2010 ANNUAL REPORT

STATEMENT OF CAPITAL EXPENDITURES AND MAJOR EQUIPMENT EXPENDITURES

AUGUST 30, 2010
Statement of Major Capital Equipment and Expenditures

Actual 2009

Funds were designated for the purchase of Digital converters in the amount of $110,020 and High Definition converter boxes in the amount of $687,150. An additional $125,650 was designated for Digital Video Recorders (DVR) and $1,852,125 for HD DVRs. Total projected converters expenditures are $2,774,945.

Projected 2010

Comcast plans to designate approximately $305,450 for network extensions and rebuilding of the internal wiring within designated multi dwelling units in the City of Alexandria. In addition, funds will be designated for the purchase of Digital converters in the amount of $75,000 and High Definition converter boxes in the amount of $281,275. Funds in the amount of $1,520,150 will be designated for HD DVRs. Total projected converter expenditures are $2,181,875.
CONSTRUCTION UPDATE

Through June 30, 2010 the construction department has designed, constructed and activated .11 miles of cable plant that included both coaxial and fiber hardline.

The Headend has been working on the deployment of additional HD channels for the customers

DOCSIs 3.0 has been implemented providing 105 Mpbs Internet service

Video On Demand hours were increased to 20,000 hours

Deployment of Comcast Digital Voice service continues to grow.
Director and Executive Officer Ownership

Shares Beneficially Owned

The table below indicates the number of shares beneficially owned by directors and officers as of February 28, 2009, as detailed in the Comcast Corporation's 2009 Proxy Statement. Please see the 2009 Proxy Statement for a more detailed explanation of these holdings.

<table>
<thead>
<tr>
<th>Total Shares Beneficially Owned</th>
<th>Class A</th>
<th>Class A Special</th>
<th>Class B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael J. Angelakis</td>
<td>358,472</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S. Decker Anstrom</td>
<td>75,011</td>
<td>2,400</td>
<td>-</td>
</tr>
<tr>
<td>Kenneth J. Bacon</td>
<td>70,504</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Arthur R. Block</td>
<td>413,310</td>
<td>862,517</td>
<td>-</td>
</tr>
<tr>
<td>Sheldon M. Brownville</td>
<td>59,664</td>
<td>209,323</td>
<td>-</td>
</tr>
<tr>
<td>Edward D. Boyce</td>
<td>40,442</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Julian A. Briski</td>
<td>443,431</td>
<td>5,301,325</td>
<td>-</td>
</tr>
<tr>
<td>Stephen B. Burke</td>
<td>1,976,769</td>
<td>4,526,599</td>
<td>-</td>
</tr>
<tr>
<td>David L. Cohen</td>
<td>1,817,603</td>
<td>759,956</td>
<td>-</td>
</tr>
<tr>
<td>Joseph J. Collins</td>
<td>151,442</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>J. Michael Cook</td>
<td>83,610</td>
<td>3,450</td>
<td>-</td>
</tr>
<tr>
<td>Gerald L. Hassell</td>
<td>16,014</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jeffrey A. Horniman</td>
<td>84,155</td>
<td>10,192</td>
<td>-</td>
</tr>
<tr>
<td>Brian L. Roberts</td>
<td>3,354,083</td>
<td>22,570,731</td>
<td>9,444,375</td>
</tr>
<tr>
<td>Ralph J. Roberts</td>
<td>2,451,726</td>
<td>6,189,616</td>
<td>-</td>
</tr>
<tr>
<td>Dr. Judith Rodin</td>
<td>72,740</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Michael J. Swart</td>
<td>81,168</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>All directors and executive officers as a group (18 persons)</td>
<td>12,002,969</td>
<td>41,419,641</td>
<td>9,444,375</td>
</tr>
</tbody>
</table>

Non-Employee Director Stock Ownership Policy

Last Revised: February 23, 2010

Purpose:
To provide a guideline for the ownership of Comcast Corporation Common Stock by non-employee directors of the Company.

Policy Statement:
It is the Company's policy to require that all non-employee directors of Comcast Corporation maintain a significant ownership position in Comcast Corporation publicly traded Common Stock, as defined in the guideline set forth herein.

I. Ownership Guidelines
Non-employee directors will be required to own Comcast Corporation Common Stock equal in value to at least five (5) times a director's annual retainer.

II. Ownership Defined
Ownership (for purposes of meeting the guidelines) will be determined by summing the following amounts:

i. 100% of the market value of stock owned (1) directly by the non-employee director or his or her spouse, (2) jointly by the non-employee director and his or her spouse, and (3) indirectly by a trust for the benefit of the non-employee director, his or her spouse and/or his or her children, and (3) indirectly by a trust for the benefit of the non-employee director, his or her spouse and/or his or her minor children

ii. 100% of the market value of the non-employee directors' Deferred Stock Units under the Company's Deferred Stock Option Plan

iii. 50% of the market value of the non-employee directors' Stock Fund under the Company's Deferred Compensation Plan

iv. 50% of the difference between the market price and the exercise price of the non-employee director's vested stock options under the Company's Stock Option Plans. (Note: A sale of a call covered by shares or vested options will be deemed a sale of the underlying shares or options and will therefore reduce the
Comcast Investor Relations - Director and Executive Officer Ownership

number of owned shares for vested options for purposes of the
PSS Plan and determined and defined under the Company's Restricted Stock Plan.

III. Valuation Date
Ownership as of any date for purposes of determining compliance with the guideline, will be calculated based on the closing price of the applicable class of stock as of the trading day prior to the date of
determination.

IV. Grace Period
A non-employee director will be allowed a grace period to meet the guideline in full, from the date of initial election or appointment to the Board of Directors through the fifth December 31st thereafter, as set forth below (the "Grace Period"). For non-employee directors serving as of the original effective date of this Policy, November 4, 2003 shall be deemed to be such date. The Grace Period may be extended, and the required minimum holdings percentages may be reduced, at the discretion of the Governance and Directors Nominating Committee.

Non-employee directors may satisfy the guideline in part over the course of the Grace Period, as follows:

<table>
<thead>
<tr>
<th>December 31st Following Initial Election or Appointment</th>
<th>Required Minimum Holdings as a Percent of Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>20%</td>
</tr>
<tr>
<td>2nd</td>
<td>40%</td>
</tr>
<tr>
<td>3rd</td>
<td>60%</td>
</tr>
<tr>
<td>4th</td>
<td>80%</td>
</tr>
<tr>
<td>5th and Thereafter</td>
<td>100%</td>
</tr>
</tbody>
</table>

V. Compliance
A non-employee director will annually certify whether or not he or she is in compliance with this Policy both (i) as of December 31 each year and (ii) as of each date (if any) during each year on which the non-employee director sold or otherwise disposed of stock. Certifications will be provided to the Cable Division's Vice President - Compensation and Benefits using the Comcast Corporation Non-Employee Director Stock Ownership Policy Compliance Certification Form. A non-employee director is not required to purchase or otherwise acquire shares to come in to compliance with this Policy. The Governance and Directors Nominating Committee may determine that a non-employee director shall be deemed to be in compliance with this Policy in cases where any non-compliance occurs as a result: (a) solely or primarily of a decline of the market price of the stock; (b) of transactions made pursuant to hardship exceptions; (c) of a bona fide gift; and/or (d) a diversification election made with respect to stock deferred under the Company's Restricted Stock Plan.

VI. Non-Compliance
A non-employee director will not be permitted to sell stock until his or her holdings meet the applicable minimum requirement, and then only to the extent that the director's remaining holdings do not fall below the applicable minimum requirement. Bona fide gifts and diversification elections made with respect to stock deferred under the Company's Restricted Stock Plan shall not be deemed to be dispositions hereunder.

VII. Hardship Provision
Hardship exceptions may be made at the discretion of the Chair of the Governance and Directors Nominating Committee.

VIII. Administration and Interpretation
The Governance and Directors Nominating Committee reserves the right to interpret, change, amend, modify or terminate this Policy at any time.

Employee Stock Ownership Policy
Adopted May 19, 2010

Purpose:
To provide a guideline for the ownership of Comcast Corporation Common Stock by the Company's named executive officers under Securities and Exchange Commission rules, Section 16 executive officers and non-executive employees.

Policy Statement:
It is the Company's policy to require that its named executive officers, Section 16 executive officers and non-executive employee directors each maintain a significant ownership position in Comcast Corporation Common Stock, as defined in the applicable guideline set forth herein.

I. Ownership Guideline
The named executive officers, Section 16 executive officers and non-executive employee directors will be expected to own Comcast Corporation Common Stock based on the following applicable guideline:

<table>
<thead>
<tr>
<th>Position</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Executive Officer, President of the Board of Directors</td>
<td>At least 5 times base salary</td>
</tr>
</tbody>
</table>
II. Ownership Defined
Ownership (for purposes of meeting the applicable guideline) will be determined by summing the following amounts:

i. 100% of the market value of Comcast Corporation Common Stock owned (1) directly by the employee or his or her spouse, (2) jointly by the employee and his or her spouse and/or his or her children, and (3) indirectly by a trust for the benefit of the employee, his or her spouse and/or his or her minor children.

ii. 100% of the market value of the employee’s Deferred Stock Units under the Company’s Deferred Stock Option Plan.

iii. 100% of the market value of Comcast Corporation Common Stock credited to the employee’s account under the Company’s Employee Stock Purchase Plan. (Note: Employees are required under this Policy to retain shares of Comcast Corporation Common Stock credited to his or her brokerage account under the Employee Stock Purchase Plan for a period of one hundred eighty (180) days from the date credited. Thereafter, any such shares may be disposed in accordance with law and this Policy).

iv. 60% of the market value of the employee’s Stock Fund under the Company’s Deferred Compensation Plan.

v. 60% of the difference between the market price and the exercise price of the employee’s vested stock options under the Company’s Stock Option Plans. (Note: A sale of a call covered by shares or vested options will be deemed a sale of the underlying shares or options and will therefore reduce the number of owned shares or vested options for purposes of this Policy).

vi. 60% of the market value of Comcast Corporation Common Stock owned in the Company’s Retirement-Investment (401(k)) Plan.

vii. 60% of the market value of Comcast Corporation Common Stock vested and deferred under the Company’s Restricted Stock Plan.

III. Valuation Date
Ownership as of any date for purposes of determining compliance with the applicable guideline will be calculated based on the closing price of the applicable class of Comcast Corporation Common Stock as of the trading date prior to the date of determination. For this purpose, the closing price of the Class B Common Stock will be deemed to be the closing price of the Class A Common Stock or Class A Special Common Stock, whichever is lower.

IV. Grace Period
A subject employee will be allowed a grace period to meet the applicable guideline in full, from the date the employee first becomes subject to the Policy through the six December 31st thereafter, as set forth below (the “Grace Period”). The Grace Period may be extended, and the required minimum holdings percentage indicated below may be reduced, at the discretion of the Governance and Directors Nominating Committee.

