

ROBERT AND KIMBERLY BROZ, PETITIONERS *v.* COMMISSIONER  
OF INTERNAL REVENUE, RESPONDENT

Docket No. 21629-06.

Filed July 7, 2011.

Ps were shareholders in a wholly owned S corporation (S) engaged in providing wireless cellular service. The parties dispute the length in years of the recovery period that S must use to calculate its annual depreciation deduction for the wireless cellular assets. Wireless cellular assets include antenna support structures, cell site equipment and leased digital equipment. *Held:* We apply the plain language of sec. 168, I.R.C., in interpreting classification issues of first impression. The plain language of Rev. Proc. 87-56, 1987-2 C.B. 674, the revenue procedure in effect for the years at issue, is unambiguous as it applies to S's wireless cellular assets. *Held:* The antenna support structures fall within asset class 48.14 with a recovery period of 15 years, as specified in Rev. Proc.

87–56, *supra*. The cell site equipment, excluding the switch, and the leased digital equipment fall within asset class 48.12 with a recovery period of 10 years. *Id.*

*Stephen W. Feldman* and *Eric T. Weiss*, for petitioners.  
*Meso T. Hammoud*, *Elizabeth Rebecca Edberg*, and *Steven G. Cappellino*, for respondent.

KROUPA, *Judge*: Respondent determined over \$16 million of deficiencies<sup>1</sup> in petitioners' Federal income tax for 1996, 1998, 1999, 2000 and 2001 (the years at issue).

In this report we decide whether RFB Cellular, Inc. (RFB), an S corporation petitioners wholly owned, is entitled to certain depreciation deductions for wireless cellular equipment. Specifically, we must determine whether petitioners properly classified antenna support structures, cell site equipment and leased digital equipment for depreciation purposes.<sup>2</sup> We find that they did not. A forthcoming report will address the remaining seven issues.

#### FINDINGS OF FACT

Some of the facts have been stipulated and are so found. We incorporate the stipulation of facts and the accompanying exhibits by this reference. Petitioners resided in Gaylord, Michigan at the time they filed the petition.

#### *Overview of RFB Cellular, Inc.*

Petitioner husband (petitioner) formed RFB Cellular, Inc. (RFB), a wholly owned S corporation, in 1991. RFB was engaged in providing wireless cellular service during the years at issue. Petitioner had many years of experience with the cellular industry before he formed RFB. He was president of Cellular Information Systems (CIS), a cellular company. Petitioner also served as a board member to the Cellular Telephone and Internet Association (CTIA) and was involved with lobbying efforts on behalf of the cellular industry.

<sup>1</sup> Respondent determined a \$100,003 deficiency for 1996, a \$4,671,608 deficiency for 1998, a \$3,385,533 deficiency for 1999, a \$4,954,056 deficiency for 2000, and a \$3,395,214 deficiency for 2001.

<sup>2</sup> We note that the Internal Revenue Service has since provided updated class life guidance for the ever-changing cellular service industry. Rev. Proc. 2011–22, 2011–18 I.R.B. 737, applies for years after the years at issue.

### *Overview of the Cellular Industry*

The Federal Communications Commission (FCC) administers the radio-frequency spectrum on which cellular carriers operate wireless networks. The FCC issues licenses for wireless networks to operate on specific broadcast frequencies on the spectrum. The licenses are further limited to a specific geographic area.

A cellular network is operated on a grid that divides the geographic region covered by the license into smaller cells (cell sites). The size of the cells depends on the anticipated amount of cellular traffic. In urban areas, the cells are smaller to maximize network capacity. In rural areas where capacity is less of a concern, such as those areas in Michigan where RFB operated its cellular networks, the cells are larger to provide more coverage. The cell site structure enables the cellular carrier to reuse a limited number of broadcast frequencies across the geographic region.

