

BEFORE THE DIRECTOR OF COMMERCE AND CONSUMER AFFAIRS
OF THE STATE OF HAWAII

In the Matter of)
McCAW COMMUNICATIONS OF HAWAII KAI, INC.)
Requesting Modification of Construction)
Specifications)

DOCKET NO. 01-86-01
ORDER NO. 124

DECISION AND ORDER

Introduction

On April 25, 1985, the Director of Commerce and Consumer Affairs ("Director") issued Order No. 112, in Docket No. 01-84-01, which approved the transfer of the assets and cable television permit of Kaiser Teleprompter of Hawaii, Inc. to McCaw Communications of Hawaii Kai, Inc. ("McCaw"), subject to certain conditions. Pursuant to item 12 of Order No. 112, McCaw was to have completed headend improvements and satellite receive site construction in accordance with the schedule and specifications proposed in its application unless it obtained the Director's prior approval to requested changes.

On May 30, 1985, the Director, in Order No. 117, approved McCaw's request to change the construction specifications which required the installation of a simulsat antenna to the installation of a 7-meter and a 10-meter earth station. This change was allowed because a similar simulsat antenna was installed by McCaw Cablevision LP Maui County/Hawaii County, an affiliated company, and failed to meet both the manufacturer's specifications as well as the cable company's expectations. The Director found that the substitution of the 7- and 10-meter earth stations represented the only alternative available to McCaw which would both preserve the proposed programming package and provide the desired programming flexibility. McCaw reaffirmed its commitment to install

such additional equipment as was necessary to meet future cable programming needs of the Hawaii Kai subscribers.

By letter dated October 23, 1986, McCaw requested an additional change in its construction specifications which would eliminate the requirement to install the 7- and 10-meter earth stations at its receive site and permit it to continue to receive satellite programming via microwave from Oceanic Cablevision's system on Oahu. McCaw has indicated that it will review with the Director the need for installing its own earth station equipment as technological changes indicate, and in any event within three years. McCaw believes that this proposed permit modification will allow it to meet the programming needs of its subscribers in the best way technically possible. To the extent additional equipment is necessary to meet these needs, McCaw will install equipment of the same or higher quality used in its current operation.

McCaw also requested that it be allowed to substitute the present off-air signals received through the newly-installed Yagi antennas for the provision of studio feed broadcast signals. McCaw asserts that these antennas are providing sufficiently good signal quality to remove the need for direct microwave studio feed of the local broadcast signals.

The Director has considered these requests, information obtained by the Cable Television Division and additional commentary and documents submitted in support of McCaw's request. Based on this information and the statements of McCaw representatives, and for the reasons set forth below, the Director has decided to approve McCaw's requested changes in construction specifications, with the following reservations:

1. Should visible ghosting or other distortions relating only to the signals received off-air appear, the Director will address again the need for direct feeds of local broadcast stations to Hawaii Kai; and

2. Should other satellite services not carried by Oceanic be determined to be of substantial interest to Hawaii Kai subscribers, the Director will address again the need for McCaw to construct a separate satellite reception site.

Discussion

The Director in both Order No. 112 and Order No. 117 highlighted the goals to be achieved by the McCaw system as they pertain to the requirement for studio feed broadcast signals and the 7- and 10-meter earth stations. These goals are:

1. To improve signal quality and transmission dependability.
2. To expand the programming offered to Hawaii Kai subscribers.
3. To provide flexibility to meet the future cable programming needs of the Hawaii Kai subscribers.
4. To eliminate total dependence of the Hawaii Kai cable system on the programming offered by Oceanic to its subscribers.
5. To achieve these goals in the most financially responsible method.

1. Improved signal quality and transmission dependability. McCaw originally proposed direct microwave studio feed of the local broadcast signals to improve signal quality and enhance transmission dependability. The equipment at the Hawaii Kai headend prior to McCaw's acquisition of the system was inadequate to receive the local broadcast signals off-air and process those signals to subscribers with a signal quality which was satisfactory to the Director and to McCaw. McCaw therefore proposed direct studio feed transmission of the local broadcast signals which, in essence, would have provided for the microwaving of the signals from the broadcast studios to the Hawaii Kai headend. From there, the signals are transmitted through the cable system to the subscribers. However, improvements which McCaw has made to the Hawaii Kai cable system since its acquisition have improved the system's signal quality and therefore

lessened the need for direct studio feeds. Specifically, McCaw has installed two Yagi antennas at its headend which dramatically improved the off-air reception of the local broadcast signals. Ghosting, which was the primary problem identified by McCaw, and reception problems which existed prior to the installation of these antennas have been minimized. Because of these other improvements which McCaw has made, the Director does not see the need at this time for studio feeds of the local broadcast signals and therefore approves conditional waiver of this requirement.

