⁰

! The names of the operator license classes should have some relevance, reflecting the level of achievement or at least the nature of the operating privileges afforded.¹¹

! There should not be a huge gap in qualifications and privileges between any two successive classes.¹²

8. The Amateur Radio 2000 plan for restructuring the amateur radio operator license classes would meet all of these objectives, and in fact would meet the ARRL stated objectives better than the ARRL's own plan. For example, the qualification requirements prescribed under the Amateur Radio 2000 plan better relate to the privileges earned than they would using the ARRL plan. **The Commission should adopt rule changes to implement the Amateur Radio 2000 plan.**

9. How many operator license classes should there be? All of the commenters agree that (obviously) there should be an operator license class that conveys all amateur radio privileges. Virtually all of the commenters also agree that there should be a basic operator license class for newcomers, especially young persons, that is easy to obtain. Most of the commenters also support either one or two intermediate classes, and that leads to the proposals which have either 3 or 4 amateur radio operator license classes. Typical of a 3 class plan is that advanced by Quarter Century Wireless Association, Inc. ("QCWA"), which would combine the Advanced and Amateur Extra Class licenses, retain the Technician and General Classes and abolish the rest.¹³ Three classes, however, are too few to retain a viable incentive structure, provide privileges related to qualifying requirements, allow a smooth and equitable transition from the existing structure, and avoid a major gap in privileges and requirements between the entry level class and the journeyman level class (such as now exists between the Technician Plus and General Classes). A four class structure, as described in the Amateur Radio 2000 plan, is optimum. Furthermore, according to ARRL, a

10 The ARRL plan would instantly upgrade Novice Class to General Class. In no way can the Novice qualification requirements be compared to those for the General Class. Likewise, many other commenters would upgrade all Advanced Class licensees to Amateur Extra Class. This is not equitable because the existing Amateur Extra Class examination requirements are a substantial hurdle.

11 It is not suggested that there be a wholesale renaming, but it has never been clear to Jackson what the meaning of "General" class is. As opposed to the "Specific" class?

12 There is a huge gap in the existing qualification requirements and privileges between the Technician Plus Class and the General Class. This discourages upgrading and is causing stagnation in the service.

13 Comments of QCWA at page 2. By way of disclosure, Jackson is a life member of QCWA, but does not have any role in formulating, nor necessarily agree with, QCWA's positions on amateur radio issues.

4 class structure would be more popular among amateurs than a 3 class structure.¹⁴ **The Commission should reduce the number of operator license classes to 4, but only in accordance with the Amateur Radio 2000 plan.**

10. Should the Amateur Extra and Advanced Classes be merged? As previously noted, a number of the commenters recommend combining the Advanced and Amateur Extra Class licenses.¹⁵ The rationale these commenters generally offer for this position is that they believe there is little difference in the operating privileges accorded the Advanced and Amateur Extra Class licenses respectively. This reasoning is not valid. While at first glance it may appear that access to a few small high frequency subbands, obtained by upgrading from Advanced Class to Amateur Extra Class, are not a significant increase in privileges, it should be noted that these subbands are arguably the most valuable in the HF amateur radio allocation. Within these subbands one will find the least crowded conditions and the best operators; this also makes them attractive to DX stations. The value of a prestige license permitting use of these subbands is also noted by David Finley, N1IRZ ("Finley") in his comments.¹⁶

11. Under the Amateur Radio 2000 plan, the Advanced Class amateur radio operator license is intended for experimenters, amateurs who are primarily interested in technology, but, like the basic and intermediate classes, it is earned solely by passing tests. By contrast, under the Amateur Radio 2000 plan, the Expert (Amateur Extra) Class operator license is earned only by actual operating or experimenting and achieving a significant measure of success in furthering at least one of the purposes expressed in Section 97.1 of the rules. Jackson would like to think of real-world requirements in lieu of testing as uniquely his own idea, but he notes Gordon West, WB6NOA ("West"), a leading amateur radio educator, and CQ Communications, Inc. ("CQ"), a major amateur radio publisher, have also thought of it and recommended that it be considered in their comments.¹⁷ A separate Expert class operator license provides other motivations (as noted by Courtney B. Duncan and Jan A. Tarsala¹⁸) that would encourage amateur licensees to actually use their

14 Comments of ARRL at fn. 7.

15 See e.g. comments of the National Conference of Volunteer Examiner Coordinators at page 11 of 37; comments of Jimmy D. LeMarr, W5NBC at page 1, Section II; comments of William D. Ricker, N1VUX at page 2; comments of Raymond K. Adams, W4CPA, at page 10 of 11.