RFB provided cellular service to two license areas, and operated approximately 75 cell sites, on the Michigan peninsula during the years at issue. Most of RFB's revenue came from roaming charges for the use of the Michigan networks. RFB would make its networks available to customers of other carriers who were traveling within the geographic area of the licenses. RFB and other carriers sent their receivables and payables to a clearinghouse that would sort out the charges and payments and issue a bill to each carrier.

### *Operation of the Cellular Network*

The three basic components of a cellular network are (1) the base station, which includes towers, antennas and related electronic equipment; (2) transmission facilities between the base station and the switch; and (3) the switch. Cellular carriers added onto the existing assets to update from analog to digital cellular technology.

#### *A. The Antenna Support Structures*

Signals from the cellular user travel from the cellphone to the antenna. The antenna is mounted on a free-standing tower so that it can transmit and receive signals across great distances. The height of the tower also reduces interference with radio signals from trees and tall buildings. The tower

is strong enough to support the weight of the antenna and related equipment, plus accumulated ice and snow. The tower is also built to withstand high winds.

RFB constructed some of its towers on top of preexisting structures to prevent the obstruction of the antennas. RFB used the same towers for many years, and it would simply switch the antenna and related equipment when it stopped working or became obsolete.

### *B. The Base Station*

The base station is located at or near the base of the tower. The cell phone searches for a signal from the closest base station before a call is made. The signal from the base station is what gives the cell phone service or “bars”. The cell phone then sends a radio signal to the base station identifying the user and the user’s location. A radio transmitter in the cell phone converts the user’s speech into strings of ones and zeroes that can be transmitted as radio signals to the antenna.

The base station contains a two-way radio that converts the radio signal from the cellphone to a form that can be transmitted over wire or optical fiber to the switch. The radio also converts the signal from the switch to a radio signal that can be transmitted to the cellular user. The radio contains some computerized parts, including a computerized component that amplifies the radio signals. The base station contains some switching software so it can route the calls if the switch no longer functions.

The base station is housed in a small equipment shelter. RFB typically leased the land beneath the equipment shelters for 25 years, with 5-year renewals. The equipment shelters were prefabricated from concrete slabs and were approximately 8 to 10 feet wide by 10 to 12 feet long. The equipment shelters were very heavy, and, like the towers, they were designed to remain in service for many years. The equipment shelters did not need to be replaced when the base station equipment was replaced. Instead, RFB would simply switch out the base station equipment when it no longer functioned or became obsolete. The equipment shelters had air conditioning, temperature alarm systems, fire/smoke alarm systems, and intruder alarm systems.

### *C. The Switch*

The switch, which is the technological descendant of the switchboard, is a computer system that routes the cellular calls. Wireless calls are typically transmitted to the switch from the base station over a landline or radio network. The switch is connected to the landline and other carriers. It determines how to route the call based on the number that is dialed. The switch also maintains billing records and monitors the base stations. One switch can serve as many as 200 base stations.

#### *The Transition From Analog to Digital Technology*

RFB initially provided analog cellular service. It began, however, updating its equipment to provide digital service. The digital equipment could handle approximately eight times as many calls as the analog service. The digital technology also provided customers with additional services. These additional services included the ability to text, send pictures, download ring tones and access the Internet. Moreover, the FCC eventually required that all cellular carriers phase out analog service and upgrade to newer digital technology.

RFB acquired and installed the leased digital equipment so it was ready for use in 2000. RFB decommissioned its analog equipment soon after the FCC mandated the switch to digital.

#### *RFB's Returns for the Years at Issue*

RFB claimed depreciation deductions for wireless cellular equipment during the years at issue. RFB did not specifically identify the items being depreciated but instead classified items into generic categories, such as "switch equipment" and "cellular equipment".

RFB included all costs for towers, antennas, equipment shelters and related land improvements in the "antenna support structure" asset class. RFB depreciated the antenna support equipment over seven years under asset class 48.32. RFB classified a wide variety of equipment, including the switch and the base station, as "cell site equipment." RFB depreciated the cell site equipment over five to seven years under asset class 48.121. RFB depreciated the leased digital equipment over five years under asset class 48.121. RFB included

costs for concrete, excavating, steel, fencing and construction in the leased digital equipment category.