Subject employees may satisfy the guideline in part over the course of the Grace Period, as follows:

<table>
<thead>
<tr>
<th>December 31st Following Date Employee First Becomes Subject to Policy</th>
<th>Required Minimum Holdings as a Percent of Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>20%</td>
</tr>
<tr>
<td>3rd</td>
<td>30%</td>
</tr>
<tr>
<td>4th</td>
<td>50%</td>
</tr>
<tr>
<td>5th</td>
<td>70%</td>
</tr>
<tr>
<td>6th and thereafter</td>
<td>100%</td>
</tr>
</tbody>
</table>

V. Compliance
A subject employee will annually certify whether or not he or she is in compliance with this Policy both: (i) as of December 31 prior to the year which the certification is made, and (ii) as of each date of any event during the year which the certification is made on which the employee is subject to the Policy.

Certifications will be provided to the Cable Division’s Vice President - Compensation and Benefits using the Comcast Corporation Employee Stock Ownership Policy Compliance Certification Form. A subject employee is not required to purchase or otherwise acquire shares to come in compliance with this Policy. The Governance and Directors Nominating Committee may determine that a subject employee shall be deemed to be in compliance with this Policy in cases where any non-compliance occurs as a result: (a) solely or primarily of a decline of the market price of the stock; (b) of transactions made pursuant to hardship exceptions; (c) of a bona fide gift; and/or (d) of a diversification election made with respect to stock deferred under the Company’s Restricted Stock Plan.

VI. Non-Compliance
If a subject employee is not in compliance with this Policy, then he or she will not be permitted to sell or otherwise dispose of stock until he or her holdings meet the applicable minimum requirement, and then only
to the extent that the employee's remaining holdings do not fall below the applicable minimum holding requirement. bona fide gifts and diversification elections made with respect to stock deferred under the Company's Restricted Stock Plans shall not be deemed to be dispositions hereunder.

VII. Hardship Provision

Hardship exceptions, upon the recommendation of senior management, may be made: (i) with respect to named executive officers, by the Chair of the Governance and Directors Nominating Committee; and (ii) with respect to all other subject employees, by the Corporate Division Executive Vice President having responsibility for administration.

VIII. Administration and Interpretation

The Governance and Directors Nominating Committee reserves the right to interpret, change, amend, modify or terminate this Policy at any time.
Comcast Executive Officers

Brian L. Roberts*
Chairman and CEO, Comcast Corporation

Brian L. Roberts, 51, has served as a director since March 1988, as our President since February 1990, as our Chief Executive Officer since November 2002 and as our Chairman of the Board since May 2004. As of December 31, 2009, Mr. Roberts had sole voting power over approximately 33% of the combined voting power of our two classes of voting common stock. He is a son of Mr. Ralph J. Roberts. Mr. Roberts is also a director of Comcast Holdings Corporation and the National Cable and Telecommunications Association, the principal trade association of the cable television industry, and he is Chairman of CableLabs, the cable industry’s research and development organization.

*Brian Roberts does not participate in any committees.

Michael J. Angelakis
Chief Financial Officer
Comcast Corporation

Michael J. Angelakis serves as Chief Financial Officer for Comcast Corporation, one of the nation’s leading providers of entertainment, information and communication products and services. Mr. Angelakis is responsible for all corporate development, strategic planning, investor relations, internal reporting, external reporting, taxation, and other financial administrative matters at Comcast Corporation, as well as other oversight responsibilities.

Prior to joining Comcast in 2007, Mr. Angelakis served as Managing Director and as a member of the Management and Investment Committees of Providence Equity Partners, one of the leading private equity firms investing in communications and media companies around the world. Before joining Providence Equity Partners in 1999, Mr. Angelakis was President and Chief Executive Officer of State Cable TV Corporation and Aurora Telecommunications, LLC. He also served as Vice President at Manufacturers Hanover Trust Company in New York, where he oversaw one of the bank’s media and communications portfolios. Additionally, Mr. Angelakis spent several years in London developing Manufacturers Hanover’s acquisition finance and merchant banking activities throughout Western Europe. In 2009, Mr. Angelakis was named among America’s Best CFOs by Institutional Investor magazine for the second consecutive year.

Mr. Angelakis is a graduate of Babson College and the Owner/President Management Program at the Harvard Business School. He serves as a Trustee of Babson College and is on the board of Big Brothers Big Sisters of America.
Stephen B. Burke  
Chief Operating Officer, Comcast Corporation  
Steve Burke joined Comcast in 1998 as President of Comcast Cable and has been a driving force in the Company’s growth from a cable industry leader to one of the nation’s leading providers of entertainment, information and communication products and services. Under Mr. Burke’s leadership, Comcast has become the largest cable company, largest residential internet service provider, third largest phone company in America and recently launched a wireless business. In addition to overseeing the Company’s products and services, Mr. Burke oversees Comcast’s programming networks, advertising and Comcast Interactive Media.

Since his arrival at Comcast, Mr. Burke has led Comcast to leadership in multiplatform video entertainment distribution, including the Company’s industry changing video on demand platform and online video offerings. Comcast’s On Demand service, which was introduced in 2003, now offers more than 17,000 choices a month and has had over 15 billion customer views since launch. Mr. Burke has been praised for leading the highly successful integration of AT&T Broadband with Comcast.

Before joining Comcast, Mr. Burke served with The Walt Disney Company as President of ABC Broadcasting. Mr. Burke joined The Walt Disney Company in January 1986, where he helped to develop and found The Disney Stores. In 1992, he moved to Euro Disney S.A., where, as President and Chief Operating Officer, he helped to lead a comprehensive restructuring effort.

Mr. Burke serves on the Board of Directors for Berkshire Hathaway Inc. and J.P. Morgan Chase & Co., and he is the Chairman of The Children’s Hospital of Philadelphia — rated the #1 children’s hospital by U.S. News & World Report in 2009.

Mr. Burke, 52, is a Phi Beta Kappa graduate of Colgate University and earned an MBA from the Harvard Business School. He lives in Haverford, PA, with his wife and five children.

David L. Cohen  
Executive Vice President  
Comcast Corporation  
David L. Cohen is Executive Vice President of Comcast Corporation, one of the nation’s leading providers of entertainment, information and communication products and services. Mr. Cohen has a broad portfolio of responsibilities, including corporate communications, government affairs, public affairs, corporate administration, and serves as senior counselor to the CEO. Before assuming this position in July of 2002, Mr. Cohen served as a partner in and Chairman of Ballard Spahr Andrews & Ingersoll, LLP, one of the 100 largest law firms in the country.
A native of New York, Mr. Cohen graduated from Swarthmore College in 1977 with a BA and with a JD from the University of Pennsylvania Law School (summa cum laude) in 1981. From January 1992 to April 1997, Mr. Cohen served as Chief of Staff to the Honorable Edward G. Rendell, the Mayor of the City of Philadelphia. As detailed in the book *A Prayer for the City*, written by Pulitzer-Prize winning author Buzz Bissinger, Mr. Cohen played a critical coordinating role in significant budgetary and financial issues, in economic development activities, in collective bargaining negotiations, and in a wide variety of other policy and operational issues relating to the city.

Mr. Cohen serves as Chairman of both the Board of Directors and the Executive Committee of the Greater Philadelphia Chamber of Commerce, and as a member of the CEO Council for Growth. Mr. Cohen also serves as Chairman of the Trustees of the University of Pennsylvania and its Executive Committee. Mr. Cohen also serves as a member of the Trustee Board and the Executive Committee of Penn Medicine (an umbrella governance structure overseeing both the University of Pennsylvania Health System and the University's School of Medicine). Mr. Cohen serves as a national trustee of City Year and is Chair of the Governance Committee and a member of the Executive Committee. He also serves on the national board of the National Urban League and as a member of the Corporate Advisory Board of the National Council of La Raza. In addition, Mr. Cohen serves as the Vice Chair of the Board of Directors of the Jewish Federation of Greater Philadelphia. Mr. Cohen is a former Chair of the United Way of Southeastern Pennsylvania, former Co-Chair of the 2003 Resource Development Campaign for the United Way of Southeastern Pennsylvania, former Chair of the Southeastern Pennsylvania Chapter of the American Red Cross, former Co-Chair of Philadelphia 2000, the Host Committee for the 2000 Republican National Convention, and the former Co-Chair of the Host Committee for the National Conference of Volunteerism and Service.

Mr. Cohen has received numerous awards for his civic and charitable activities, including the Americanism Award of the Anti-Defamation League (1993), the Philadelphia Commission on Human Relations Clarence Farmer Service Award (1997), the Community Legal Services Champions Award (1997), the Philadelphia Bar Medal (1997), the Variety Club Gold Heart Humanitarian Award (1998), the Philadelphia Hospitality Vision for Philadelphia Award (1999), the American Red Cross Citizen of the Year Award (1999), the Police Athletic League Award (2001), the United Way's Citizen Volunteer of the Year Award (2002), the City Year Philadelphia Lifetime of Idealism Award (2004), National Cable Television Association, Vanguard Award for Leadership and Impact in the Cable Industry (2005), the American Red Cross Celebration of Volunteers Award (2006), the Association of Cable Communicators President's Award (2007), the President's Volunteer Service Award (2007), MS Society Hope Award (2007), the Drexel Business Leader of the Year Award (2008), the National Urban League of Philadelphia Business Leader of the Year Award (2008), the Philadelphia Business Journal Minority Business Leader Award (2009), and the Annual Northwest Philadelphia Community Appreciation Awards Trailblazing Footsteps Award (2009). Mr. Cohen also was awarded an Honorary Doctor of Laws degree from Drexel University in June of 1997.

Mr. Cohen, 55, lives in Philadelphia with his wife and their two sons.
Arthur R. Block, Esq.
Senior Vice President, General Counsel and Secretary
Comcast Corporation
Arthur Block has served as Senior Vice President, General Counsel, and Secretary since 2000. He is the Company's chief legal officer, overseeing Comcast's legal and corporate governance functions. Mr. Block has been with Comcast since 1989; during this time, he has served as the lead in-house attorney for Comcast's mergers, acquisitions, and financings.

Prior to joining Comcast, Mr. Block was a partner in the Corporate Department of the Philadelphia law firm Wolf, Block, Schorr and Solis-Cohen, which he joined in 1978.

Mr. Block currently serves as Vice Chair of the Site Board of City Year Greater Philadelphia and as the Chair of the Finance Committee of the Board of Managers of Moore College of Art and Design.

Mr. Block received his B.S. in economics from the University of Pennsylvania's Wharton School of Business in 1975, and his J.D. from the University of Michigan Law School in 1978.

Lawrence J. Salva
Senior Vice President, Chief Accounting Officer and Controller
Comcast Corporation
Lawrence J. Salva serves as Senior Vice President, Chief Accounting Officer, and Controller for Comcast Corporation. As Chief Accounting Officer, Mr. Salva is responsible for external financial and management reporting. As Corporate Controller, he is responsible for corporate accounting and corporate internal controls, risk management, and support of the corporate financial planning and analysis functions.

Prior to joining Comcast in January 2000, Mr. Salva was a partner with PricewaterhouseCoopers for over 12 years, where he held various positions of increasing responsibility. Following the merger of Coopers & Lybrand and Pricewaterhouse in 1998, Mr. Salva was named as the national technical accounting consulting partner and regional risk management partner for PwC's Southeast Region. Mr. Salva also served as a Professional Accounting Fellow with the U.S. Securities and Exchange Commission's Office of the Chief Accountant.