16 Comments of Finley at page 2. Finley's plan is somewhat similar to the Amateur Radio 2000 plan. Finley claims that his plan provides for 3 classes, but upon close review it is noted that one of his classes is split into two subclasses; considering that, his plan actually calls for 4 classes.

17 Comments of West at pages 7-8; comments of CQ at paras. 33-36.

18 Duncan and Tarsala list some of these motivations such as pride of accomplishment. See comments of Duncan and Tarsala at page 7. Duncan and Tarsala propose a plan involving a basic license and numerous endorsements (similar to some the Commission's commercial operator licenses). This idea may have some merit but would also likely pose some unforeseen administrative problems.

privileges to support the purposes of the service, rather than just encouraging them to sit for more examinations.

12. Many of the restructuring plans offered by other commenters would retain a medium speed (10 to 13 wpm) Morse telegraphy test requirement for the Advanced Class operator license. To do this however, would be a grave mistake. The Advanced Class operator license is intended for amateur experimenters, persons who are primarily interested in the technology and secondarily in operating activities. Accordingly, the Amateur Radio 2000 plan calls for a substantial written examination for the Advanced Class operator license focussing entirely on technical material. One problem with telegraphy testing that has long been recognized is that there are persons with extraordinary technical knowledge and credentials but little or no interest in telegraphy who are prevented by the telegraphy tests from using amateur high frequency bands for amateur radio experimentation.¹⁹ Accordingly, there should not be any Morse telegraphy test, beyond the minimum necessary to comply with international requirements, as a prerequisite for the Advanced Class.

13. On the other hand, many commenters have made persuasive arguments that the Morse code is still relevant and useful in the amateur radio service and is likely to remain so for the foreseeable future.²⁰ Although Morse telegraphy proficiency is not necessary (beyond meeting international requirements) for the Advanced Class and is in fact an undesirable barrier for upgrading to the Advanced Class, it would be folly to call a person without a working proficiency in Morse telegraphy an expert amateur radio operator. Thus, the Amateur Radio 2000 plan calls for a medium speed²¹ telegraphy test as a requirement for the Expert Class amateur radio operator license. Because the Expert class must have a substantial Morse telegraphy proficiency requirement, and the Advanced Class should not, these two classes can not be combined. **The Commission should not combine the Advanced and Amateur Extra classes into a single class.**

14. What should the names of the operator license classes be? The ARRL initially considered recommending that the operator license classes be named as letters (e.g. Class A, Class B).²² Other commenters, such as Jay W. Underdown, W0PS ("Underdown"), oppose the use of letters as class names.²³ In its comments, the ARRL favors retaining the existing

19 This reason led in part to the creation decades ago of the existing Technician Class operator license and explains why that name was chosen. Similar reasoning justified creation of the Canadian digital certificate.

20 See e.g. comments of Michael J. Sparling, W6LVW, at pages 3-5; comments David L. Heller, K3TX at appendices A & B; comments of Kenwood at para. 6.

21 Specifically, 12 wpm is suggested to conform with international licensing practice.

22 See *QST*, September 1998, pages 48-50, attached to comments of ARRL.

23 Comments of Underdown at page 4.

operator license class names, with the exception of the Amateur Extra Class, which it would rename Extra Class.²⁴ ARRL reasons that amateur radio operators are emotionally attached to the existing class names. The National Conference of Volunteer Examiner Coordinators ("NCVEC") would retain the existing class names simply because it is concerned about the inconvenience of relabeling existing exam and study materials.²⁵ This is an absurd argument, regulation of the Amateur Radio Service can not be based on whether materials on hand must be revised; otherwise, nothing would ever change.

