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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

September 27, 1995

Via Courier

Mr. William Caton
Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Transmitted herewith, on behalf of ComTECH Communications, Inc., is an original and four (4) copies of its Comments, for consideration in the Commission's Third Notice of Proposed Rule Making, *In the Matter of Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Service,* PR Docket No. 89-552, GN Docket No. 93-252, PP Docket No. 93-253, released August 28, 1995.

If any questions should arise related to this matter, kindly contact Russell Fox of this office, or the undersigned counsel.

Sincerely,

Susan H.R. Jones

Enclosure

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service	)	PR Docket No. 89-552
	)	
Implementation of Sections 3(n) and 332 of the Communications Act	)	GN Docket No. 93-252
	)	
Regulatory Treatment of Mobile Services	)	
	)	
Implementation of Section 309(j) of the Communications Act-Competitive Bidding, 220-222 MHz	)	PP Docket No. 93-253

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To: The Commission

COMMENTS OF COMTECH COMMUNICATIONS, INC.

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Dated: September 27, 1995

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SUMMARY

Comtech Communications, Inc. is one of the most active participants in the 220 MHz mobile communications industry. Because the Commission's proposed rules in this proceeding will have such dramatic impact upon the 220 MHz industry, ComTech welcomes this opportunity to participate in this rule making proceeding.

Specifically, and with respect to licensing issues, ComTech urges the Commission not to proceed with its proposed intention to eliminate its existing separate allocations for commercial and non-commercial licenses in 220 MHz frequency band for nationwide licensing. In the event that the Commission proceeds with its proposal, however, ComTech asserts that the Commission should process pending applications under its existing rules, rather than apply, retroactively, newly adopted rules. With respect to non-nationwide licenses, ComTech urges the Commission to restrict the ability of public safety licensees, who will not be required to pay through auctions for their spectrum, to resell excess capacity or profit in any way from their spectrum. As to the Commission's proposal regarding local channel blocks, ComTech asserts that a five- (5-) channel block license is economically inefficient to operate; instead, ComTech supports licensing local licenses in ten- (10-) channel blocks. Similarly, ComTech supports the Commission's proposal to license 220 MHz spectrum on a contiguous basis. To comply with construction requirements, however, and in light of incumbent Phase I 220 MHz licensees, ComTech requests that the Commission allow that construction requirements be met by construction of 220 MHz channels at more than a single site.

With respect to the Commission's proposed Technical and Operational rules, ComTech supports the Commission's proposed elimination of the current restriction of the provision of

fixed services on a primary basis by 220 MHz licensees; the proposal to allow 220 MHz licensees to offer paging services; unlimited channel aggregation; and the new, more flexible "coverage requirements," rather than construction deadlines. ComTech strongly opposes, however, the Commission's proposal to accept applications for secondary, fixed use of the 220 MHz band. Such a proposal, ComTech believes, could cause harmful and disruptive interference to the existing licensee, and convey unjust enrichment to the secondary user. ComTech does not agree that the maximum adjacent co-channel protection among 220 MHz licensees can be achieved through a 38 dBuV/m border signal strength. ComTech asserts that reliable communications coverage can be provided, with minimum co-channel interference, with a 28 dBuV/m signal strength. Similarly, ComTech believes that co-channel protection with respect to Phase I licensees, based upon sites less than 120 km apart, should be set at the 28 dBuV/m contour for each station.

With respect to proposed auction rules for the 220 MHz spectrum, ComTech opposes the Commission's proposal to employ different upfront payments for different channel blocks in the same geographic area, based upon whether the underlying channels are licensed to an incumbent user. ComTech favors, as more equitable and efficient, that the Commission adopt universal upfront payments. In addition, ComTech urges the Commission to retain its small business credits during auctions, with 40% bidding credits for all nationwide and regional licenses.

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To: The Commission

COMMENTS OF COMTECH COMMUNICATIONS, INC.