Mr. Salva served as Chairperson of the Committee on Corporate Reporting, the senior technical committee of FEI, through June 2007 and continues as a member of its Executive Subcommittee. He is a member of the Standing Advisory Group of the Public Company Accounting Oversight Board and a member of the Board of Directors of the Rowan University Foundation. In 2006, Mr. Salva was named to Business Finance magazine's top 60 influencers list, and to Treasury and Risk magazine's "100 Most Influential People in Finance" list.

Mr. Salva graduated summa cum laude with a Bachelor of Arts degree from Glassboro State/Rowan University in 1977. He is a CPA in Pennsylvania and is a member of the AICPA, PICPA, and Financial Executives International.
Comcast Board of Directors

S. Decker Anstrom
S. Decker Anstrom, 59, has served as a director since June 2001. From January 2002 to December 2008, Mr. Anstrom served as a director and President and Chief Operating Officer of Landmark Communications, Inc., a privately held multimedia company, the assets of which, prior to September 2008, included The Weather Channel. From August 1999 to December 2001, Mr. Anstrom served as President and Chief Executive Officer of The Weather Channel.

Kenneth J. Bacon
Kenneth J. Bacon, 55, has served as a director since November 2002. Mr. Bacon has served as the Executive Vice President of Housing and Community Development at Fannie Mae since July 2005 and as Senior Vice President of Multifamily Investment at Fannie Mae since 2000. From January 2005 to July 2005, he served as the interim Executive Vice President of Housing and Community Development. Mr. Bacon is a member of the Executive Leadership Council and a director of the Corporation for Supportive Housing.

Sheldon M. Bonovitz
Sheldon M. Bonovitz, 72, has served as a director since March 1979. Mr. Bonovitz is currently Chairman Emeritus of Duane Morris LLP, a law firm. From January 1998 to December 2007, he served as Chairman and Chief Executive Officer of Duane Morris. Mr. Bonovitz is a director of eResearchTechnology, Inc. He is also Chairman of Philadelphia’s Children First Fund, a trustee of the Dolfinger-McMahon Charitable Trust and the Christian R. and Mary F. Lindbach Foundation and a member of the board of trustees of The Barnes Foundation, The Curtis Institute of Music, the Free Library of Philadelphia Foundation and the Philadelphia Museum of Art. He is a founder of the Foundation for Self-Taught American Artists, is the Foundation’s President and serves on the Foundation’s Board of Trustees.

Edward D. Breen
Edward D. Breen, 54, has served as a director since June 2005. Since July 2002, Mr. Breen has served as Chairman and Chief Executive Officer of Tyco International Ltd. (“Tyco International”). From January 2002 to July 2002, Mr. Breen served as President and Chief Operating Officer of Motorola, Inc.; from January 2001 to January 2002, he served as Executive Vice President and President of Motorola’s Networks Sector; and from January 2000 to January 2001, he served as Executive Vice President and President of Motorola’s Broadband Communications Sector. Mr. Breen is also a director of Tyco International.
Julian A. Brodsky
Julian A. Brodsky, 76, has served as a director since March 1969 and has been an employee of Comcast since 1964. Since May 2004, he has served as our non-executive Vice Chairman. From May 1987 to May 2004, he served as our Vice Chairman. In addition, he is a director of Amdocs Ltd., RBB Fund, Inc. and the Philadelphia Chamber Music Society, a trustee and Vice Chairman of the Philadelphia Museum of Art and a director emeritus of The Cable Center.

Joseph J. Collins***
Joseph J. Collins, 65, has served as a director since October 2004 and has been our Presiding Director since May 2010. Mr. Collins currently serves as the Chairman of Aegis, LLC. From August 2001 to December 2003, he served as Chairman and Chief Executive Officer of AOL Time Warner Interactive Video. From 1989 to August 2001, Mr. Collins served as Chairman and Chief Executive Officer of Time Warner Cable.

*** Presiding Director (Presides at private sessions of the independent directors).

J. Michael Cook
J. Michael Cook, 67, has served as a director since November 2002. Mr. Cook is a director of International Flavors & Fragrances, Inc. and is a Trustee of the Scripps Research Institute. Mr. Cook is also Chairman Emeritus of the board of Catalyst, Chairman of the Accountability Advisory Panel to the Comptroller General of the United States, an emeritus member of the Advisory Council of the Public Company Accounting Oversight Board (PCAOB) and a member of the Accounting Hall of Fame. Mr. Cook was also named one of the Outstanding Directors in America by Director's Alert in 2002 and is a past member of the National Association of Corporate Directors' Blue Ribbon Commission on Corporate Governance.

Gerald L. Hassell
Gerald L. Hassell, 58, has served as a director since May 2008. He is President of The Bank of New York Mellon ("BNYM"). Prior to the merger of The Bank of New York Company, Inc. and Mellon Financial Corporation in July 2007, Mr. Hassell was President of The Bank of New York Company, Inc. and The Bank of New York. Mr. Hassell is on BNYM's Board of Directors. He is also Chairman of the Board of Visitors of The Fuqua School of Business at Duke University, a member of the Board of Visitors of Columbia University Medical Center, a member of The Financial Services Roundtable and Financial Services Forum, Vice Chairman of Big Brothers/Big Sisters of New York, and a member of the boards of the New York Philharmonic, The Economic Club of New York and The National September 11 Memorial & Museum.
Jeffrey A. Honickman
Jeffrey A. Honickman, 53, has served as a director since December 2005. He has served since 1990 as the Chief Executive Officer of Pepsi-Cola & National Brand Beverages, Ltd., a bottling and distribution company, which includes among its affiliates Pepsi-Cola Bottling Company of New York, Inc. and Canada Dry Bottling Companies from New York to Virginia. He is also the Vice President and Secretary of Antonio Ongio Inc., a beverage distributor based in Philadelphia, Pennsylvania, which does business as Origlio Beverages. He currently serves on the board of directors of the American Beverage Association and the Pepsi-Cola Bottlers Association. Mr. Honickman is a member of the board of trustees of Germantown Academy. He also serves on the board of governors of St. Joseph's University Academy of Food Marketing, the board of trustees of the National Museum of American Jewish History, and the Dean's Advisory Council of the Drexel University College of Business and Administration.

Brian L. Roberts
Brian L. Roberts, 51, has served as a director since March 1988, as our President since February 1990, as our Chief Executive Officer since November 2002 and as our Chairman of the Board since May 2004. As of December 31, 2009, Mr. Roberts had sole voting power over approximately 33% of the combined voting power of our two classes of voting common stock. He is a son of Mr. Ralph J. Roberts. Mr. Roberts is also a director of Comcast Holdings Corporation and the National Cable and Telecommunications Association, the principal trade association of the cable television industry, and he is Chairman of CableLabs, the cable industry's research and development organization.

*Brian Roberts does not participate in any committees.

Ralph J. Roberts
Ralph J. Roberts, 90, our Founder, has served as a director since March 1969 and is Chairman Emeritus of the Board. He served as the Chair of the Executive and Finance Committee of the Board, now the Finance Committee of the Board, from November 2002 until December 2008. From March 1969 to February 1990, Mr. Roberts served as our President, and from November 1984 to November 2002, he served as our Chairman of the Board. He is the father of Mr. Brian L. Roberts.

*Ralph J. Roberts does not participate in any committees.
Dr. Judith Rodin
Dr. Judith Rodin, 65, has served as a director since November 2002. She is President of the Rockefeller Foundation. From 1994 to 2004, Dr. Rodin served as President of the University of Pennsylvania, as well as a professor of psychology and of medicine and psychiatry at the University of Pennsylvania. She also serves as a director of AMR Corporation and Citigroup Inc.

Michael I. Sovern
Michael I. Sovern, 78, has served as a director since November 2002. Mr. Sovern is Chairman of Sotheby's. He is also President Emeritus and Chancellor Kent Professor of Law at Columbia University where he served as President for 13 years. He is President and a director of The Shubert Foundation and a director of The Shubert Organization. He is also a director of Sotheby's.
2010 ANNUAL REPORT

COMCAST ALEXANDRIA STAFF
AUGUST 30, 2010
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2010 ANNUAL REPORT

COMCAST CABLE TELEVISION
CHANGES
AUGUST 30, 2010
CHANNEL CHANGES
July 1, 2009 – June 30, 2010

August 2009
- Launched NFL Network on Channel 733 as a Digital Starter Service, HD, Channel 246,
  Launched the NFL Network HD on Channel 246 as a Digital Starter Service

September 2009
- *ESPNU*, Channel 730, will be added to Comcast’s Digital Classic Service and the
  Sports Entertainment Package.

December 2009
- PBS Kids Sprout on channel 128 moved from Digital Preferred to Digital Starter
  Service
- Style on Channel 118 moved from Digital Preferred to Digital Starter Service
- ESPNews migrated from Channel 102 to Channel 719

May 2010
- The Sports Overflow Channel, Channel 77 which airs MASN2 events will no
  longer default to C-Span2; ESPNews replaced it as the default channel

June 2010
- Launched WFDC Univision HD on Channel 794 as a Limited Basic Service
- Launched WMDO – Telefutura HD on Channel 795 as a Limited Basic Service
- Launched WMDO LATV on Channels 270 and 599 as a Limited Basic Service
- WMDO Telefutura on Channel 15 migrated from an analog to digital format; it
  remains a Limited Basic Service
Trend Overview

- Viewership of several types local Government programming significantly increased in 2010.
- Interest in community-oriented programs increased significantly.
- While Alexandrians had a renewed interest in local programming, the Community Bulletin Board lost viewership.
- Comcast customer service and quality of services delivered to subscribers remained strong and saw improvement based on the scores of the 2010 survey.
Viewer'ship of local Government programming turned around to significantly increase in 2010 (based on the segment of customers that view local access channels).

### SECTION TWO - ACCESS CHANNELS

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<td>76.7% 125 1 YES</td>
<td>56.9% 18.9%</td>
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<td>2b. Have you ever watched a Planning Commission meeting?</td>
<td>96.2% 99 1 YES</td>
<td>36.5% 18.7%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>2c. Have you ever watched a Board of Zoning Appeals meeting?</td>
<td>45.9% 73 1 YES</td>
<td>34.7% 10.9%</td>
<td></td>
</tr>
</tbody>
</table>
Interest in community-oriented programs increased significantly.

**SECTION TWO - ACCESS CHANNELS:**

<table>
<thead>
<tr>
<th>Year</th>
<th>2a. Have you ever watched a Board of Architectural Review - Parker-Gray District meeting?</th>
<th>2008</th>
<th>Change</th>
<th>FROM 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>31.9%</td>
<td>1 YES</td>
<td>19.2%</td>
<td>12.7%</td>
</tr>
<tr>
<td>2008</td>
<td>88.1%</td>
<td>2 NO</td>
<td>93.7%</td>
<td>19.7%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DK/CNA/VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>160</td>
<td>160</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION TWO - ACCESS CHANNELS:**

<table>
<thead>
<tr>
<th>Year</th>
<th>2b. Have you ever watched a School Board meeting?</th>
<th>2008</th>
<th>Change</th>
<th>FROM 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>37.5%</td>
<td>1 YES</td>
<td>38.3%</td>
<td>19.5%</td>
</tr>
<tr>
<td>2008</td>
<td>62.5%</td>
<td>2 NO</td>
<td>61.7%</td>
<td>19.2%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DK/CNA/VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>160</td>
<td>160</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION TWO - ACCESS CHANNELS:**

<table>
<thead>
<tr>
<th>Year</th>
<th>3. Would you be interested in specific programming which highlights City services, programs and/or projects?</th>
<th>2008</th>
<th>Change</th>
<th>FROM 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>87.6%</td>
<td>1 YES</td>
<td>17.6%</td>
<td>63.3%</td>
</tr>
<tr>
<td>2008</td>
<td>12.4%</td>
<td>2 NO</td>
<td>82.3%</td>
<td>36.9%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DK/CNA/VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>160</td>
<td>160</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In spite of Alexandrians renewed interest in local programming, the Community Bulletin Board lost viewership.