15. James M. Wilcox, W3WV ("Wilcox")²⁶ opposes the continued use of the name "Technician" to describe the basic entry class, because most of these licensees are not radio technicians, and he recommends calling it "Novice" even though it is not the same as the existing Novice class.²⁷ This would however, inevitably cause confusion. Kenwood Communications Corporation ("Kenwood")²⁸ recognizes that the operator license class names create a "sense of achievement" but would retain the existing operator class names simply for the sake of consistency.²⁹ A foolish consistency is the hobgoblin - you know the rest.

16. Bob Vernall, ZL2CA ("Vernall")³⁰ argues that the names "Novice" and "Technician" are inappropriate misnomers, but also feels that the names "Advanced" and "Extra" are demeaning to those who hold lower classes.³¹ The former opinion is valid, but the latter is not. Persons with Bachelor's degrees do not feel demeaned simply because their university or college also awards Masters and Doctorate degrees. Boy Scouts who have earned First Class do not feel demeaned because other boys have earned the Eagle badge.

17. In the Amateur Radio 2000 plan, the entry level operator license is called "Basic" class, because names such as "Novice" or "Beginner" are somewhat demeaning, particularly for those who are content with the Basic license privileges, and may hold that license

24 Comments of ARRL at fn. 15.

25 Comments of NCVEC at page 9 of 37.

26 By way of disclosure, Jackson and Wilcox are acquainted and members of the same QCWA chapter. Jackson does not necessarily agree with Wilcox's positions on amateur radio matters.

27 Comments of Wilcox at page 2.

28 By way of disclosure, equipment at Jackson's station (W4VG) includes Kenwoods TS-950SDX, TS-790A, TS-690S/AT, TS-440S/AT, TS-711A, TH-225A and numerous accessories. Jackson does not necessarily agree with Kenwood's positions on amateur radio issues.

29 Comments of Kenwood at fn. 3.

30 Jackson wonders why Vernall is participating in this proceeding, as the amateur radio regulations of New Zealand are not at stake herein.

31 Comments of Vernal at page 7.

indefinitely. However, the names Advanced Class and Expert Class are not demeaning. It should be noted that the name "Technician" is inappropriate for the Basic Class because most entry level licensees today are not radio technicians.³² **The Commission should adopt the operator class names given in the Amateur Radio 2000 plan.**

18. Should Basic Class operators be afforded QRP HF operating privileges? In his comments, William D. Ricker, N1VUX ("Ricker") suggests in essence that the codeless Basic Class be allowed high frequency operating privileges at very low power ("QRP") levels.³³ This is actually a brilliant idea and Jackson wishes he had thought of it. What better way to introduce newcomers, particularly young persons, to the wonders and magic of high frequency communications? QRP amateur radio operation is perfect for this because QRP equipment is relatively inexpensive, QRP operation integrates beautifully into outdoor activities like camping and backpacking, QRP levels present little possibility of danger from radiofrequency exposure, and because the development of good operating practices is rewarded by better results when operating QRP. Later when an operator upgrades to Intermediate Class, he or she will appreciate the 250 Watt power limit, but will carry with him or her the good practices learned from his or her QRP days. Unfortunately, it appears that the international Morse telegraphy testing requirement may prevent the Commission from doing this.³⁴ However, it is such a good idea that it has been included in the Amateur Radio 2000 plan. **The Commission should consider whether it is legally possible to accord low power high frequency privileges to the entry level codeless operator class, such as is recommended in the Amateur Radio 2000 plan.**

19. Should transmitter power be used as upgrade incentives? Ricker and other commenters³⁵ suggest that the Commission use power limits as upgrade incentives. This idea has merit. The Novice Class has long been limited in power not only as an incentive but in recognition of the entry level skills of such operators. However, because the Novice Class is being phased out, and the Basic Class will officially become the new entry level class. Accordingly, the Amateur Radio 2000 plan provides for a 250 Watt power limit for the Basic and Intermediate Classes. Because additional transmitter power is a technical privilege, it should be accorded to the operator license class that has passed a technical examination. Under the Amateur Radio 2000 plan, this is the Advanced Class.³⁶ **The**

32 Comments of Jackson at paras. 19-20.

33 Comments of Ricker at page 8.

34 Ricker refers to the "Japanese footnote" as allowing Japan to allow high frequency privileges to codeless class licensees. Jackson is of the opinion that there is no power level low enough to ensure that high frequency operation is limited to domestic communications. However, the Commission could consider alternatives such as limiting communication to domestic stations, in connection with the QRP high frequency operation.