Respondent issued the deficiency notice disallowing the depreciation deductions. Respondent determined that the antenna structures should be depreciated over 15 years under asset class 48.14, rather than the seven years petitioners claimed. Respondent also determined that the cell site equipment and the leased digital equipment, other than the switch, should be depreciated over 10 years under asset class 48.12, rather than the five years petitioners claimed.

Petitioners timely filed a petition.

#### OPINION

We are asked to determine the appropriate class life for the ever-changing cellular phone industry. The parties disagree over the characterization of certain wireless cellular equipment for depreciation purposes. There are three categories of equipment at issue: (1) antenna support structures, (2) cell equipment and (3) leased digital equipment. We begin by discussing depreciation generally, then address each equipment category in turn.

#### *I. Depreciation Generally*

A reasonable allowance for depreciation is allowed under section 167<sup>3</sup> for the exhaustion, wear and tear, and obsolescence of property used in a trade or business or held for the production of income. The depreciation deduction is based on the adjusted basis of the property, as determined under section 1011 for the purpose of determining gain on the sale or other disposition of the property. Sec. 167(c).

Depreciation deductions were based on the estimated useful life of the property before 1981. The useful life was the period for which the taxpayer expected to use the asset in his or her trade or business, and did not necessarily correspond with the economic life of the asset. Sec. 1.167(a)-1(b), Income Tax Regs. Congress abandoned the useful life concept in 1981 and adopted the accelerated cost recovery system (ACRS) in effect today. See *Grinalds v. Commissioner*, T.C. Memo. 1993-66. ACRS allows greater depreciation for taxpayers

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<sup>3</sup>All section references are to the Internal Revenue Code in effect for the years in issue unless otherwise indicated.

through shortened depreciation periods and simplifies depreciation calculations by reducing the number of property classes. S. Rept. 97-44, at 47 (1981), 1981-2 C.B. 412, 425. Congress modified ACRS (MACRS) in 1986 by prescribing mandatory depreciation methods for each ACRS class. See *Grinalds v. Commissioner, supra*.

The Secretary has the authority to prescribe class lives for each class of property. See sec. 167(m).<sup>4</sup> The class lives are intended to reasonably reflect the anticipated useful life of that class of property to a particular industry or other group. *Id.* The guideline classes and periods (lives) are “established, supplemented, and revised” as necessary. Sec. 1.167(a)-11(b)(4)(ii), Income Tax Regs. The class lives of depreciable assets can be found in a series of revenue procedures issued by the Secretary. See *id.*

The revenue procedure in effect for the years at issue is Rev. Proc. 87-56, 1987-2 C.B. 674. Rev. Proc. 87-56, *supra*, divides assets into two broad categories: (1) Asset guideline classes 00.11 through 00.4, consisting of specific depreciable assets used in all business activities (the asset category), and (2) asset guideline classes 01.1 through 80.0, consisting of depreciable assets used in specific business activities (the activity category). The asset category takes priority over the activity category if an asset is listed in both categories. See *Norwest Corp. & Subs. v. Commissioner*, 111 T.C. 105, 158 (1998). “Telephone Communications” is listed as an activity in Rev. Proc. 87-56, 1987-2 C.B. at 684. The telephone communications category includes assets identified in asset classes 48.11 through 48.14 and used to provide commercial and contract telephone services. *Id.*

The various classes of telephone equipment are defined by reference to the FCC’s Uniform System of Accounts for Class A and Class B Telephone Companies (USOA).<sup>5</sup> *Id.*; see also 47

<sup>4</sup>Sec. 167(m) was deleted from the Code by the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508, sec. 11812(a)(1), 104 Stat. 1388-534. Sec. 167(m) essentially codified the Asset Depreciation Range system described in sec. 1.167(a)-11, Income Tax Regs., and in particular the system of asset guideline classes and periods found there. See H. Rept. 92-533, at 30-35 (1971), 1972-1 C.B. 498, 514-516; S. Rept. 92-437, at 45-52 (1971), 1972-1 C.B. 559, 584-588.