**SECTION THREE - COMMUNITY TELEVISION CHANNEL:**

<table>
<thead>
<tr>
<th>Year</th>
<th>4. Have you ever watched the Community Bulletin Board on Channel 65 from 10:00 am to 5:30 pm daily?</th>
<th>2008</th>
<th>Change</th>
<th>FROM 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>46.1%</td>
<td>1 YES</td>
<td>55.4%</td>
<td>16.2%</td>
</tr>
<tr>
<td>2008</td>
<td>53.9%</td>
<td>2 NO</td>
<td>44.9%</td>
<td>16.3%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DK/CNA/VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>124</td>
<td>120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Interest in local programs of various types increased by viewers of the Comcast Community Television Channel.

<table>
<thead>
<tr>
<th>2010 Score</th>
<th>3b. Civic/Information Show?</th>
<th>2009</th>
<th>CHANGE FROM 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.1%</td>
<td>1 YES</td>
<td>44.4%</td>
<td>17.7%</td>
</tr>
<tr>
<td>37.9%</td>
<td>2 NO</td>
<td>55.4%</td>
<td>-17.5%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DUNA/NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2010 Score</th>
<th>3b. Entertainment Show?</th>
<th>2009</th>
<th>CHANGE FROM 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.2%</td>
<td>1 YES</td>
<td>49.1%</td>
<td>21.1%</td>
</tr>
<tr>
<td>29.8%</td>
<td>2 NO</td>
<td>50.9%</td>
<td>-21.1%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DUNA/NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>43.9%</td>
<td>1 YES</td>
<td>51.9%</td>
<td>32.1%</td>
</tr>
<tr>
<td>16.1%</td>
<td>2 NO</td>
<td>40.2%</td>
<td>-32.1%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0 DUNA/NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Customers that reported interactions remained at similar levels to 2009 with Comcast in the office and on the phone. Satisfaction with the quality of service increased moderately, and Comcast scores remain respectable. The customers that reported in-office visits scored quality even higher.

### Section Four: Service to Subscribers

<table>
<thead>
<tr>
<th>Section Four: Service to Subscribers</th>
<th>2010 Score</th>
<th>2009 Score</th>
<th>Change from 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever called the cable company for any reason other than initiating service?</td>
<td>2010 Score</td>
<td>2009 Score</td>
<td>Change from 2009</td>
</tr>
<tr>
<td>88.0%</td>
<td>530</td>
<td>1 YES</td>
<td>67.0%</td>
</tr>
<tr>
<td>34.0%</td>
<td>272</td>
<td>2 NO</td>
<td>33.0%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>0 DK/NIA/NA</td>
<td>0.0%</td>
</tr>
<tr>
<td>552</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section Four: Service to Subscribers</th>
<th>2010 Score</th>
<th>2009 Score</th>
<th>Change from 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Was your call answered within a reasonable period of time?</td>
<td>2010 Score</td>
<td>2009 Score</td>
<td>Change from 2009</td>
</tr>
<tr>
<td>78.0%</td>
<td>421</td>
<td>1 YES</td>
<td>78.9%</td>
</tr>
<tr>
<td>20.4%</td>
<td>108</td>
<td>2 NO</td>
<td>21.1%</td>
</tr>
<tr>
<td>0.6%</td>
<td>0</td>
<td>0 DK/NIA/NA</td>
<td>0.0%</td>
</tr>
<tr>
<td>529</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section Four: Service to Subscribers</th>
<th>2010 Score</th>
<th>2009 Score</th>
<th>Change from 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>1b. Was the person with whom you spoke courteous?</td>
<td>2010 Score</td>
<td>2009 Score</td>
<td>Change from 2009</td>
</tr>
<tr>
<td>94.3%</td>
<td>489</td>
<td>1 YES</td>
<td>92.5%</td>
</tr>
<tr>
<td>5.7%</td>
<td>38</td>
<td>2 NO</td>
<td>5.0%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>0 DK/NIA/NA</td>
<td>0.0%</td>
</tr>
<tr>
<td>529</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section Four: Service to Subscribers</th>
<th>2010 Score</th>
<th>2009 Score</th>
<th>Change from 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>1c. Did your questions or problems receive a satisfactory resolution?</td>
<td>2010 Score</td>
<td>2009 Score</td>
<td>Change from 2009</td>
</tr>
<tr>
<td>78.9%</td>
<td>417</td>
<td>1 YES</td>
<td>73.5%</td>
</tr>
<tr>
<td>21.2%</td>
<td>112</td>
<td>2 NO</td>
<td>28.5%</td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>0 DK/NIA/NA</td>
<td>0.0%</td>
</tr>
<tr>
<td>529</td>
<td>Total Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q7 BROADBAND MARKET RESEARCH
10575 CRESTWOOD DRIVE * MANASSAS * VA * 20109
703.392.3200
### 2010 Comcast ALEXANDRIA Customer Surveys

#### Section Four: Service to Subscribers

**2010 Score 14: Have you ever visited the local Comcast Office?**

<table>
<thead>
<tr>
<th>Score</th>
<th>2009</th>
<th>CHANGE FROM 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.3%</td>
<td>488</td>
<td>1 YES</td>
</tr>
<tr>
<td>37.7%</td>
<td>302</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>D/K/A/NA</td>
</tr>
<tr>
<td>601</td>
<td>Total Responses</td>
<td></td>
</tr>
</tbody>
</table>

**2010 Score 15: Were you satisfied with the quality of service you received?**

<table>
<thead>
<tr>
<th>Score</th>
<th>2009</th>
<th>CHANGE FROM 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>75.0%</td>
<td>601</td>
<td>1 YES</td>
</tr>
<tr>
<td>25.0%</td>
<td>209</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>D/K/A/NA</td>
</tr>
<tr>
<td>601</td>
<td>Total Responses</td>
<td></td>
</tr>
</tbody>
</table>

**2010 Score 16: Were you satisfied with the quality of service you received?**

<table>
<thead>
<tr>
<th>Score</th>
<th>2009</th>
<th>CHANGE FROM 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>83.4%</td>
<td>416</td>
<td>1 YES</td>
</tr>
<tr>
<td>16.6%</td>
<td>63</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>D/K/A/NA</td>
</tr>
<tr>
<td>459</td>
<td>Total Responses</td>
<td></td>
</tr>
</tbody>
</table>

---

Service to subscriber scores saw some strong improvements since 2009 measurements.

#### Section Five: Service to Subscribers

Using a scale from 1 to 6, with 1 meaning "completely satisfied" and 6 meaning "completely unsatisfied," please select the number that best represents your satisfaction with the following customer service aspects of the system.

<table>
<thead>
<tr>
<th>Score</th>
<th>2009</th>
<th>CHANGE FROM 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.864</td>
<td>3191</td>
<td>INSTALLATION OF CABLE IN YOUR HOME</td>
</tr>
<tr>
<td>4.179</td>
<td>3367</td>
<td>PICTURE QUALITY</td>
</tr>
<tr>
<td>4.112</td>
<td>3284</td>
<td>SOUND QUALITY</td>
</tr>
<tr>
<td>3.918</td>
<td>2892</td>
<td>RESPONSE TO INQUIRIES OR PROBLEMS</td>
</tr>
<tr>
<td>4.078</td>
<td>3354</td>
<td>NUMBER OF CHANNELS PROVIDED</td>
</tr>
<tr>
<td>3.645</td>
<td>3088</td>
<td>OVERALL CUSTOMER SERVICE</td>
</tr>
<tr>
<td>3.968</td>
<td>Average score</td>
<td></td>
</tr>
<tr>
<td>3.987</td>
<td>2010</td>
<td>Change from 2009</td>
</tr>
</tbody>
</table>
2010 Comcast Cable Television Subscriber Survey
Alexandria, Virginia
SURVEY METHODOLOGY

All of the following charts and graphs are based on responses from a structured phone survey conducted with a random probability sample of 801 Alexandria active cable television customers. Calling began on August 11th and was completed August 17th, 2010. Calls were placed during a mix of daytime and evening hours on weekdays as well as daytimes on Saturdays.

All surveys were completed from Q7’s fully supervised calling center. Prior to the beginning of data collection, all surveyors were trained specifically on each survey question and its response set. At least once per shift, each surveyor was monitored on-line while conducting an actual survey. Some of the questions asked were based on previous versions of the same study completed in earlier years.

In order to generate a random probability of households, the calling list provided to Q7 was randomized prior to outbound dialing. The completed sample response includes 801 customers. This sample size will generate data useful in making business decisions based on commonly accepted statistical norms at the 95% confidence level with a margin of error of +/- 3.44%, assuming an overall population of approximately 65,000.
What is the major reason(s) you subscribe to cable television at this time?
What is the major reason you subscribe to cable television at this time? "Other" answers...

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet service</td>
<td>42</td>
</tr>
<tr>
<td>Like Comcast / Don't like other providers</td>
<td>20</td>
</tr>
<tr>
<td>Double Play</td>
<td>11</td>
</tr>
<tr>
<td>Good Service</td>
<td>9</td>
</tr>
<tr>
<td>HDTV</td>
<td>5</td>
</tr>
<tr>
<td>Less Expensive Option</td>
<td>4</td>
</tr>
<tr>
<td>DVR</td>
<td>2</td>
</tr>
<tr>
<td>Quality Programming</td>
<td>1</td>
</tr>
<tr>
<td>Reliable</td>
<td>1</td>
</tr>
</tbody>
</table>
Comcast currently has five access channels:
The City Government Access Channel on Channel 70,
The Educational Access Channels on 71, 72, 73
and the Community Channel on Channel 69.

Were you previously aware of these channels?
Channel 70 is the local government access channel which provides brief announcements about upcoming government meetings and events, and broadcasts live City Council meetings, Planning Commission meetings, Board of Zoning Appeals meetings, and Board of Architectural Review meetings.

Do you watch Channel 70 programming?
Have you ever watched a Saturday public hearing?
Have you ever watched a Planning Commission meeting?
Have you ever watched a Board of Zoning Appeals meeting?
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Have you ever watched a Board of Architectural Review - Old and Historic District meeting?

SECTION TWO - ACCESS CHANNELS

0% 10% 20% 30% 40% 50% 60% 70%

- Yes

- No

0%

© 2010 Q7 BROADBAND MARKET RESEARCH™ + Q7WEB.COM + 703-352-5200
Have you ever watched a Board of Architectural Review - Parker-Gray District meeting?

0% 10% 20% 30% 40% 50% 60% 70% 80%

Yes

No

Unknown 9%

29.
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Have you ever watched a School Board meeting?