ComTech Communications, Inc. ("ComTech" or the "Company"), by its attorneys, pursuant to the provisions of Section 1.415 of the Rules and Regulations of the Federal Communications Commission ("FCC" or "Commission") hereby submits its comments in response to the Third Notice of Proposed Rule Making ("Third Notice") adopted in the above referenced proceeding in which the Commission proposes a new framework for the operation and licensing of systems in the 220-222 MHz band.[1]

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[1] In the Matter of Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz band by the Private Land Mobile Radio Service, Second Memorandum Opinion and Order and Third Notice of Proposed Rule Making, PR Docket No. 89-552, FCC 95-312 (released August 28, 1995).

I. INTRODUCTION

ComTech Communications, Inc., headquartered in northern California, is one of the most active legitimate participants in the 220 MHz industry. It has already initiated the construction and operation of 220 MHz facilities in many locations. Its affiliate, ComTech Inc., holds one of four authorizations for nationwide 220 MHz service. In addition to its nationwide operations, ComTech has acquired several local 220 MHz stations and manages facilities licensed to other entities.

Through the construction and operation of many 220 MHz systems to date, ComTech has demonstrated a commitment to the nascent 220 MHz industry. In addition to placing in operation local systems, ComTech has already begun to construct and operate the facilities associated with its nationwide authorization. ComTech expects to continue to be a significant participant in the 220 MHz arena. The Commission's rules will have a dramatic impact on its current and future operations. Accordingly, ComTech is pleased to have this opportunity to submit the following comments.

II. COMMENTS

A. Channel Assignment and Service Area Rules

1. Nationwide Licensing

When the Commission initially adopted rules for the 220 MHz service, it set aside thirty (30) channels for non-commercial operations on a nationwide basis. The FCC has yet to issue authorizations for those nationwide systems, inaction which has hurt the development of narrowband 220 MHz technology, by reducing by 15% the

amount of spectrum for which manufacturers can produce equipment. Now, the Commission intends to reverse its initial decision and offer the thirty channels, on a nationwide basis, to new applicants. Because it anticipates that the spectrum will be predominantly used for commercial operations, the Commission would auction the spectrum in three ten channel blocks.

The Commission's proposal is a transparent attempt to elevate the revenue raising potential of the spectrum over both the needs of non-commercial users, the rights of existing applicants and the development of narrowband technology. The Commission is prohibited by the Communications Act, however, from engaging in such an evaluation.[2] The Commission should, therefore, proceed to license the 30 non-commercial channels has it originally proposed, as expeditiously as possible.[3] Such an approach would preserve the integrity of the Commission's allocation and licensing processes.

The Commission reasons that it is no longer necessary to require a separate non-commercial allocation in the 220 MHz band because its authorization of 3800 non-nationwide licenses has promoted the development of narrowband technology.[4] The Commission's rationale is erroneous. Various factors have contributed to the lack of vitality of the 220 MHz industry (including the FCC's own inattentiveness to permitting licensees to secure necessary modifications of station authorizations). It is untrue,

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[2] 47 U.S.C. 309(j)(7).

[3] The Commission inquires by what method the licenses should be issued, if the existing applications remain viable. ComTech assumes that authorization by lottery will be quicker than if comparative hearings were employed. Because ComTech's primary interest is in seeing the licenses issued quickly, it favors the use of lotteries.

[4] Third Notice at ¶ 34.

therefore, that narrowband technology has been promoted to the extent possible. It would be beneficial, therefore, to require the licensing of non-commercial systems, which will have an immediate need for equipment (potentially unlike commercial systems that will grow over time). These non-commercial systems will, as the Commission originally anticipated, spur the growth of narrowband technology, which has not yet occurred.

ComTech notes that Section 90.717 of the regulations specifies that such non-commercial systems must serve only the licensee's internal communications requirements. Accordingly, ComTech presumes that the Commission will continue to forbid non-commercial licensees to resell excess capacity. To the extent that current non-commercial applicants are unable or unwilling to construct systems with this restriction, the channels can later be recaptured and made available, through competitive bidding, for commercial operations. However, at least the current applications should be processed under the rules that presently exist.