<sup>5</sup>Petitioners contend that respondent’s expert improperly relied on the FCC’s USOA classification to classify the cellular equipment. Petitioners’ argument overlooks that Rev. Proc. 87-56, 1987-2 C.B. 674, 684, specifically references the USOA classification regime. Rev. Proc. 87-56, *supra*, adopts the FCC’s classification regime for certain types of assets. We find the adoption reasonable given the FCC’s experience and expertise in telecommunications. Furthermore, the reference to the USOA in Rev. Proc. 87-56, *supra*, is a shorthand way of referring to related

C.F.R. pt. 31 (1986). Public utilities, like the wireless cellular industry, whose rates are often mandated by expenses, are routinely required to use uniform systems of accounting promulgated by regulatory agencies. See *Sprint Corp. & Subs. v. Commissioner*, 108 T.C. 384, 403 (1997) (citing *Pac. Enters. & Subs. v. Commissioner*, 101 T.C. 1 (1993)). The USOA is the uniform system of accounting that the FCC requires telecommunications companies to apply. See 47 C.F.R. pt. 32.1 (1986). The USOA classifies telephone communications equipment for accounting and depreciation purposes.

The USOA classifications were revised in 1988, the year after Rev. Proc. 87-56, *supra*, was issued.<sup>6</sup> See USOA Revision Order, 51 Fed. Reg. 43498 (Dec. 2, 1986). Property's present class life, however, is determined based on the class life applicable to such property as of a particular date, in this case January 1, 1986.<sup>7</sup> Accordingly, accounts in place as of that particular date control, even though the FCC has since redefined its accounts. See *Sprint Corp. & Subs. v. Commissioner*, *supra* at 404. Nevertheless, we will consider the 1988 revisions of the USOA classifications to the extent we find them helpful in interpreting the classifications in effect on January 1, 1986.

## II. Classification of the Equipment

We now turn to classification of the equipment. We must determine for the first time how certain wireless cellular equipment should be classified. In interpreting other classification issues of first impression, we have applied the plain language of the depreciation statutes and USOA classifications. *Id.* We will therefore apply the plain language to determine the proper classification of equipment category. We begin with the classification of the antenna support structures.

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types of equipment. The Secretary ultimately determines the class lives.

<sup>6</sup>The revision changed the relevant account numbers but did not make significant substantive changes to the classification categories.

<sup>7</sup>In *Sprint Corp. & Subs. v. Commissioner*, 108 T.C. 384, 402 (1997), the date was Jan. 1, 1981, pursuant to former sec. 168(g)(2). We noted that "One essential theme of the ACRS was predictable depreciation periods; that was accomplished by freezing in time the property classifications as they were on January 1, 1981. Until further amendment by Congress, there were to be no changes." *Id.* at 404. The applicable date is here Jan. 1, 1986, pursuant to sec. 168(i)(1).

### A. *The Antenna Support Structures*

RFB classified a broad range of wireless cellular equipment as “antenna supporting structures” under asset class 48.32, which it then depreciated over seven years.<sup>8</sup> Respondent contends that the class life should be adjusted to 15 years under asset class 48.14. RFB classified the equipment as antenna supporting structures under asset class 48.32 because the equipment was used to support the antennas and related equipment. Asset class 48.32 is in the Telegraph, Ocean Cable, and Satellite Communications (TOCSC) activity category. Asset class 48.32 therefore does not apply because the TOCSC activity category involves “domestic and international radio-telegraph, wire-telegraph, ocean-cable \* \* \* [or] satellite communications services.” Rev. Proc. 87-56, 1987-2 C.B. at 684.<sup>9</sup>