Although the quality of the signals currently transmitted to the Hawaii Kai system via AML microwave from Oceanic is generally good, McCaw initiated tests on an FM microwave path in order to evaluate whether the signal quality of a premium service received by microwave might be improved. Presently, premium signals are received as scrambled signals from Oceanic. This requires additional processing by McCaw, and thus results in poorer quality on premium channels. The FM path will eliminate the need for this additional processing. McCaw has completed the survey necessary to apply for and receive FCC licenses for new FM paths. McCaw is committed to installing immediately upon receiving the Director's waiver of the 7- and 10-meter dish requirements the necessary equipment to provide microwave transmission of premium service signals received from Oceanic. The use of these new FM microwave paths will improve the signal quality of the premium channels now being offered by the system.

2. Expand programming offered to Hawaii Kai subscribers. Prior to the rebuild, which coincided with the acquisition of the Hawaii Kai system, Hawaii Kai subscribers were offered seven Honolulu broadcast signals, together with Lifetime, HBO, WTBS, CNN and USA satellite signals. In its application for transfer of the cable television permit for Hawaii Kai, McCaw proposed to expand the programming to include KIKU, a Honolulu independent station, MTV, Disney, Family Fair, Showtime, Critic's Choice and NGN. A review of McCaw's current channel package indicates that McCaw is

currently offering nine local broadcast stations, including two that were not originally proposed. Furthermore, with the exception of Lifetime (which is no longer carried by Oceanic), Critic's Choice (now called Bravo), and Family Fair (which was replaced by the Disney Channel), McCaw is offering all of the other proposed programs. In addition, McCaw is offering Nickelodeon, VH-1 (in stereo), a program guide, Cable Value Network, CNN Headline News, ESPN, Prime Ticket, Cinemax and X-Press. Receiving signals microwaved from Oceanic's headend apparently has not interfered with McCaw expanding its programming beyond that originally proposed.

3. Provision of programming flexibility. McCaw has reaffirmed to the Director its desire to continue to be responsive to the programming needs of the Hawaii Kai cable subscribers and has committed to take such actions as it can to retain the necessary flexibility to meet those needs. In its modification request, McCaw has indicated that a review of programming needs must include a consideration of time-shifting and tape playback capabilities as well as program selection and diversity. McCaw argues that its reception of satellite signals microwaved from the Oceanic headend represents a significant advantage to McCaw and its subscribers in the areas of time shifting and video tape playback.

Satellite signals received at headend locations in Hawaii are scheduled according to either West or East Coast time, and therefore are available either two to three hours or five to six hours earlier in Hawaii than on the Mainland. This scheduling does not coincide with the viewing patterns and preferences of Hawaii Kai subscribers. The kinds of problems associated with this time difference are more evident in premium programming such as HBO or Showtime, which schedule their features during prime time and tend to offer adult-oriented movies later at night. Without time-shifting, Hawaii Kai subscribers would miss many of these features because they would be shown in the late afternoons. At the same time, adult-oriented programming intended for late-night

viewing would be available earlier, during times when children would more likely be watching television. Hawaii subscribers would also miss programming (such as MTV and VH-1) carried on satellite transponders whose footprints do not include Hawaii unless the cable operator had tape playback capabilities.

Time shifting and tape playback are cumbersome and expensive processes. McCaw estimates that if it were to install its own 7- or 10-meter earth stations, it would be necessary for it to expend between \$25,000 and \$50,000 per channel in capital for time shifting. Therefore, in order to time shift the channels which are currently carried, McCaw estimates that it would have to expend between \$175,000 and \$350,000 in capital. In addition, McCaw estimates it would have to employ personnel to operate recorders and tape players on a 24-hour basis, which could add another \$150,000 per year in expenses.

The Director finds that the capital expenditures needed for time shifting and tape playback would probably be closer to the low end of McCaw's estimates. McCaw's estimates of labor costs appear to be reasonable. Currently, Oceanic time shifts its Mainland satellite signals for its own subscribers and has in effect procedures for receiving tapes of programming, such as MTV and VH-1, and playing these tapes back over the cable system. Therefore, through McCaw's programming arrangements with Oceanic, Hawaii Kai subscribers have the benefit of both time shifting and tape playback at minimal cost.

4. Eliminate total dependence of the Hawaii Kai cable system on programming offered by Oceanic. The Cable Television Division has reviewed the programming available by satellite in Hawaii and specifically the programming carried by Oceanic. The division has determined that Oceanic appears to carry a fairly good mix of services and that few of the satellite programs not being carried would likely attract a sufficient number of additional subscribers to offset the cost of providing the service. (A

copy of the list of satellite services available in Hawaii and those services carried by Oceanic is attached.)