2. Non-Nationwide Licensing

The Commission would license the 140 local 220 MHz channels as either public safety or non-public safety spectrum, with different licensing methodologies applicable to the two categories. ComTech does not object to the reservation of fifteen (15) channels for public safety uses. However, such public safety entities should also be prohibited from reselling excess capacity on their systems. To the extent that remaining 220 MHz spectrum will be subject to auction, public safety licensees should not be

permitted to offer services on spectrum that they obtain for free in competition with entities that are required to pay for spectrum.

The Commission proposes that the remaining 125 local 220 MHz channels be allocated on a local or regional basis. The local channels would be allocated for use over a geographic area prescribed by the Bureau of Economic Analysis ("EA" licenses). Sixty such channels would be available for local use. The Commission further proposes that the EA licenses be issued in four blocks of ten channels and four blocks of five channels. ComTech disagrees with the Commission's decision to create five channel local licenses. In ComTech's experience, it is economically inefficient to operate with any fewer than ten channels in a geographic area. Licensees cannot produce sufficient revenues with only five channels to justify the investment required to construct such a facility. However, the incremental costs of installing an additional five channels, for a minimum ten channel system, allow the production of sufficient revenue. Accordingly, ComTech recommends that the Commission revise its plan for the authorization of local licenses so that there will be 6 ten channel licenses.

The Commission proposes the authorization of sixty five (65) channels over five broad regions. Those channels would be available in blocks of ten (three blocks equaling 30 channels), fifteen (one block) and twenty (one block). ComTech supports this approach. Allocation of at least ten channels per block will meet the minimum requirements to construct an economically viable system. Because the Commission proposes to license this spectrum by competitive bidding, smaller ten channel blocks will facilitate participation by smaller companies, while the existence of larger blocks of

fifteen and twenty channels will permit the construction of systems with larger capacity, by licensees able to afford those authorizations and the related construction costs.

The Commission would authorize this spectrum in contiguous channel blocks. However, of the channels proposed for EA or regional use, only the channels 171-180 and 186-200 were previously available on a contiguous basis.[5] The remaining 100 channels proposed for commercial operations were previously allocated for five channel trunked systems, on an interleaved channel basis, with each channel in a block thirty channels apart.[6] Accordingly, EA and regional licensees, to the extent they are required to protect the operations of incumbent users, must take into consideration the operation of multiple licensees.

ComTech believes that the authorization of channels on a contiguous basis will increase technology options for licensees. Accordingly, it supports the Commission's plan. However, because new licensees will be required to protect Phase I licensees in a patchwork fashion, the Commission must recognize that Phase II licensees will likely be unable to construct all of their authorized channels at a single site. Indeed, some of their authorized channels may be unusable anywhere in the service area licensed. In the past, the Commission has required that Part 90 licensees construct all of their authorized channels at a single location to meet the construction requirements.[7] This

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[5] These channels were previously allocated for single channel operations.

[6] For example, the licensee of channel block 1 was licensed for channels 1, 31, 61, 91 and 121.

[7] 47 C.F.R. § 90.155; 47 C.F.R. § 90.631.

rule can plainly not apply to Phase II 220 MHz licensees.[8] The Commission should clarify, therefore, that in order to meet construction requirements, licensees may construct any subset of their authorized channels in their licensed service area, so as to provide substantial service to the required population or coverage area. Because the definition of substantial service (for purpose of determining renewal expectancy) is already codified at section 22.940 of the regulations, it is unnecessary to prescribe that any particular number of channels is constructed at a particular site. It should be sufficient that a licensee provides substantial service throughout the coverage area.

B. Technical and Operational Rules

1. Fixed Operations

The Commission proposes to lift the current restriction on the provision of fixed services on a primary basis by 220 MHz licensees. ComTech agrees with the Commission's proposal. While ComTech anticipates that it will continue to provide primarily mobile services, the proposed regulations will permit it to react to consumer demand.

2. Secondary, Fixed Operations

The Commission proposes to accept applications for authorization of secondary, fixed use of the 220 MHz band. Such systems could operate with a maximum of two watts effective radiated power ("ERP") within urban areas and with up to five watts ERP in locations outside urban centers.

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[8] ComTech does not object to the retention of this requirement for Phase I licensees, who are authorized on a site specific basis, and for whom coverage requirements are not applicable.