Instead, the equipment is more appropriately categorized in the “Telephone Communications” activity category. Petitioners claim the Telephone Communications activity category is too broad to apply to the wireless equipment at issue. They argue that comparing the wireless cellular equipment to equipment used by traditional landline telephone companies is tantamount to comparing a calculator to an abacus. They claim that respondent’s classification ignores the physical, technological and practical differences between the equipment. Petitioners argue further that wireless cellular equipment has a useful life that is “demonstrably shorter” than that of landline equipment. They may nonetheless not depreciate their equipment under a class life simply because they believe it better approximates the equipment’s useful life. See *Grinalds v. Commissioner*, T.C. Memo. 1993-66. Deductions are a matter of legislative grace, and petitioners are entitled to deduct only the amounts prescribed by Congress. See *INDOPCO, Inc. v. Commissioner*, 503 U.S. 79, 84 (1992).

<sup>8</sup>RFB characterized the equipment very broadly on its depreciation schedules. This Court bears heavily against taxpayers whose inexactitude is of their own making. See *Bogue v. Commissioner*, T.C. Memo. 2007-150.

<sup>9</sup>Moreover, even if the antenna support structures were properly classified as TOCSC property, they would have a class life of 24 years, rather than seven years as classified by petitioners. Rev. Proc. 87-56, 1987-2 C.B. at 684, states that if property described in the TOCSC classes “is comparable to telephone distribution plant described in Class 48.14 and used for the 2-way exchange of voice and data communication which is the equivalent of telephone communication, such property is assigned a class life of 24 years under this revenue procedure.”

Moreover, the plain language of Rev. Proc. 87-56, *supra*, is unambiguous as it applies to RFB's equipment. Assets in the Telephone Communications activity category are used to provide commercial and contract telephonic services, which petitioner provided during the years at issue. See *id.*, 1987-2 C.B. at 684. The relevant asset class for the antenna support structures is class 48.14. This class includes "telephone distribution plant" assets, which include "pole lines, cable, aerial wire, underground conduits, and comparable equipment." *Id.* The antenna support structures fit with the assets listed in asset class 48.14, because they provide structural support to the antennas and related equipment.

Furthermore, the antenna support structures are includable in asset class 48.14 by reference to the USOA. Asset class 48.14 includes "land improvements, as defined in FCC Part 31, Account 241." *Id.* Account 2411, which is the modified version of Account 241, includes "towers \* \* \* not associated with building", or otherwise freestanding. See 47 C.F.R. pt. 32.2411 (1988).<sup>10</sup> Respondent's expert testified that RFB's towers are appropriately classified as freestanding because the towers' association with various buildings was purely incidental. RFB installed towers on top of preexisting buildings where it was necessary to ensure that the antennas would be unobstructed. Regardless of where they were built, the towers were freestanding structures designed for the sole purpose of providing structural support to the antenna.<sup>11</sup>

We hold, accordingly, that the appropriate asset class for the antenna support structures is asset class 48.14. Assets in asset class 48.14 have a recovery period of 15 years. Rev. Proc. 87-56, 1987-2 C.B. at 684. We therefore sustain respondent's determination that petitioners improperly depreciated the antenna support structures over a period of 7 years.

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<sup>10</sup>The antenna support structures' present class life is determined based on the class life applicable to such property as of Jan. 1, 1986. Here we view the 1988 revisions of the USOA classifications as helpful in interpreting the classifications in effect on Jan. 1, 1986.

<sup>11</sup>Petitioners contend that the equipment shelters should not be included within asset class 48.14 because they are movable structures, and therefore cannot constitute land improvements. Petitioners have not provided any evidence, beyond their own self-serving testimony, that the equipment shelters were movable by design.

### B. *The Cell Site Equipment*

We now turn to classification of the cell site equipment. RFB characterized a wide variety of cell site equipment, including the base station and the switch, under the general category of “cell site equipment”. RFB classified the cell site equipment as computer-based telephone central office switching equipment (computer-based switching equipment) under asset class 48.121 and depreciated the equipment using a 5-year life. Respondent concedes that petitioner properly classified the switch as computer-based switching equipment under asset class 48.121. Respondent contends that the remaining cell site equipment, including the base station, should be classified as telephone central office equipment under asset class 48.12. <sup>12</sup> Petitioners argue that the base station should be included in asset class 48.121 because it has some of the same equipment and can perform some of the same functions as the switch.

Asset classes 48.121 and 48.12 both apply to telephone central office switching equipment. The major distinction between the two asset classes is that asset class 48.121 “includes equipment whose functions are those of a computer or peripheral equipment”. *Id.* The term “computer” refers to a programmable electronically activated device that (1) is capable of accepting information, applying prescribed processes to the information, and supplying the results of these processes with or without human intervention, and (2) consists of a central processing unit containing extensive storage. See sec. 168(i)(2)(B)(ii). “Related peripheral equipment” includes any equipment designed to be placed under the control of the central processing unit of a computer. Sec. 168(i)(2)(B)(iii).

Petitioners argue that the remaining cell site equipment qualifies as computer equipment because it contains computerized parts. They emphasize that the radio uses the computer processing system of converting transmissions into ones and zeroes. Many devices, including cars and CD players, use the same computer processing system. We agree

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<sup>12</sup>We note that the revenue procedure in effect for taxable years ending on or after Dec. 31, 2010, now classifies the “base station controller (or generational equivalent) \* \* \* [and the] base transceiver station (or generational equivalent)” in asset class 48.121 with a recovery period of five years. Rev. Proc. 2011-22, 2011-18 I.R.B. at 738.

with respondent that, under petitioners' analysis, virtually every asset in today's increasingly computerized world would be labeled a computer.

Moreover, even though the remaining equipment included some computerized parts, the equipment is not a computer. See sec. 168(i)(2)(B). The key component of the base station and other cell site equipment was the radio. The primary purpose of the radio was to transmit cellular communications between the cell phone and the switch. The radio itself did not employ computer processing, nor did it contain a central processing unit containing extensive storage. We find it compelling that even though the base station contained some of the same software as the switch, which is classified as a computer, the base station did not have the computer system or storage capacity to keep billing records. Furthermore, the radio technology has functioned for many years without the use of computerized parts, suggesting that those parts are only ancillary. The presence of some computerized components therefore does not qualify the remaining cell site equipment as computer-based.

Finally, the plain language of Rev. Proc. 87-56, 1987-2 C.B. at 684, places the remaining cell site equipment in asset class 48.12. Asset class 48.12, "telephone central office equipment", includes "central office switching and related equipment as defined in \* \* \* [USOA] Account No. 221" such as "radio transmitters and receivers." See 47 C.F.R. pt. 32.2231 (1988).

We find that the remaining cell site equipment, including the base station, is instead covered by asset class 48.12, which has a recovery period of ten years. See *id.* We therefore sustain respondent's determination that petitioners improperly depreciated the cell site equipment over a period of five years.

### *C. The Leased Digital Equipment*

We now turn to the leased digital equipment. RFB classified a wide variety of digital equipment, including the base station, the switch, and the antenna support structures, as computer-based switching equipment under asset class 48.121. RFB depreciated all the digital equipment over five years under asset class 48.121. The digital equipment comprised

some of the same assets as the analog equipment. We find therefore, for the reasons cited previously, that the switch has a 5-year class life under asset class 48.121 and the remaining cell site equipment has a class life of ten years under asset class 48.12. The towers and related land improvements have a class life of 15 years under asset class 48.14.

Furthermore, depreciation does not begin until the asset is placed in service. See sec. 168(d). An asset is placed in service when it is “acquired and put into use.” *Wilson v. Commissioner*, T.C. Memo. 2002–61, affd. 71 Fed. Appx. 623 (9th Cir. 2003). Petitioners therefore may not claim any depreciation deductions for the leased digital equipment until 2000.

Additional issues are being addressed in a forthcoming opinion.