35 See e.g. comments of Gregory A. Dean, N9NWO at page 2; comments of Vernal at page 6.

36 The General Class has also passed a substantial technical exam and will retain its power privileges and eventually be converted to Advanced Class upon renewal.

Commission should adopt a 250 Watt peak envelope power output limit for the Basic and Intermediate Class operator licenses, as outlined in the Amateur Radio 2000 plan.

20. Should the radiotelephone subbands be expanded? The ARRL has proposed that, because the Novice Class subbands will be returned to full power use, the Commission expand the radiotelephone subbands on several bands. This proposal is not appropriate as it has not been established that additional radiotelephone spectrum is required, except for the 40 meter band.³⁷ **The Commission should not alter the mode subbands at this time.**

21. Should the Commission create a basic permit with no actual operating privileges? CQ proposes that the Commission create a basic amateur permit that would have no associated station license (and thus no call sign) and could be used only under the supervision of a higher class radio amateur.³⁸ The existing rules already allow this without the need of a permit. This would be the opposite of eliminating an unnecessary rule, it would be creating an unnecessary rule. **The Commission should not create a basic permit with no operating privileges or associated primary station license.**

22. Should the Commission require Morse code tests to be based on solid copy? The California Central Coast DX Club ("CA-DX") requests this.³⁹ This type of test is appropriate for commercial radiotelegraph operators that carry message traffic for customers, but is not relevant to casual amateur radio communications. **The Commission should not require solid-copy Morse code testing.**

37 On the 40 meter band at night, international broadcast stations in Regions 1 and 3 occupy most of the radiotelephone band. However, addressing this problem should be taken up when the ITU realigns the 40 meter band down to 6.9 MHz.

38 Comments of CQ at page 20.

39 Comments of CA-DX at page 4.

VI. CONCLUSION

23. In view of the extensive record in this proceeding, it is clear that the Commission has adequate notice to adopt a wide range of proposals, choosing not only from those in the *NPRM*, but also from those suggested by commenters. Jackson urges the Commission to give full consideration to adopting the comprehensive **Amateur Radio 2000 plan** set forth in Appendix A attached hereto. The Commission is urged to keep in mind goals and objectives for the Amateur Radio Service, beyond the limited simplification and "streamlining" goals of the biennial review process. Although saving federal resources is always a desirable objective⁴⁰, the Commission should disclose with particularity the actual amounts of resources it is expending upon administration of the amateur radio service, perhaps in comparison with the amounts it is spending on other non-auctioned services, and the amount it expects to save, should it decide to make changes based solely on administrative resource considerations. Finally, the Commission should consider the proposals in Jackson's comments and at the end of the Amateur Radio 2000 plan, with regard to issuance of institutional amateur radio station licenses (in lieu of RACES, club and military recreation licenses).

Respectfully submitted,

Barnett Carwile Jackson, Jr.

40 Amateurs will no doubt be pleased to give up FCC services to amateur radio if they know that the taxpayer dollars saved thereby will be applied to some apparently greater Federal purpose, such as appointing more special counsels to investigate and prosecute high level government officials.