ComTech is strongly opposed to this proposal. By allowing secondary operations on a licensee's channels, the Commission subjects the licensee to potential interference at any time, at any place. The relatively low power level at which the secondary, fixed operations will occur are still powerful enough to disrupt operations of the primary licensee who will have bid for the use of the spectrum in an auction.

The Commission's proposal is a remarkable departure from other instances in which it has auctioned spectrum. In no other case, has the Commission auctioned spectrum and then allowed another entity, who has not participated in the auction, to use the licensee's channels without compensating the auction winner.[9] Indeed, ComTech questions why an applicant would even bid on the use of spectrum, knowing that there would potentially be other users, even on a secondary basis, authorized to employ the spectrum for which it paid to use. Securing the use of spectrum in an auction should ensure that the auction winner has exclusive rights to the spectrum. Should a user wish to employ the type of technology offered by Fairfield Industries, Inc., the proponent of the secondary, fixed plan, that user should arrange to employ the spectrum through the auction winner in the area where operations are desired. Allowing secondary fixed use of spectrum is, at best, inconsistent with auctioning the use of that spectrum or, at worst, makes the auction meaningless.

3. Paging Operations

[9] It is inconceivable, for example, that the Commission would have allowed secondary operations of any nature on the recently auctioned personal communications service ("PCS") spectrum. The Commission offers no reason for its departure from this policy in the current rulemaking proceeding.

The Commission proposes to allow 220 MHz licensees to offer paging services. ComTech supports this recommendation. As with fixed operations, the proposed regulations will allow licensees to respond to market demands. ComTech requests that the Commission clarify that all Phase I and Phase II licensees will be permitted to offer paging services. Although paragraph 87 of the Third Notice suggests that this option will be available to Phase I and Phase II licensees, paragraph 85 references only Phase II licensees. Because there is no rational basis for restricting this flexibility to Phase II licensees, ComTech expects that the Commission intended to extend the ability to offer paging to all 220 MHz licensees.

4. Channel Aggregation

The Commission proposes that, in order to promote the use of other than narrowband technologies, licensees should be permitted to aggregate their contiguous channels to create wider bandwidths. The Commission proposes that licensees choosing to aggregate channels must maintain a spectral efficiency at least equivalent to that obtained through the use of five kHz channelization. Alternatively, the Commission questions whether its proposal to license through competitive bidding provides sufficient incentives for licensees to use their spectrum efficiently.

ComTech believes that competitive bidding will ensure that spectrum is used as intensively as possible. To the extent that the Commission has determined that the spectrum to be auctioned will be employed for commercial purposes, licensees will have every incentive to derive as much revenue as possible from the spectrum, to offset the cost of securing the spectrum. Accordingly, ComTech believes that there should be

no limit on the amount of spectrum that a licensee obtains and no requirement that licensees demonstrate spectral efficiency at least equivalent to that obtained through the use of five kHz channelization.

Further, a licensee's ability to secure multiple channel blocks should not be limited to instances where channels are contiguous. First, not all advanced technologies require contiguous spectrum. Frequency hopping techniques, which do not require contiguous spectrum, may be as efficient as wideband emissions. Second, if, as ComTech suggests, licensees will be motivated to employ spectrum for which they pay as intensively as possible, it is irrelevant whether that spectrum is contiguous. Accordingly, the Commission should impose no limit on the number of channels a licensee may obtain in a geographic area through the auction procedure. Aggregation should be possible among EA and regional licenses that are subject to auction.[10]

Moreover, the opportunity to aggregate spectrum should be extended to all Phase I and Phase II licensees. The Commission notes that nationwide Phase I and non trunked Phase I licensees would, under its proposal, be permitted to aggregate adjacent spectrum to create contiguous channel blocks.[11] However, as noted above, the existence of contiguous spectrum should not be a prerequisite to channel aggregation. Today, channel aggregation is limited by the existence of section 90.739 of the regulations. ComTech proposes that the Commission eliminate this section of the rules, so that channels can be aggregated. Section 90.739 is a regulatory holdover from the rules

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[10] Although ComTech opposes the auction of nationwide spectrum, should the Commission proceed with such an auction, no aggregation limit should apply to these channels either.