Hence, the Director does not believe that McCaw's dependency on Oceanic's facilities for satellite programming, at this time, is of concern. Should other satellite services, not carried by Oceanic, be determined to be of substantial interest to Hawaii Kai subscribers, the Director will again address the need for construction of a separate satellite site by McCaw.

5. Financial considerations. McCaw has indicated that the originally proposed 7- and 10-meter dishes would range in cost from \$110,000 to \$125,000. As highlighted above, an additional \$175,000 to \$350,000 in capital expenditures might be needed to provide time shifting. Furthermore, McCaw believes that, to provide acceptable signal quality with the satellite dishes, it would need to purchase and install additional shielding equipment or equipment to trap out interfering frequencies now received at Koko Head. Finally, installation of satellite dishes, time shifting and playback equipment would require additional on-going annual operating costs. The Director finds that these expenditures are not warranted at this time because the goals of improved signal quality, transmission dependability, and expansion of programming are already being met.

In addition, the Director is sensitive to the changes currently occurring in satellite technologies. The 7- or 10-meter dishes, if located on Koko Head, probably would only receive signals from two satellites, Satcom 3-R and Galaxy I. Much of satellite programming is in a transition phase and many vendors have announced plans or are believed to be considering moving the transmission of their signals from Satcom 3-R or Galaxy I to another satellite, or broadcasting on the KU band frequencies. Among the services involved are HBO, Cinemax, Disney, Showtime, The Movie Channel, Nickelodeon,

MTV, VH-1, Lifetime and C-Span. This is in part due to the degradation of the existing satellites, particularly Satcom 3-R.

The turmoil in the satellite programming industry is also in part due to improvements being made in satellite technology which allow improved signals to be broadcast over a much narrower band. Existing 7- and 10-meter dishes would have to be modified in order to receive signals from the new satellites broadcasting on the KU band. In addition, industry analysts believe that the dishes which will be used two to three years from now will be significantly improved over the current 7- and 10-meter dishes, will be smaller in size, and less expensive to install and operate. It is therefore likely that a 7- or 10-meter dish installed today may be outdated in less than five years. These are additional reasons why the Director believes capital expenditures for an independent earth station at Hawaii Kai are unwarranted at this time.

Conclusion

While McCaw's current system of receiving satellite and local programming does not eliminate total dependence on Oceanic, it does satisfy the first four goals specified above. Therefore, the Director finds it is in the best interest of the Hawaii Kai subscribers to waive conditionally the requirements that McCaw install a 7-meter and a 10-meter dish at its Koko Head headend site and that it obtain local broadcast signals by direct feed.

NOW, THEREFORE, IT IS HEREBY ORDERED that the request for modification of construction specifications of McCaw Communications of Hawaii Kai, Inc. be approved, subject to the following conditions:

1. McCaw shall not be required to install a 7-meter and a 10-meter earth station at its receive site in Hawaii Kai (Order No. 117).

2. McCaw may continue to receive satellite programming microwaved from Oceanic's headend site.

3. Should McCaw continue to receive satellite programming from Oceanic, McCaw shall obtain additional FM microwave frequency licenses and install necessary equipment to improve the signal quality of the premium satellite signals received from Oceanic within three months of this Order.

4. McCaw shall not be required to provide direct feed studio broadcast signals (Order No. 112, Condition No. 12) from the local Honolulu broadcasters as long as those signals received off-air by the equipment at the McCaw headend are not visibly degraded by ghosting or other distortions.

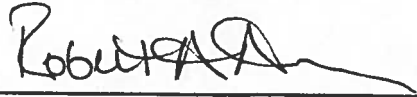
5. McCaw shall continue to be responsive to the needs for programming of Hawaii Kai subscribers.

6. McCaw shall conduct a survey at the request of the Director of its subscribers as to additional programming to be offered and shall review with the Director the need for its own independent satellite reception equipment at its headend whenever it is determined that there is substantial interest by Hawaii Kai subscribers in satellite services not carried by Oceanic and in any event within three years from the date of this Decision and Order.

6. All conditions in Order No. 1 dated October 21, 1970, as amended by Order No. 65 dated August 14, 1978, Order No. 100 dated November 14, 1983, Order No. 111 dated January 2, 1985, Order No. 112 dated April 25, 1985 and Order No. 117 dated May 30 1985, which are not superseded or amended by this Decision and Order shall remain in effect.

7. Any exercise by McCaw of the rights and privileges granted herein shall constitute agreement to these conditions.

Dated at Honolulu, Hawaii, this 8th day of May, 1987.