APPENDIX A

**The Amateur Radio 2000 Plan
for
Restructuring the U.S. Amateur Radio Operator License Classes
and providing for the issuance of
Institutional Amateur Radio Station Licenses**

The Federal Communications Commission will amend Part 97 of its Rules (47 C.F.R. Part 97) to effect the following changes to the existing amateur radio operator license structure:

1. A new Basic Class amateur radio operator license is created.
2. The Basic Class amateur radio operator license conveys the same control operator privileges as the Technician Class license, except that maximum transmitter peak envelope power output is limited to 250 Watts, unless the Basic Class licensee previously held a Technician Class amateur radio operator license, in which case this 250 Watt power limitation does not apply.
3. If it is determined that this provision can be made within the constraints of S.25.5 of the International Radio Regulations, the Basic Class and Technician Class amateur radio operator licenses will (in addition to VHF/UHF privileges) convey the high frequency subband control operator privileges of the Intermediate Class operator license (listed below), except that maximum transmitter peak envelope power output on these high frequency subbands for a Basic or Technician Class control operator is limited to 5 Watts.
4. The requirement to earn a Basic Class amateur radio operator license is a passing score on a short (25 to 50 question) multiple choice written test covering FCC rules, VHF operating procedures, VHF radio wave propagation, and general amateur radio practices.
5. The primary station license held by a new Basic Class amateur radio operator will bear a Group D call sign.
6. No new Technician Class amateur radio operator licenses will be issued. Outstanding Technician Class amateur radio operator licenses remain valid until they expire.
7. Until such time as the S.25.5 of the International Radio Regulations is repealed or amended to discontinue the existing international Morse telegraphy testing requirement for amateur radio operation below 30 MHz, upon timely application for renewal, each amateur radio operator holding a Technician Class operator license will be issued a Basic Class operator license and a primary

station license bearing the same call sign, even if it is a Group C call sign, unless the licensee requests a different call sign, in which case that different call sign will be a Group D call sign.

8. Any Basic Class amateur radio operator who previously held a Technician Class and who intends to continue or begin operating a transmitter with a maximum peak envelope power output exceeding 250 Watts should be able to produce evidence of having held a Technician Class license.
9. A new "Intermediate Class" amateur radio operator license is created.
10. The Intermediate Class amateur radio operator license conveys more frequency band control operator privileges than the Technician Plus amateur radio operator license, but less than the General Class amateur radio operator license. Specifically, the Intermediate Class conveys operating authority on the following high frequency subbands in Region 2 (and comparable high frequency subbands in Regions 1 and 3, adjusted as necessary to meet ITU requirements):

1.81-1.96 MHz	7.225-7.300 MHz	18.068-18.168 MHz	28.10-29.70 MHz
3.60-3.75 MHz	10.10-10.15 MHz	21.050-21.200 MHz	all above 30 MHz
3.90-4.00 MHz	14.05-14.15 MHz	21.350-21.450 MHz	
7.05-7.15 MHz	14.25-14.35 MHz	24.890-24.990 MHz	
11. For Intermediate Class amateur radio control operators, the maximum transmitter peak envelope power output is limited to 250 Watts, unless the Intermediate Class licensee previously held a Technician Plus Class amateur radio operator license, in which case this 250 Watt power limitation does not apply.
12. The requirements to earn an Intermediate Class amateur radio operator license comprise those of the Basic Class *and* successful performance on a low speed (5 or 6 wpm) Morse telegraphy test to satisfy the International Radio Regulations requirement for operation on amateur radio frequency bands below 30 MHz *and* a passing score on a 25 question multiple choice test covering FCC rules, HF operating procedures, HF radio wave propagation, and general amateur radio practices.
13. At such time as the S.25.5 of the International Radio Regulations is repealed or amended to discontinue the existing international Morse telegraphy testing requirement for amateur radio operation below 30 MHz, the low speed telegraphy examination requirement for the Intermediate Class will also be eliminated.
14. Until such time as the S.25.5 of the International Radio Regulations is repealed or amended to discontinue the existing international Morse telegraphy testing