[11] Third Notice at fn. 128.

governing the specialized mobile radio ("SMR") service at 800 MHz. Channel aggregation rules at 800 MHz have since been eliminated. Instead, the Commission uses its construction requirements to ensure that a licensee does not hoard spectrum. Similarly, the Commission may use its construction requirements for Phase I and Phase II licensees to ensure that spectrum is used to serve the public. Once Phase I and Phase II licensees construct their facilities, they will have every incentive to serve as many customers as possible, in order to offset their construction costs. The incentives for Phase II licensees will be amplified by the need to recover the costs of securing their authorization.

5. Construction Requirements

The Commission specifies new coverage requirements for Phase II licensees. ComTech does not object to these requirements. However, as noted above, the issuance of authorizations containing contiguous spectrum "overlaid" on authorizations for non-contiguous spectrum creates special considerations. Contrary to the Commission's suggestion, the 220 MHz landscape is unlike that of the 900 MHz SMR service, where the Commission has also imposed a coverage requirement, despite the existence of incumbent licensees. At 900 MHz, the channel blocks to be auctioned match exactly those issued to incumbent licensees. At 220 MHz, the Commission should clarify, as requested above, that not all channels authorized need be constructed within the authorized service area, so long as the licensee is able to meet the "substantial service" requirements of Section 22.940 of the regulations.

In addition, ComTech notes that the Commission proposes different construction requirements for Phase II nationwide licensees than those which currently apply to Phase I nationwide licensees. ComTech opposes the auction of spectrum previously allocated for non-commercial use. However, to the extent that the Commission proceeds with its recommendation for auctioning nationwide 220 MHz spectrum, ComTech requests clarification that the current construction requirements will remain in place for Phase I nationwide licensees. Those licensees have proceeded with capital formation and business plans based upon the current construction requirements. It would be fundamentally unfair to retroactively change the regulations and impose a different set of construction requirements on these licensees.

6. Field Strength Limit at EA and Regional Borders

The Commission proposes that licensees be permitted to transmit with a signal of at least 38 dBuV/m throughout its area of service. The Commission also proposes a field strength limit of 38 dBuV/m at the EA or regional border. The Commission's rationale is based upon the presumption that a licensee needs to maintain a field strength of at least 38 dBuV/m to provide an adequate level of service. The Commission's reasoning is not supported by ComTech's experience in the field. In fact, a service provider, such a ComTech, is able to provide reliable communications well beyond the predicted 28 dBuV/m contour, in the absence of co-channel interference. As adjacent EA and regional licensees build-out their systems, assuming the proposed equal 38 dBuV/m signal strength at the borders, co-channel interference is likely to arise as a significant limitation to service along a system's border. Because ComTech

believes that adjacent co-channel interference will be the limitating factor in a system's ability to provide reliable communications service along its borders, ComTech urges the Commission to adopt a 28 dBuV/m signal strength standard, rather than a 38 dBuV/m standard.

Because of this likelihood of interference along borders, ComTech supports the Commission's proposal to permit licensees to exceed the signal limits at border only if all affected co-channel EA and regional licensees agree. The Commission's flexibility with respect to border signal strength is particularly important given the fact that EA and regional borders often do not follow natural or terrestrial limitations to coverage, or reflect transmitter sites which create the actual footprint of coverage. If given the opportunity to enter into agreements and cooperative situations, co-channel licensees will be able create mutually compatible systems that serve the public in the best possible manner. In the event that co-channel licensees are not able to agree or cooperate effectively, ComTech supports the adoption of a 28 dBuV/m signal level for EA and regional licenses. ComTech asserts that such a level is fully adequate to provide reliable communications service within the contour, and will also provide full protection to co-channel licensees.

7. Protection of Phase I Licensees

The Commission proposes that EA and regional licensees ordinarily not be permitted to construct their stations less than 120 km from co-channel Phase I licensees. In order to accommodate low power systems, the Commission proposes to allow Phase II licensees to operate within 120 km of Phase I licensees, if the Phase II licensee can

demonstrate that they provide at least 10 dB protection to the 38 dBu V/m contour of the Phase I licensee's station.