ROBERT A. ALM
Director of Commerce and Consumer Affairs

SATELLITE CHANNELS

<u>CATEGORY</u>	<u>SATELLITE</u>	<u>TRANSPONDER</u>
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Pay channels carried by Oceanic:

Request TV (pay per view)	Galaxy 1	TR-12
The Movie Channel	Galaxy 1	TR-14
Cinemax	Galaxy 1	TR-19
The Disney Channel	Galaxy 1	TR-24
Showtime	Satcom 3R	TR-10
HBO	Satcom 3R	TR-13

Pay channels not carried by Oceanic:

Viewer's Choice 2 (pay per view)	Galaxy 1	TR-16
Viewer's Choice 1 "	Satcom 3R	TR-5
After Hours (x rated)	Spacenet 1	TR-1(1)
American Exxtasy (x rated)	Spacenet 1	TR-2(3)
First Run (pay per view)	Spacenet 1	TR-5(9)
Telstar Channel (pay per view)	Spacenet 1	TR-9(17)

Music/Entertainment carried by Oceanic:

MTV	BY TAPE	No transponder to Hawaii
VH-1	BY TAPE	No transponder to Hawaii

Music/Entertainment not carried by Oceanic:

The Nashville Network	Galaxy 1	TR-2
Tempo Television	Satcom 3R	TR-6

News/Education carried by Oceanic:

CNN	Galaxy 1	TR-7
CNN Headline News	Galaxy 1	TR-8
C-Span/House	Galaxy 1	TR-13
Discovery Network	Galaxy 1	TR-22
FNN	Satcom 1R	TR-7

News/Education not carried by Oceanic:

The Learning Channel	Satcom 3R	TR-2
Lifetime	Satcom 3R	TR-17
Reuter's Monitor Service	Satcom 3R	TR-18
WTN	Satcom 1R	TR-16
Worldnet/USIA-TV	Satcom 1R	TR-18
Radiotelevisione Italiana	Satcom 1R	TR-22
WTN	Satcom 1R	TR-16
Healthcare Information Network	Spacenet 1	TR-5(9)
Hospital Satellite Network	Spacenet 1	TR-6(11)
American Hospital Association	Spacenet 1	TR-6(11)
Vanderbilt Medical Television	Spacenet 1	TR-11(21)

continued

<u>CATEGORY</u>	<u>SATELLITE</u>	<u>TRANSPONDER</u>
Foreign Language channels carried by Oceanic:		
None		
Foreign language channels <u>not</u> carried by Oceanic:		
Univision (Spanish)	Galaxy 1	TR-6
Galavision (Spanish)	Galaxy 1	TR-20
Religious channels carried by Oceanic:		
None		
Religious channels <u>not</u> carried by Oceanic:		
CBN Cable Network	Galaxy 1	TR-11
PTL	Galaxy 1	TR-17
TBN	Satcom 3R	TR-2
CTN	Spacenet 1	TR-3(5)
ACTS	Spacenet 1	TR-8(15)
Discovery Broadcast	Spacenet 1	TR-10(19)
BTN	Spacenet 1	TR-11(21)
Sports channels carried by Oceanic:		
ESPN	Galaxy 1	TR-9
Prime Ticket	Satcom 1R	TR-7
Sports channels <u>not</u> carried by Oceanic:		
Wold Communications	Westar 5	TR-6D(11) TR-9D(17)
Shopping channels carried by Oceanic:		
Cable Value Network	Satcom 1R	TR-15
Shopping channels <u>not</u> carried by Oceanic:		
Video Shopping Mall	Galaxy 1	TR-22
Home Shopping Club	Satcom 3R	TR-22

continued

<u>CATEGORY</u>	<u>SATELLITE</u>	<u>TRANSPONDER</u>
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Broadcast Stations carried by Oceanic:

WTBS	Galaxy 1	TR-18
USA Network	Satcom 3R	TR-9

Broadcast Stations not carried by Oceanic:

WGN-TV	Galaxy 1	TR-3
WOR-TV	Galaxy 1	TR-15
KUSA-TV	Satcom 1R	TR-2
KCNC-TV	Satcom 1R	TR-4
KMGH-TV	Satcom 1R	TR-6
KRMA-TV	Satcom 1R	TR-12
KDVR-TV	Satcom 1R	TR-20
KSPN-TV	Satcom 1R	TR-24

Children's Programming carried by Oceanic:

Nickelodeon	Satcom 3R	TR-1
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Children's programming not carried by Oceanic:

None

Promo channels carried by Oceanic:

None

Promo channels not carried by Oceanic:

HBO	Galaxy 1	TR-1
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