**SECTION TWO - ACCESS CHANNELS**

- **Yes**
- **No**

- **3%**
- **26%**

© 2010 Q7 BROADBAND MARKET RESEARCH™  ☎ Q7WEB.COM  ☎ 709-302-8200
Would you be interested in specific programming that highlights City services, programs or projects?
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Channels 71, 72, and 73 are the educational access channels. Channel 72 broadcasts telecourses from Northern Virginia Community College. Channel 73 broadcasts telecourses from George Mason University and Channel 71 for cable ready TVs is used by the Alexandria City Public School System.

Have you ever watched the telecourses sponsored by Northern Virginia Community College?
Have you ever watched the telecourses sponsored by George Mason University?

SECTION TWO - ACCESS CHANNELS

Yes

No

Unknown 0%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%
Have you ever watched any of the programming sponsored by the Alexandria City Public School?
Do you presently have children enrolled in the Alexandria Public School System?
Instructional programming can also be seen on MHZ Channels 192 through 197. Have you ever watched instructional programming sponsored by MHZ Channels 192 through 197?

SECTION TWO - ACCESS CHANNELS

Yes 0%
No 100%

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2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Comcast produces local programming as a public service to Alexandrians. These programs are shown on Channel 69 in the evenings during the week and on the weekends.

Have you ever watched the programming on Channel 69?
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Have you ever watched the Community Bulletin Board on Channel 69 from 10:00 am to 5:30 am daily?
Are you interested in any of the following categories of programming that are currently shown on Channel 69...

Local high school sports?
Are you interested in any of the following categories of programming that are currently shown on Channel 69...

Civic/Informational Shows?
Are you interested in any of the following categories of programming that are currently shown on Channel 69...

**Entertainment Shows?**

**SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69 - INTEREST**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>20%</td>
</tr>
</tbody>
</table>

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2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Are you interested in any of the following categories of programming that are currently shown on Channel 69...

Current Local Events?

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69 - INTEREST

☐ YES

☐ MAYBE

☐ NO

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2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

What are the biggest obstacles to your watching more programs on the PEG channels?

- Technical Quality of Programs
- Lack of Interest in Topics
- Lack of Program Listing Info
- Brand
What are the biggest obstacles to your watching more programs on the PEG channels? 'Other' answers...

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doesn't watch much TV</td>
<td>14</td>
</tr>
<tr>
<td>Lack of information</td>
<td>2</td>
</tr>
<tr>
<td>Not home enough</td>
<td>2</td>
</tr>
<tr>
<td>Too old</td>
<td>1</td>
</tr>
<tr>
<td>Watch news only</td>
<td>1</td>
</tr>
</tbody>
</table>
Have you ever considered producing a show on the Community Channel?
Are you aware that Comcast conducts Community Programming Volunteer Operations classes in television production for a nominal fee?
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Would you be interested in taking such a class?

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 28

YES

NO

DUNNO

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Have you ever called the cable company for any reason other than initiating service?
Was your call answered within a reasonable period of time?
Was the person with whom you spoke courteous?

SECTION FOUR - SERVICE TO SUBSCRIBERS

Was

Not

Below 3%

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33
Was your question or problem resolved?
Have you ever visited the local Comcast Office?
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Were you satisfied with the quality of service you received?

*All respondents answering.*

Were you satisfied with the quality of service you received?

*PARSED TO THE 496 ACTUAL VISITORS IN Sec 4 1D.*
Using a scale from 1 to 5, with 1 meaning "extremely dissatisfied" and 5 meaning "extremely satisfied," please select the number that best represents your satisfaction with the following customer service aspects of the system.
Are there any channels that are not presently offered that you or others in your household would like to see added to our system?
1b. If yes, which channel(s) would you like to see added to the system?

<table>
<thead>
<tr>
<th>Channel Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD CHANNELS</td>
<td>21</td>
</tr>
<tr>
<td>More Sports Channels</td>
<td>8</td>
</tr>
<tr>
<td>Military Channel</td>
<td>7</td>
</tr>
<tr>
<td>BBC America</td>
<td>6</td>
</tr>
<tr>
<td>Channel 22</td>
<td>5</td>
</tr>
<tr>
<td>More Movie Channels</td>
<td>5</td>
</tr>
<tr>
<td>BRAVO HD</td>
<td>4</td>
</tr>
<tr>
<td>Comedy Central HD</td>
<td>4</td>
</tr>
<tr>
<td>Country Music Channels</td>
<td>3</td>
</tr>
<tr>
<td>ESPN Catholic</td>
<td>3</td>
</tr>
<tr>
<td>HBO</td>
<td>3</td>
</tr>
<tr>
<td>Christian or Religious Channels</td>
<td>2</td>
</tr>
<tr>
<td>ESPN U Channel</td>
<td>2</td>
</tr>
<tr>
<td>More Overall Channels</td>
<td>2</td>
</tr>
<tr>
<td>Oxygen</td>
<td>2</td>
</tr>
<tr>
<td>Sleuth Boomerang</td>
<td>2</td>
</tr>
<tr>
<td>Arts Programs</td>
<td>1</td>
</tr>
<tr>
<td>Cartoon Network</td>
<td>1</td>
</tr>
<tr>
<td>CNN International</td>
<td>1</td>
</tr>
<tr>
<td>College Football</td>
<td>1</td>
</tr>
<tr>
<td>Fine Living Channel</td>
<td>1</td>
</tr>
<tr>
<td>French TVS</td>
<td>1</td>
</tr>
<tr>
<td>Investigation Discovery</td>
<td>1</td>
</tr>
<tr>
<td>More Kids Programming</td>
<td>1</td>
</tr>
<tr>
<td>Outdoor Life Channel</td>
<td>1</td>
</tr>
<tr>
<td>TVS America</td>
<td>1</td>
</tr>
<tr>
<td>TNT HD</td>
<td>1</td>
</tr>
</tbody>
</table>
If Comcast added the new channels that you would like to see, would you be willing to pay more for the service?
Are there any persons in your household with hearing or vision disabilities which interferes with their enjoyment of cable TV?

SECTION SIX - ACCESSIBILITY SURVEY

- Yes
- No

9%

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Are there any persons in your household with mobile, manual or dexterity impairments that would interfere with their ability to use cable TV controls?

SECTION SIX - ACCESSIBILITY SURVEY

YES

NO

0%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

[Bar chart with data points]

comcast.
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Have any of these disabilities or impairments affected this person's ability to:

Access/change channels on cable?

- Yes
- No
- Don't know

0% 10% 20% 30% 40% 50% 60%

© 2010 C7 BROADBAND MARKET RESEARCH™ | C7WEB.COM | 703-392-6000
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Have any of these disabilities or impairments affected this person's ability to:

Discuss a bill with Comcast?

Yes

No

Excluded 0%

SECTION SIX - ACCESSIBILITY SURVEY
Have any of these disabilities or impairments affected this person's ability to:

Find out what programming is on cable?

SECTION SIX - ACCESSIBILITY SURVEY

Yes

No

0%
10%
20%
30%
40%
50%
60%
70%

© 2010 G7 BROADBAND MARKET RESEARCH™ | G7WEB.COM | 703-392-9200
Have any of these disabilities or impairments affected this person's ability to:
Understand the dialog on programs?

- YES
- NO
- INCAPABLE 3%

SECTION SIX - ACCESSIBILITY SURVEY

© 2010 C7 BROADBAND MARKET RESEARCH™  |  C7WEB.COM  |  703-392-5200
2010 Comcast Cable Television Subscriber Survey - Alexandria, Virginia

Have any of these disabilities or impairments affected this person’s ability to:

Follow the program on cable?

- Yes
- No
- Don’t know

%
Section Six - Accessibility Survey - Question 3f.

Have any of these disabilities or impairments affected this person's ability to:
Other ... respondent comment detail.

No responses.
Total Surveys: 801

SECTION ONE - BACKGROUND INFORMATION
1). What is the major reason you subscribe to cable television at this time?

- 29.213% (234) 1 MORE CHANNELS
- 4.994% (40) 2 MOVIES
- 16.355% (131) 3 BETTER RECEPTION
- 7.990% (64) 4 PREMIUM SERVICES
- 7.116% (57) 5 SPORTS
- 34.332% (275) 6 OTHER

Total Responses: 801

SECTION TWO - ACCESS CHANNELS

1). Were you previously aware of these channels?

- 62.921% (504) 1 YES
- 37.079% (297) 2 NO

Total Responses: 801

Channel 70 is the local government access channel which provides brief announcements about upcoming government meetings and events, and broadcasts live City Council meetings, Planning Commission meetings, Board of Zoning Appeals meetings, and Board of Architectural Review meetings. Do you watch Channel 70 programming?

2). Have you ever watched an Alexandria City Council meeting?

- 78.750% (126) 1 YES
- 21.250% (34) 2 NO

Total Responses: 160

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703.392.5200
SECTION TWO - ACCESS CHANNELS

2b). Have you ever watched a Saturday public hearing?

- 37.500% 60 1 YES
- 62.500% 100 2 NO
- 0.000% 0 0 DK/NA/OA

160 Total Responses

SECTION TWO - ACCESS CHANNELS

2c). Have you ever watched a Planning Commission meeting?

- 56.250% 90 1 YES
- 43.750% 70 2 NO
- 0.000% 0 0 DK/NA/OA

160 Total Responses

SECTION TWO - ACCESS CHANNELS

2d). Have you ever watched a Board of Zoning Appeals meeting?

- 45.625% 73 1 YES
- 54.375% 87 2 NO
- 0.000% 0 0 DK/NA/OA

160 Total Responses

SECTION TWO - ACCESS CHANNELS

2e). Have you ever watched a Board of Architectural Review - Old and Historic District meeting?

- 36.875% 59 1 YES
- 63.125% 101 2 NO
- 0.000% 0 0 DK/NA/OA

160 Total Responses

SECTION TWO - ACCESS CHANNELS

2f). Have you ever watched a Board of Architectural Review - Parker-Gray District meeting?

- 31.875% 51 1 YES
- 68.125% 109 2 NO
SECTION TWO - ACCESS CHANNELS

2g). Have you ever watched a School Board meeting?

57.500% 92 1 YES
42.500% 68 2 NO
0.000% 0 0 DK/NA/5A
160 Total Responses

SECTION TWO - ACCESS CHANNELS

Would you be interested in specific programming which highlights City services, programs and/or projects?

87.640% 702 1 YES
12.360% 99 2 NO
0.000% 0 0 DK/NA/5A
801 Total Responses

SECTION TWO - ACCESS CHANNELS

Channels 71, 72, and 73 are the educational access channels. Channel 72 broadcasts telecourses from Northern Virginia Community College. Channel 73 broadcasts telecourses from George Mason University and Channel 71 for cable ready TVs is used by the Alexandria City Public School system.

Have you ever watched the telecourses sponsored by Northern Virginia Community College?

17.353% 139 1 YES
82.647% 662 2 NO
0.000% 0 0 DK/NA/5A
801 Total Responses

SECTION TWO - ACCESS CHANNELS

Have you ever watched the telecourses sponsored by George Mason University?

15.980% 128 1 YES
84.020% 673 2 NO
0.000% 0 0 DK/NA/5A
801 Total Responses
SECTION TWO - ACCESS CHANNELS

Have you ever watched any of the programming sponsored by the Alexandria City Public Schools?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Responses</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.476%</td>
<td>156</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>801</td>
</tr>
<tr>
<td>80.524%</td>
<td>645</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION TWO - ACCESS CHANNELS

Do you presently have children enrolled in the Alexandria Public School System?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Responses</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.990%</td>
<td>64</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>801</td>
</tr>
<tr>
<td>92.010%</td>
<td>737</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION TWO - ACCESS CHANNELS

Instructional programming can also be seen on MHZ21 channels 192 through 197.