ComTech believes that co-channel protection, when based on sites less than 120 km apart, (both between Phase I licensees and between Phase I and II licensees) should be set at the 28 dBu V/m contour for each station. The standard co-channel separation would remain at 120 km. There may be limited instances where Phase I licensees do not meet this criteria today. However, ComTech assumes that these licensees are likely at the 120 km separation level today and would otherwise be covered by the general 120 km separation standard.

As shown in the attached diagrams, it is incorrect to assume that 10 dB is the equivalent protection between a Phase I licensee and a Phase II licensee located 120 km apart. Exhibit A hereto shows the 38 dBu and 28 dBu coverage contours for co-channel facilities in Los Angeles (Santiago Peak) and San Diego (Mt. Otay). The sites studied are 138 km apart (somewhat more than the co-channel separation envisioned by the regulations).

Because of power de-rating requirements, licensees at Santiago Peak are limited to 5 watts ERP. The 38 dBu contour provides a coverage area of approximately 43 km, while the area depicted in the 28 dBu contour provides a coverage of approximately 65 km. Because Mt. Otay is somewhat lower, it may transmit with an ERP of 15 watts. This produces a 38 dBu V/m contour at 49 km and a 28 dBu V/m contour at 70 km. Exhibit A demonstrates that if these two sites were located 120 km apart, each station's 28 dBu V/m contour would overlap.

Exhibit B also shows the 18 dBu V/m contour for each station. This demonstrates that for stations operating with maximum power and ERP, located 120 km apart, there is a 20 dB, not 10 dB difference between one station's 38 dBuV/m contour and another's. Accordingly, it is erroneous for the Commission to conclude that 10 dB protection at a licensee's 38 dBu contour is sufficient or equivalent to the protection now afforded co-channel licensees. Instead, ComTech recommends that the Commission insure that Phase II licensees do not exceed 28 dBu V/m at the Phase I licensee's 28 dBu V/m contour.

C. Auction Rules

The Commission proposes auction rules largely consistent with its regulations governing other services. There are elements, however, of the Commission's proposal, that are unique to 220 MHz upon which ComTech hereby comments.

First, the Commission proposes that bidders be required to tender an upfront payment of $2,500 or $0.02 per pop per MHz, whichever is greater. The upfront payment calculation will define the upper bound of MHz-pops on which a bidder will be permitted to bid in any round. The Third Notice is silent on whether all EA and regional licenses covering the same geographic area will command the same MHz-pops upfront payment. In the recently announced rules governing the auction of 900 MHz SMR spectrum, different upfront payments were required for different channel blocks in the same geographic area, based upon whether the channels were licensed to an

incumbent user.[12] ComTech does not believe this is a sound approach, as recently pointed out by RAM Mobile Data Limited Partnership.[13] Instead, all licenses for a geographic area should require the same upfront payment, in order to maximize a bidder's flexibility during the auction.

The Commission proposes bidding rules designed to assist designated entities. In general, ComTech supports the Commission's proposals. ComTech believes that there is an insufficient record at this time to extend designated entity benefits to other than small businesses. The current licensees in the 220 MHz service received their authorizations through a lottery in which, at least for local authorizations, there was no barrier to entry. There is also no evidence that women and minority applicants were excluded from participation in the lottery for nationwide licenses. Accordingly, there is no evidence of past discrimination in the 220 MHz service against women and minorities. The Commission can best promote the opportunities for women and minorities to participate in the provision of spectrum based services by, as it has proposed, making bidding credits, reduced down payments and installment payments available to small businesses on all 220 MHz channel blocks.

The Commission proposes to provide bidding credits to eligible small businesses. However, the Third Notice is unclear as to the extent of the bidding credits for nationwide channels, if the Commission chooses to license these channels by competitive bidding. Specifically, the Third Notice states:

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[12] Second Order on Reconsideration and Seventh Report and Order, PR Docket No. 89-553, PP Docket No. 93-253, GN Docket No. 93-252, ____ FCC Rcd ____ (released September 14, 1995).

[13] Emergency Petition for Reconsideration and/or Waiver of Activity Rules, filed by RAM Mobile Data USA Limited Partnership, September 21, 1995.

> Since we believe that the nationwide and regional 220 MHz licenses will be similar in value to the nationwide and regional PCS narrowband licenses, we propose offering a 40 percent bidding credit to qualified designated entities. We propose offering this bidding credit on one of the four nationwide channel blocks, the block encompassing Channels 51-60, as all three blocks are equal in size and equally unencumbered.[14]

Yet, in the subsequent paragraph, the Commission inquires if "a 40 percent credit [is] appropriate to provide meaningful bidding opportunities for small businesses on nationwide and regional blocks?"[15] It is unclear, therefore, whether the Commission to proposes to offer a 40 percent credit on one of the three nationwide blocks, all of the three nationwide blocks, or all of the nationwide and regional blocks.[16] ComTech favors the provision of a 40 percent bidding credit on all nationwide (to the extent they are auctioned) and regional blocks. Unlike EA licenses, the cost to acquire nationwide and regional licenses will likely be high, as the Commission has seen in narrowband PCS. Accordingly, meaningful participation by small businesses will be significantly aided by a 40 percent bidding credit.

The Commission's proposal is similarly unclear with respect to the treatment of affiliated entities. On the one hand, the Commission suggests that it will "not attribute the gross revenues of investors that hold less than 25 percent interest in the applicant, but [that it] will include the gross revenues of the applicant's affiliates and investors with ownership interests of 25 percent or more in the applicant in determining whether

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[14] Third Notice at ¶ 162.

[15] Id. at ¶ 163.

[16] ComTech assumes that the reference to "one of the four nationwide channel blocks" is simply an error.

an applicant qualifies as a small business."[17] However, the Commission also states it believes "that 5 percent may be an appropriate attribution threshold."[18]

ComTech believes that for purposes of determining whether an entity is a small business, the Commission should evaluate the gross revenues and total assets of the entity, its affiliates and any attributable investors in the entity. An attributable investor would be defined, as it is under section 24.320(b)(2)(iv), as an entity that holds no more than 25 percent of the applicant's passive equity. An affiliate would be defined as it is under section 24. 720(l) of the regulations. Accordingly, unless an investor held more than 25% of an applicant's voting stock or would otherwise be considered an affiliate under section 24.720(l) of the regulations, its gross revenues and total assets would not be counted toward a determination of whether an applicant is a small business, under the thresholds suggested by the Commission.

III. CONCLUSIONS

ComTech supports the Commission's efforts to liberalize the regulations governing the 220-222 MHz service. Allowing licensees the opportunity to provide, for example, paging and fixed services will increase the utility of the spectrum to service providers and ultimately benefit consumers. In creating the new licensing scheme, the Commission should be aware of several characteristics of the 220 MHz band, which do not appear evident in the Third Notice. First, the Commission should be aware that it is economically unattractive to operate with fewer than 10 channels. Accordingly, the

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[17] Third Notice at ¶ 174.
[18] Id. at ¶ 175.

FCC should not license EA or regional systems with five channel blocks. Because of these economic pressures, the Commission should allow the aggregation of spectrum by both Phase I and Phase II licensees, regardless of whether such aggregation causes the creation of contiguous spectrum.

Second, the Commission should remember that there are hundreds, and there may yet be thousands of licensees already operating in the 220-222 MHz band. There must be accommodation of these licensees in any Commission plan to license spectrum on a contiguous basis that is now licensed to different entities. Moreover, the Commission must ensure that those licensees are protected from co-channel interference from new licensees.

Finally, the Commission should not permit secondary fixed use of the 220-222 MHz band. This spectrum should be licensed on an exclusive basis. Should entities have a requirement to use fixed operations, they can arrange with a licensee serving the area in which they have a communications need. That licensee will ensure that the use of spectrum does not interfere with other entities.

WHEREFORE, THE PREMISES CONSIDERED, ComTech Communications, Inc. hereby submits the foregoing comments and urges the Federal Communications Commission to act in a manner consistent with the views expressed herein.

Respectfully submitted,

COMTECH COMMUNICATIONS, INC.

By: _____

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Dated: September 27, 1995