- requirement for amateur radio operation below 30 MHz, the holder of a Technician Class amateur radio operator license may upgrade to the Intermediate Class amateur radio operator license by passing the low speed Morse telegraphy test.
15. After such time as the S.25.5 of the International Radio Regulations is repealed or amended to discontinue the existing international Morse telegraphy testing requirement for amateur radio operation below 30 MHz, any outstanding Technician Class operator license will convey the privileges of the new Intermediate Class amateur radio operator license, and will be renewed as such.
 16. All new Intermediate Class licensees will be issued a primary station license bearing a Group C call sign if available, or otherwise a Group D call sign.
 17. No new Novice and Technician Plus Class amateur radio operator licenses will be issued.
 18. Outstanding Novice Class amateur radio operator licenses continue to be valid and convey their current privileges until they expire.
 19. Outstanding Technician Plus Class amateur radio operator licenses will immediately convey the increased control operator frequency band privileges of the new Intermediate Class.
 20. Upon timely application for renewal, amateur radio operators holding a Novice or Technician Plus Class amateur operator license will be issued an Intermediate Class amateur radio operator license.
 21. Any Intermediate Class amateur radio operator who previously held a Technician Plus Class amateur radio operator license and who intends to continue or begin operating a transmitter with a maximum peak envelope power output exceeding 250 Watts should be able to produce evidence of having held a Technician Plus Class license.
 22. No new General Class amateur radio operator licenses will be issued.
 23. Outstanding General Class amateur radio operator licenses will continue to be valid and convey their current privileges until they expire.
 24. Upon timely application for renewal, amateur radio operators holding a General Class amateur radio operator license will be issued an Advanced Class amateur radio operator license. The holder of a General Class amateur radio operator license may upgrade to the Advanced Class amateur radio operator license at any time by passing the written test.

25. The requirements for earning the Advanced Class amateur radio operator license are changed to reflect a technical focus. Specifically, the requirements are those of the Intermediate Class *and* a passing score on a substantial (50 to 100 question) multiple choice test covering amateur radio technology: electrical principles, amateur radio station equipment circuit components, practical circuits employed in amateur radio station equipment, signals and emissions transmitted by amateur radio stations, and amateur radio station antennas and feed lines. The questions on this Advanced Class test will be taken from all of the existing question pools including those for former element 4B.
26. The Amateur Extra Class amateur radio operator license is renamed as the "Expert Class".
27. The additional requirements for earning the Expert Class operator license are changed to emphasize real-world achievement and contribution to the Amateur Radio Service over testing. Specifically, the requirements for earning the Expert Class operator license are those of the Advanced Class amateur radio operator license *and* successful performance on a medium speed (12 or 13 wpm) Morse telegraphy test *and* proof of a substantial amateur radio achievement. The substantial achievement may be any one appearing on a list to be incorporated in the Part 97 rules. The list comprises achievements that show that the candidate has engaged in activities that further one or more of the purposes of Part 97 of the rules. The list includes the following possible achievements:
- ! passing a high speed (20 wpm) Morse telegraphy examination
 - ! contacting amateur radio stations in 100 or more foreign countries, as evidenced by written confirmations
 - ! using amateur radio to provide public service or emergency communications in connection with an actual event
 - ! authoring a technical article for an amateur radio publication
 - ! establishing or maintaining an open amateur radio repeater, beacon or packet radio bulletin board system
 - ! teaching an amateur radio licensing class
 - ! serving as a volunteer examiner, or any function of a volunteer examination coordinator
 - ! serving as a volunteer in the amateur auxiliary enforcement function

- ! serving as a traffic net manager
 - ! receiving an honorary award from a major amateur radio organization
 - ! organizing a new amateur radio club
 - ! making 200 contacts in an amateur radio contest
28. The exact number of questions on each written examination, within the guidelines given above, will be determined by the National Conference of Volunteer Examiner Coordinators.
29. The Commission will issue, upon proper application, one or more institutional amateur radio station licenses to any eligible partnership, corporation, incorporated or unincorporated association, or state or local government. The issuance of institutional amateur radio station licenses will replace outstanding RACES, club, military recreation, and space station licenses upon renewal. Institutional amateur radio station licenses may also be obtained (if so desired) to cover repeater, remote base and auxiliary link stations. Existing membership and "trustee" requirements will be eliminated.
30. An entity may apply for and hold as many institutional amateur radio station licenses as it requires to cover its amateur radio stations, however, only one of these institutional amateur radio station licenses may bear a call sign that is not a Group D call sign.