Have you ever watched instructional programming sponsored by MHZ21 channels 192 through 197?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Responses</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.993%</td>
<td>48</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>801</td>
</tr>
<tr>
<td>94.007%</td>
<td>753</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION THREE - COMCAST COMMUNITY TELEVISION

Comcast produces local programming as a public service to Alexandrians. These programs are shown on Channel 69 in the evenings during the week and on the weekends.

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

1). Have you ever watched the programming on Channel 69?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Responses</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.481%</td>
<td>124</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>801</td>
</tr>
<tr>
<td>84.519%</td>
<td>677</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

Have you ever watched the Community Bulletin Board on Channel 69 2). from 10:00 am to 5:30 am daily?

45.161% 56 1 YES
54.839% 68 2 NO
0.000% 0 0 DK/NA/OA
124 Total Responses

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

Are you interested in any of the following categories of programming 3). that are currently shown on Channel 69?

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69 - INTEREST

3a). Local high school sports?
40.323% 50 1 YES
59.677% 74 2 NO
0.000% 0 0 DK/NA/OA
124 Total Responses

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69 - INTEREST

3b). Civic/Informational Shows?
62.097% 77 1 YES
37.903% 47 2 NO
0.000% 0 0 DK/NA/OA
124 Total Responses

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69 - INTEREST

3c). Entertainment Shows?
70.161% 87 1 YES
29.839% 37 2 NO
0.000% 0 0 DK/NA/OA
124 Total Responses

SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69 - INTEREST

3d). Current Local Events?
83.871% 104 1 YES
### SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

What are the biggest obstacles to your watching more programs on the PEG channels?

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Percentage</th>
<th>Count</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Quality of Programs</td>
<td>3.745%</td>
<td>30</td>
<td>801</td>
</tr>
<tr>
<td>Lack of Interest in Topics</td>
<td>55.556%</td>
<td>445</td>
<td>801</td>
</tr>
<tr>
<td>Lack of Program Listing Info</td>
<td>28.464%</td>
<td>228</td>
<td>801</td>
</tr>
<tr>
<td>Other</td>
<td>12.235%</td>
<td>98</td>
<td>801</td>
</tr>
</tbody>
</table>

### SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

Have you ever considered producing a show on the Community Channel?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5.243%</td>
<td>42</td>
<td>801</td>
</tr>
<tr>
<td>No</td>
<td>94.757%</td>
<td>759</td>
<td>801</td>
</tr>
</tbody>
</table>

### SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

Are you aware that Comcast conducts Community Programming Volunteer Operations classes in television production for a nominal fee?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12.734%</td>
<td>102</td>
<td>801</td>
</tr>
<tr>
<td>No</td>
<td>87.266%</td>
<td>699</td>
<td>801</td>
</tr>
</tbody>
</table>

### SECTION THREE - COMCAST COMMUNITY TELEVISION CHANNEL 69

Would you be interested in taking such a class?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>13.483%</td>
<td>108</td>
<td>801</td>
</tr>
<tr>
<td>No</td>
<td>86.517%</td>
<td>693</td>
<td>801</td>
</tr>
<tr>
<td>DK/NA/OA</td>
<td>0.000%</td>
<td>0</td>
<td>801</td>
</tr>
</tbody>
</table>
### SECTION FOUR - SERVICE TO SUBSCRIBERS

#### Have you ever called the cable company for any reason other than initiating service?

<table>
<thead>
<tr>
<th></th>
<th>Yes %</th>
<th>No %</th>
<th>DK/NA/OA %</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66.042%</td>
<td>33.958%</td>
<td>0.000%</td>
<td>801</td>
</tr>
</tbody>
</table>

#### Was your call answered within a reasonable period of time?

<table>
<thead>
<tr>
<th></th>
<th>Yes %</th>
<th>No %</th>
<th>DK/NA/OA %</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>79.584%</td>
<td>20.416%</td>
<td>0.000%</td>
<td>529</td>
</tr>
</tbody>
</table>

#### Was the person with whom you spoke courteous?

<table>
<thead>
<tr>
<th></th>
<th>Yes %</th>
<th>No %</th>
<th>DK/NA/OA %</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>94.329%</td>
<td>5.671%</td>
<td>0.000%</td>
<td>529</td>
</tr>
</tbody>
</table>

#### Was your question or problem resolved?

<table>
<thead>
<tr>
<th></th>
<th>Yes %</th>
<th>No %</th>
<th>DK/NA/OA %</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>78.828%</td>
<td>21.172%</td>
<td>0.000%</td>
<td>529</td>
</tr>
</tbody>
</table>

#### Have you ever visited the local Comcast Office?

<table>
<thead>
<tr>
<th></th>
<th>Yes %</th>
<th>No %</th>
<th>DK/NA/OA %</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>62.297%</td>
<td>37.703%</td>
<td>0.000%</td>
<td>801</td>
</tr>
</tbody>
</table>
SECTION FOUR - SERVICE TO SUBSCRIBERS
1e). Were you satisfied with the quality of service you received?

75.031%  601  1 YES
24.969%  200  2 NO
0.000%  0   0 DK/NA/OA
  801  Total Responses

SECTION FOUR - SERVICE TO SUBSCRIBERS
Using a scale from 1 to 5, with 1 meaning "extremely dissatisfied" and 5 meaning "extremely satisfied," please select the number that best represents your satisfaction with the following customer service aspects of the system.

Raw points
3.984 3191 a). INSTALLATION OF CABLE IN YOUR HOME
4.179 3347 b). PICTURE QUALITY
4.112 3294 c). SOUND QUALITY
3.815 2898 d). RESPONSE TO INQUIRIES OR PROBLEMS
4.075 3264 e). NUMBER OF CHANNELS PROVIDED
3.845 3080 f). OVERALL CUSTOMER SERVICE
3.968  average score

SECTION FIVE - PROGRAMMING SURVEY

Are there any channels that are not presently offered that you or others in your household would like to see added to our system?

21.973%  176  1 YES
78.027%  625  2 NO
0.000%  0   0 DK/NA/OA
  801  Total Responses

SECTION FIVE - PROGRAMMING SURVEY
1b). If yes, which channel(s) would you like to see added to the system?
PLEASE SEE DATA SHEET

SECTION FIVE - PROGRAMMING SURVEY
If Comcast added the new channels that you would like to see, would you be willing to pay more for the service?

26.705%  47  1 YES
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.295%</td>
<td>129</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td>0 DK/NA/OA</td>
</tr>
<tr>
<td>176</td>
<td></td>
<td>Total Responses</td>
</tr>
</tbody>
</table>

**SECTION SIX - ACCESSIBILITY SURVEY**

Are there any persons in your household with hearing or vision disabilities which interferes with their enjoyment of cable TV?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.868%</td>
<td>47</td>
<td>1 YES</td>
</tr>
<tr>
<td>94.132%</td>
<td>754</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td>0 DK/NA/OA</td>
</tr>
<tr>
<td>801</td>
<td></td>
<td>Total Responses</td>
</tr>
</tbody>
</table>

**SECTION SIX - ACCESSIBILITY SURVEY**

Are there any persons in your household with mobile, manual or dexterity impairments that would interfere with their ability to use cable TV controls?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.277%</td>
<td>10</td>
<td>1 YES</td>
</tr>
<tr>
<td>78.723%</td>
<td>37</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td>0 DK/NA/OA</td>
</tr>
<tr>
<td>47</td>
<td></td>
<td>Total Responses</td>
</tr>
</tbody>
</table>

**SECTION SIX - ACCESSIBILITY SURVEY**

3). Have any of these disabilities or impairments affected this person's ability to:

**SECTION SIX - ACCESSIBILITY SURVEY**

3a). Access/change channels on cable?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.000%</td>
<td>5</td>
<td>1 YES</td>
</tr>
<tr>
<td>50.000%</td>
<td>5</td>
<td>2 NO</td>
</tr>
<tr>
<td>0.000%</td>
<td>0</td>
<td>0 DK/NA/OA</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Total Responses</td>
</tr>
</tbody>
</table>

**SECTION SIX - ACCESSIBILITY SURVEY**

3b). Discuss a bill with Comcast?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.000%</td>
<td>5</td>
<td>1 YES</td>
</tr>
<tr>
<td>50.000%</td>
<td>5</td>
<td>2 NO</td>
</tr>
</tbody>
</table>
### Section Six - Accessibility Survey

#### 3c). Find out what programming is on cable?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.000%</td>
<td>4</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>60.000%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3d). Understand the dialog on programs?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.000%</td>
<td>9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10.000%</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3e). Follow the program on cable?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.000%</td>
<td>7</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>30.000%</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section Four - Service to Subscribers

#### 1e). Were you satisfied with the quality of service you received?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Yes</th>
<th>No</th>
<th>DK/NA/OA</th>
</tr>
</thead>
<tbody>
<tr>
<td>83.367%</td>
<td>416</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>16.633%</td>
<td>83</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>0.000%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FCC Technical Standards Tests

System: Alexandria, VA
Test Date: Summer 2009

Signature Person Responsible for Tests

Signature System General Manager

Region/Area: Beltway
Filename: FCC POP Filing Template.doc
Template Author: Greg Harmon
Print Date: 3/5/09
Last Save Date: 8/18/2009 3:33:00 PM
Comments:
Table of Contents

Chapter 1 - Test Qualifications ................................................. 1-1

Chapter 2 – Scheduling, Requirements, and Methodology ................. 2-1
  FCC Proof of Performance .................................................. 2-1
  Twenty-four Hour Signal Variation Test .................................. 2-1
  Color Testing ......................................................................... 2-1
  FCC Public Inspection File ..................................................... 2-2
  Test Location Guide and Summary .......................................... 2-4
  Analysis of Test Results ......................................................... 2-4
  Failure Action Plan .............................................................. 2-4
  Proof Specifications – Comcast and FCC .................................... 2-5
  Channels Required for Testing ............................................... 2-6

Chapter 3 - Test Equipment List .................................................. 3-1

Chapter 4 – Headend, Hubs, Test Point List .................................... 4-1
  Requirements ........................................................................ 4-1
  Headend Information .......................................................... 4-1
  Field Test Point Information .................................................. 4-2

Chapter 5 - Channel Carriage List ................................................. Error! Bookmark not defined.

Chapter 6 - Description of Test Procedures ................................... 6-1
  Carrier to Noise ..................................................................... 6-1
  Coherent Disturbances ......................................................... 6-2
  Hum .................................................................................. 6-4
  In-channel Frequency Response (amplitude characteristics) ........ 6-5
  Frequency Measurement ....................................................... 6-7
  Carrier Level Measurements ............................................... 6-8
  Twenty-Four Hour Carrier Level Measurements ...................... 6-10

Chapter 7 - Manufacturer's Tap Specifications or Tap Port Isolation Tests 7-1

Chapter 8 – Headend/Hub Tests Results ....................................... 8-1
  Most Recent Color Test ....................................................... 8-2

Chapter 9 - Test Point Tests Results ............................................. 9-1

Chapter 10 – Summaries ............................................................. 10-1
  Narrative ............................................................................. 10-1
Chapter 1 - Test Qualifications

FCC Part 76.601.1 An identification of the instruments, including the makes, model numbers, and the most recent date of calibration, a description of the procedures utilized, and a statement of the qualifications of the person performing the tests shall also be included.

