

AC 2008-1000: A COMPARISON OF SATELLITE AND FIBER OPTIC COMMUNICATIONS

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A Comparison of Satellite and Fiber Optic Communications

(The industry, market, future trends, and technology)

Abstract

This paper is to compare fiber optics and satellite communications. It begins with a brief history of fiber and satellite communications, followed by a technical discussion of the two types of communications media, focusing on their relative advantages and disadvantages, industry, market, technology and future trends.

On the political front, this paper looks at the United States legislation to speed up fiber connectivity in the disadvantaged areas of this country. On the international front, the paper examines fiber network developments from the Middle East to the Far East, and to Africa. Other topics covered in this paper are: Types of Satellites (GEO, MEO, LEO), Satellite Services, Frequency Allocations, Frequency Band Designations, Satellite Launching, Licensing, Properties of Satellite, Economic of Satellite, Media Summary, Satellite Market Survey, Optical Market in Asia, Reliability of Satellite, Satellite Launch Coast, Spacecraft Designations and Launch Dates, Future Global Satellite Market, Worldwide Successful Space Launches, and Existing and Planned Transoceanic Fiber Cables.

This paper is based on a book that I wrote about three years ago published by www.XanEdu.edu (ISBN# 1-59399-033-0).