Person Responsible for Testing:
Greg Harmon / Brandi Porras

Industry Experience:
25 Years in CATV industry

Technical Certifications:
NCTI – Senior Master Technician (Greg)

Additional Comments:
Chapter 2 – Scheduling, Requirements, and Methodology

FCC Proof of Performance

- Two Proofs must be completed each calendar year
- The time period between any two proofs must not exceed seven months
- All repairs and retesting must be completed before the filing deadline

Twenty-four Hour Signal Variation Test

- Two twenty-four hour tests must be completed each year, one in January and one in July
- Initial repeat testing on failed twenty-four hour tests must be completed by February 10th or August 10th respective to each test period
- It is the general manager’s responsibility to insure that the twenty-four hour tests have been completed and passed by the end of February and again by the end of August

Color Testing

- Color tests must be completed tri-annually for chrominance-luminance delay inequality, differential gain, and differential phase
FCC Public Inspection File

This page addresses FCC Public Inspection File requirements only for documentation typical processed by technical staff. It does not address the political file, sponsorships, EEO, or children's programming.

The following paragraphs are excerpts from FCC rules followed by comments and interpretations.

§ 76.305 Records to be maintained locally by cable system operators for public inspection

(a) Records to be maintained. The operator of every cable television system having 1,000 or more subscribers shall maintain for public inspection a file containing a copy of all records which are required to be kept by § 76.207 (political file); 76.221(f) (sponsorship identifications); 76.79 (EEO records available for public inspection); 76.225(c) (commercial records for children's programming); 76.601(c) (proof-of-performance test data); 76.601(e) (signal leak-age logs and repair records) and § 76.701(h)(records for leased access).

(1) A record shall be kept of each test and activation of the Emergency Alert System (EAS) procedures pursuant to the requirement of part 11 of this chapter and the EAS Operating Handbook. These records shall be kept for three years.

(2) [Reserved]

(b) Location of records. The public inspection file shall be maintained at the office which the system operator maintains for the ordinary collection of subscriber charges, resolution of sub-scriber complaints, and other business or at any accessible place in the community served by the system unit(s) (such as a public registry for documents or an attorney's office). The public inspection file shall be available for public inspection at any time during regular business hours.

(c) The records specified in paragraph (a) of this section shall be retained for the period specified in §§ 76.207, 76.221(f), 76.79, 76.225(c), 76.601(c), and 76.601(e), respectively.

(d) Reproduction of records. Copies of any material in the public inspection file shall be available for machine reproduction upon request made in person, provided the requesting party shall pay the reasonable cost of reproduction. Requests for machine copies shall be fulfilled at a location specified by the system operator, within a reasonable period of time, which in no event shall be longer than seven days. The system operator is not required to honor requests made by mail but may do so if it chooses.

Comments

Insure that your FCC public inspection file is well organized, and professionally maintained.

Insure all EAS tapes that document all tests and activations of the EAS system are kept in the file. Moreover, any other documentation of EAS
activity is suggested. (correspondence with local authorities, maintenance
records, etc.)

§ 76.614 CLI Filing Information

Cable television operators transmitting carriers in the frequency bands 108–137
and 225–400 MHz shall provide for a program of regular monitoring for signal
leakage by substantially covering the plant every three months. The incorporation
of this monitoring program into the daily activities of existing service personnel in
the discharge of their normal duties will generally cover all portions of the system
and will therefore meet this requirement. Monitoring equipment and procedures
utilized by a cable operator shall be adequate to detect a leakage source which
produces a field strength in these bands of 20 mV/m or greater at a distance of 3
meters. During regular monitoring, any leakage source which produces a field
strength of 20 mV/m or greater at a distance of 3 meters in the aeronautical radio
frequency bands shall be noted and such leakage sources shall be repaired within a
reasonable period of time. The operator shall maintain a log showing the date and
location of each leakage source identified, the date on which the leakage was
repaired, and the probable cause of the leakage. The log shall be kept on file for a
period of two (2) years and shall be made available to authorized representatives of
the Commission upon request.

[50 FR 29400, July 19, 1985]

Comments

Leakage logs must be kept in the FCC public inspection file. It is
suggested that monthly LES 320s, annual flyover 320s, and other
related documentation also be filed.

Note that these records must be kept for five (5) years.

§ 76.601 Proof of Performance Filing Information

(c) The operator of each cable television system shall conduct complete performance
tests of that system at least twice each calendar year (at intervals not to exceed seven
months), unless otherwise noted below, and shall maintain the resulting test data on
file at the operator's local business office for at least five (5) years. The test data
shall be made available for inspection by the Commission or the local franchiser,
upon request. The performance tests shall be directed at determining the extent to
which the system complies with all the technical standards set forth in § 76.605(a)
and shall be as follows: (refer to rules)

Comments

Note that POP records must be kept for five (5) years.
Test Location Guide and Summary

Headend
- Visual, aural, offset frequency counts on all channels
- Visual and aural carrier levels on all channels
- Hum tests on all channels
- Color tests

Field Test-points
- Visual, aural, offset frequency counts on all channels thru 100’ drop; test channels thru converter
- Visual and aural carrier levels on all channels thru 100’ drop; test channels thru converter
- Twenty-four hour (6 month) variation tests thru 100’ drop (must be done in January and July and represent warmest and coolest time of day)
- In-channel response on test channels thru converter
- Visual Carrier to Noise (C/N) on test channels, thru 100’ drop, thru converter
- Coherent Disturbances (CSO, CTB, other) on test channels, thru 100’ drop, thru converter
- Hum on tests channels, thru 100’ drop, thru converter

Analysis of Test Results
- The person responsible for the tests must analyze and evaluate the test results and formulate an action plan to address any failures immediately

Failure Action Plan
- Repair and re-testing before the filing and reporting deadline is essential
- Repair and re-testing should be given top priority, same as a major outage
- Failures that are impossible to repair before the reporting and filing deadline (end of February or August respectively) require a written action plan to address the problem submitted to the regional engineer
## Proof Specifications – Comcast and FCC

<table>
<thead>
<tr>
<th>Specification</th>
<th>Comcast</th>
<th>FCC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visual Carrier Frequencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non - Aeronautical</td>
<td>+/- 25 KHz</td>
<td>+/- 25 KHz</td>
</tr>
<tr>
<td>Aeronautical</td>
<td>+/- 3 KHz</td>
<td>+/- 5 KHz</td>
</tr>
<tr>
<td><strong>Visual/Aural Carrier Separation (4.5 MHz)</strong></td>
<td>+/- 1 KHz</td>
<td>+/- 5 KHz</td>
</tr>
<tr>
<td><strong>Minimum Visual Carrier Level</strong></td>
<td>6 dbmV @ 100 ft</td>
<td>3 dbmV @ 100 ft</td>
</tr>
<tr>
<td><strong>Visual to Aural Carrier Level Ratio</strong></td>
<td>10 to 17 db</td>
<td>10 to 17 db</td>
</tr>
<tr>
<td><strong>Adjacent Video Carrier Level Ratio</strong></td>
<td>3 db</td>
<td>3 db</td>
</tr>
<tr>
<td><strong>Maximum Video Carrier Level Difference</strong></td>
<td>15 db</td>
<td>10 db / 0-300 MHz</td>
</tr>
<tr>
<td><strong>Peak-to-Valley</strong></td>
<td>11 db / 301-400 MHz</td>
<td>12 db / 401-500 MHz</td>
</tr>
<tr>
<td>(Any db over the required #, Fails)</td>
<td>13 db / 501-600 MHz</td>
<td>14 db / 601-700 MHz</td>
</tr>
<tr>
<td></td>
<td>15 db / 701-800 MHz</td>
<td></td>
</tr>
<tr>
<td><strong>Carrier-to-Noise Ratio</strong></td>
<td>43 db and over (passes)</td>
<td>43 db and over (passes)</td>
</tr>
<tr>
<td>(under 43 fails)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hum Modulation</strong></td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>(Record Highest % in Test Points)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IN channel Frequency vs Gain</strong></td>
<td>+/- 1 db @ Headend</td>
<td>+/- 2 OVERALL</td>
</tr>
<tr>
<td></td>
<td>+/- 2 db</td>
<td></td>
</tr>
<tr>
<td><strong>CTB and CSO</strong></td>
<td>51 db</td>
<td>51 db</td>
</tr>
<tr>
<td><strong>Cross Modulation</strong></td>
<td>45 db</td>
<td>40 db</td>
</tr>
<tr>
<td><strong>Signal Leakage</strong></td>
<td>&lt;20 uv/m @ 10 feet</td>
<td>&lt;20 uv/m @ 10 feet</td>
</tr>
<tr>
<td><strong>C x</strong></td>
<td>&lt;55</td>
<td>&lt;64</td>
</tr>
</tbody>
</table>

* Audio Frequency Norm – Between 4.495 and 4.505
Channels Required for Testing

Each test point must be tested for aural frequency offset, carrier to noise, CSO, CTB, discrete beats, in-channel response, and hum on the following number of channels based on system bandwidth.

Also test two (digital QAM) channels for digital power and constellation uniformity (this is not required, but highly recommended)

<table>
<thead>
<tr>
<th>Number of Channels</th>
<th>Up to XX MHz (system analog bandwidth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>216</td>
</tr>
<tr>
<td>6</td>
<td>300</td>
</tr>
<tr>
<td>7</td>
<td>400</td>
</tr>
<tr>
<td>8</td>
<td>500</td>
</tr>
<tr>
<td>9</td>
<td>600</td>
</tr>
<tr>
<td>10</td>
<td>700</td>
</tr>
<tr>
<td>11</td>
<td>800</td>
</tr>
<tr>
<td>12</td>
<td>900</td>
</tr>
</tbody>
</table>

Note: test channel requirement is based on analog bandwidth, not full bandwidth. This is typically 550 MHz in upgraded systems requiring nine (9) test channels.

Select channels where the programmer provides multi-burst VITS for in-channel response testing, otherwise a VITS generator will be required.

This system utilizes < 550 MHz analog bandwidth; 9 test channels will be used for the tests.
Chapter 3 - Test Equipment List

FCC Part 76.601.1 An identification of the instruments, including the makes, model numbers, and the most recent date of calibration, a description of the procedures utilized, and a statement of the qualifications of the person performing the tests shall also be included.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Number</th>
<th>Most Recent Calibration</th>
<th>Serial Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP</td>
<td>8591c</td>
<td>09-04-08</td>
<td>3916A04384</td>
</tr>
<tr>
<td>Acterna (Wavtek)</td>
<td>4040D</td>
<td>07-29-08</td>
<td>4240082</td>
</tr>
<tr>
<td>JDSU</td>
<td>SDA-5000</td>
<td>09-04-08</td>
<td>0413408</td>
</tr>
<tr>
<td>Com Sonics</td>
<td>101129-001</td>
<td>N/A</td>
<td>C5F1906419C5</td>
</tr>
<tr>
<td>Scientific Atlanta</td>
<td>8511300</td>
<td>N/A</td>
<td>GF505BFDN</td>
</tr>
</tbody>
</table>

Notes:
Chapter 4 – Headend, Hubs, Test Point List

Requirements

- Headends up to 12,500 subscribers require six test points
- Headends from 12,501 to 25,000 subscribers require seven test points
- Headends from 25,001 subscribers require eight test points
- Add one test point for each additional 12,500 subscribers
- Microwave links require at least one test point
- Fiber links to remote hubs need to be represented by at least one of the total system test points
- Headend tests are also required at hubs, i.e. frequency counts on all channels, color tests, etc.

Headend Information

Headend Name: Sterling Headend
Headend Address: 45750 ELMWOOD CT. STERLING VA. 20166
Headend Phone Number(s): (703) 430-6826 voice, XXX-XXX-XXXX EAS Override.
Headend Coordinates: N 39 deg 00 min 45 seconds, W 77 deg 24 min 59 sec
Hubs: 2
FCC Tower Registration Number: N/A
FCC TVRO Registration Number: E6617EA
FCC Commercial Radio License Number: KNIG-884 (9912A048704)
EAS System(s): (2) MEGAHERTZ EAS4, SAGE EAS ENDEC
EAS FIPS Codes Serviced By Headend: 51107
EAS Stations Monitored: LP1 (WTOP 103.5), LP2 (WABD 99.8), NOAA (163.425)
Alerts Processed: Termination, Monthly Test, Weekly Test (log), Tornado Warning, Flood Warning, Severe Thunderstorm Warning, Winter Storm Warning, Blizzard Warning, *Local Government Override Provided
Field Test Point Information

Test Point ID: TP1
Address: 85 S. Bragg St
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX047
Tap Value:
Print Number: H-1
Notes:

Test Point ID: TP#2
Address: Tower Ct. & S. Whiting St.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX043
Tap Value:
Print Number: H-1
Notes:

Test Point ID: TP #3
Address: 1 N. Donelson St.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX113
Tap Value:
Print Number: H-5
Notes:
Test Point ID: TP #4
Address: Kenwood St. & Fern St.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX295
Tap Value:
Print Number: E-6
Notes:

Test Point ID: TP #5
Address: 1121 Allison St.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX356
Tap Value:
Print Number: E-7
Notes:

Test Point ID: TP #6
Address: 901 N. Kemper St
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX155
Tap Value:
Print Number: G-4
Notes:
Test Point ID: TP # 7
Address: 528 Bellvue Pl.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX487
Tap Value:
Print Number: G-10
Notes:

Test Point ID: TP # 8
Address: 5109 Gardner Dr.
Headend: Alexandria
Hub:
Pole Number: U/G
Cascade: Node
Laser Number:
Node Number: AX520
Tap Value: 20/8
Print Number: No Print
Notes:

Test Point ID: TP # 9
Address: 418 Bashford Ln.
Headend: Alexandria
Hub:
Pole Number: U/G
Cascade: Node
Laser Number:
Node Number: AX486
Tap Value: 20/8
Print Number: G-10
Notes:
Test Point ID: TP # 10
Address: 5465 Colfax Ave.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX192
Tap Value:
Print Number: C-3
Notes:

Test Point ID: TP # 11
Address: 2357 N. Early St.
Headend: Alexandria
Hub:
Pole Number:
Cascade: Node
Laser Number:
Node Number: AX290
Tap Value:
Print Number: E-5
Notes:

Test Point ID: TP # 12
Address: Headend
Headend: Alexandria
Hub:
Pole Number:
Cascade:
Laser Number:
Node Number:
Tap Value:
Print Number:
Notes:
Chapter 5 - Channel Carriage List

Include all DTV/DOCSIS channels/allocations including reverse frequencies (attach DTV list)

<table>
<thead>
<tr>
<th>Channel</th>
<th>Grade</th>
<th>Local, Weather, Ed Access, etc</th>
<th>Call Sign</th>
<th>Tiering</th>
<th>Origination City (Local, Satellite, etc)</th>
<th>Off Air</th>
<th>Tiering</th>
<th>Chan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>I</td>
<td></td>
<td>WGN</td>
<td>BASIC</td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>lb</td>
<td></td>
<td>WBDC</td>
<td>BASIC</td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>lb</td>
<td>NBC NETWORK AFFILIATE</td>
<td>WRC</td>
<td>BASIC</td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>lb</td>
<td>FOX NETWORK AFFILIATE</td>
<td>WTTG</td>
<td>BASIC</td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>6</td>
<td>I</td>
<td>OVC</td>
<td>QVC</td>
<td>BASIC</td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>74.000Mhz</td>
<td></td>
<td>CONVERTER DATA</td>
<td>N/A</td>
<td>N/A</td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>A-5/95 Ae</td>
<td></td>
<td>Reserved for In-House Cameras</td>
<td></td>
<td></td>
<td>CRAN</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>A-4/96 Ae</td>
<td>I</td>
<td></td>
<td>Digital QAM</td>
<td>Multiple</td>
<td>TIER</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>A-3/97 Ae</td>
<td>I</td>
<td></td>
<td>Digital QAM</td>
<td>Multiple</td>
<td>TIER</td>
<td>N/A</td>
<td>N/A</td>
<td>C</td>
</tr>
<tr>
<td>Channel</td>
<td>Network</td>
<td>Program</td>
<td>LO</td>
<td>Tier</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>----</td>
<td>------</td>
<td>------</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-1/99 Ae</td>
<td></td>
<td>Digital QAM</td>
<td>Multiple</td>
<td>TIER</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/14 Ae</td>
<td>UNIVISION</td>
<td></td>
<td></td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B/15 Ae</td>
<td>TELEFUTURA</td>
<td>WMDO</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C/16 Ae</td>
<td>TELEJINDEO</td>
<td>WZDC</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D/17 Ae</td>
<td>PAX DC</td>
<td>WPXW</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/18 Ae</td>
<td>ABC-FAMILY</td>
<td>WHUT</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/19 Ae</td>
<td>PBS</td>
<td></td>
<td></td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G/20 Ae</td>
<td>WQCA 20</td>
<td>WDCA</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H/21 Ae</td>
<td>Digital QAM</td>
<td></td>
<td></td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J/22 Ae</td>
<td>Digital QAM</td>
<td></td>
<td></td>
<td>CRAN</td>
<td>C</td>
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</tr>
<tr>
<td>7 J/23 Ae</td>
<td>ABC NETWORK AFFILIATE</td>
<td>WJLA</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 J/24 Ae</td>
<td>NEWS NETWORK 8</td>
<td>NEWSCO 8</td>
<td>BASIC</td>
<td>CRAN</td>
<td>C</td>
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Chapter 6 - Description of Test Procedures

FCC Part 76.601.1 An identification of the instruments, including the makes, model numbers, and the most recent date of calibration, a description of the procedures utilized, and a statement of the qualifications of the person performing the tests shall also be included.

*Note: Subscriber terminal is interpreted as the output of the set-top converter (all tests)*

**Carrier to Noise**

FCC Requirement

76.605 a 7

Carrier to Noise Ratio

"The ratio of RF visual signal level to system noise shall be as follows:

As of June 30, 1995, shall not be less than 43 decibels."

Area Specifics

- The signal level input must be high enough to insure the test equipment internal noise is not hindering carrier to noise readings.

- When using a signal level meter, the typical input level is 20 dBmv, or as stated in the operator’s manual.

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System Specific Notes:
Coherent Disturbances
Composite Triple Beat, Composite Second Order Beat, Discrete Beat Measurement

FCC Requirement
76.605 a 8 i, ii

Coherent Disturbances

"The ratio of visual signal level to the rms amplitude of any coherent disturbances such as intermodulation products, second and third order distortions or discrete-frequency interfering signals not operating on proper offset assignments shall be as follows:

The ratio of visual signal levels to coherent disturbances shall not be less than 51 decibels for noncoherent channel cable television systems, when measured with modulated carriers and time averaged; and

the ratio of visual signal level to coherent disturbances which are frequency-coincident with the visual carrier shall not be less than 47 decibels for coherent channel cable systems, when measured with modulated carriers and time averaged."

Area Specifics

The important thing to keep in mind about Coherent Disturbance tests is that it includes more than CSO and CTB. Automated CSO/CTB measurements are fine for some things but should not be used for proofs. The reason is that automated routines perform measurements only at the common CSO/CTB frequencies (that's at the video carrier, +/- 750 kHz, and +/- 1.25 MHz for the standard channel plan in the US).

Because a narrow resolution bandwidth filter and heavy video filtering is used for the test, it is necessarily slow. If you use automated techniques, you can have the channel out of service for longer than necessary and get the wrong numbers!

Carriers leaking out of the headend or ingress are common examples of coherent disturbances that would not be measured using automatic CSO and CTB procedures. For example, the local oscillator in the modulator or processor seven channels down from the channel under test might get into the system. This causes a color beat in the picture of the channel under test. It would not be measured using automated methods.

Fortunately, CD tests can be run properly, accurately, and quickly using semi-automated or manual methods.

Performing coherent disturbance tests properly, accurately, and quickly.

Don't use automated methods that only measure CSO and CTB. The key is to use manual or semi-automated methods that allow the operator to select the disturbance(s), if any, to be measured. This allows a check across the entire channel and measurement of only the largest disturbance(s). If no disturbances are visible, the channel can be returned to service immediately.

For one popular analyzer, this is the difference between having the channel out of service for more than 90 seconds (and still not doing a thorough test), and having it off for 10 seconds and doing the test properly! When disturbances are found, the largest one can be measured first, and assuming it meets the requirements, the channel can be returned to service in less than 30 seconds.

If you run coherent disturbance tests at the tap instead of at the output of a converter (get your "good engineering practices" statement ready), consider alternatives to using tunable preselector filters. It's very easy to make mistakes with tunable filters, especially when looking for signals across the entire channel bandwidth. Remember, the reason for the filter is to minimize intermodulation distortion (such as CSO and CTB) produced in the spectrum analyzer. With many of the newer analyzers, you don't need the filter if you keep the analyzer's input level in the 5 dBmV to 10 dBmV range. Alternatively, use a fixed tuned filter that is several channels wide. For example, a 100 MHz wide filter effectively reduces the number of channels to 16, dramatically reducing the likelihood of significant beats being generated in the analyzer.

- The input to the spectrum analyzer must be sufficient to overcome the noise of the test equipment (typically 20 dBmV or manufacturer's recommendation)
- The input to the spectrum analyzer must be sufficiently band-passed to prevent overloading in the spectrum analyzer.

- If a set top converter is used for band-passing, it must not have automatic gain control or frequency circuits. Base band converters cannot be used to measure composite beats.

System Specific Notes:
Hum
Low Frequency Distortion Measurements

FCC Requirement
76.605 a 10
Hum
"The peak to peak variation in visual signal level caused by undesired low frequency disturbances (hum or repetitive transients) generated within the system, or by inadequate low frequency response, shall not exceed 3 percent of the visual signal level. Measurements made on a single unmodulated carrier may be used to demonstrate compliance with this parameter at each test location."

Area Specifics
- Insure that there is sufficient level to meet the test equipment requirement for an accurate measurement.
- Always measure low-frequency distortions to 1 kHz. Just sixty and one-twenty cycles will not cover switching power supplies.
- Measure all channels at headend

System Specific Notes: