# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

**(Mark One):**

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.**
**For the quarterly period ended June 30, 2020**

**OR**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.**
**For the transition period from __________ to __________**

**Commission File Number: 001-35975**

# Gogo Inc.
(Exact name of registrant as specified in its charter)

| | |
|---|---|
| **Delaware** | **27-1650905** |
| (State or other jurisdiction of Incorporation or Organization) | (I.R.S. Employer Identification No.) |

**111 North Canal St., Suite 1500**
**Chicago, IL 60606**
(Address of principal executive offices)

**Telephone Number (312) 517-5000**
(Registrant's telephone number, including area code)

**Securities registered pursuant to Section 12(b) of the Act:**

| Title of Class | Trading Symbol | Name of Each Exchange on Which Registered |
|---|---|---|
| Common stock, par value $0.0001 per share | GOGO | NASDAQ Global Select Market |

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|---|---|---|---|
| Large accelerated filer | ☐ | Accelerated filer | ☑ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☐ |
| | | Emerging growth company | ☐ |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

As of August 7, 2020, 85,063,638 shares of $0.0001 par value common stock were outstanding.

**Gogo Inc.**

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## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

**Gogo Inc. and Subsidiaries**
**Unaudited Condensed Consolidated Balance Sheets**
*(in thousands, except share and per share data)*

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| **Assets** | | |
| **Current assets:** | | |
| Cash and cash equivalents | $ 156,286 | $ 170,016 |
| Accounts receivable, net of allowances of $5,048 and $686, respectively | 71,684 | 101,360 |
| Inventories | 130,092 | 117,144 |
| Prepaid expenses and other current assets, net of allowances of $1,491 and $0, respectively | 32,411 | 36,305 |
| **Total current assets** | 390,473 | 424,825 |
| **Non-current assets:** | | |
| Property and equipment, net | 463,147 | 560,318 |
| Goodwill and intangible assets, net | 74,407 | 76,499 |
| Operating lease right-of-use assets | 56,173 | 63,386 |
| Other non-current assets, net of allowances of $9,568 and $0, respectively | 80,615 | 89,672 |
| **Total non-current assets** | 674,342 | 789,875 |
| **Total assets** | $ 1,064,815 | $ 1,214,700 |
| **Liabilities and Stockholders' deficit** | | |
| **Current liabilities:** | | |
| Accounts payable | $ 41,412 | $ 17,160 |
| Accrued liabilities | 147,344 | 174,111 |
| Deferred revenue | 29,689 | 34,789 |
| Deferred airborne lease incentives | 73,166 | 26,582 |
| **Total current liabilities** | 291,611 | 252,642 |
| **Non-current liabilities:** | | |
| Long-term debt | 1,118,602 | 1,101,248 |
| Deferred airborne lease incentives | 89,283 | 135,399 |
| Non-current operating lease liabilities | 80,983 | 77,808 |
| Other non-current liabilities | 53,353 | 46,493 |
| **Total non-current liabilities** | 1,342,221 | 1,360,948 |
| **Total liabilities** | 1,633,832 | 1,613,590 |
| **Commitments and contingencies (Note 13)** | - | - |
| **Stockholders' deficit** | | |
| Common stock, par value $0.0001 per share; 500,000,000 shares authorized at June 30, 2020 and December 31, 2019; 84,058,310 and 88,292,821 shares issued at June 30, 2020 and December 31, 2019, respectively; and 84,032,343 and 88,240,877 shares outstanding at June 30, 2020 and December 31, 2019, respectively | 8 | 9 |
| Additional paid-in-capital | 1,085,254 | 979,499 |
| Accumulated other comprehensive loss | (4,858) | (2,256) |
| Treasury stock, at cost | (98,857) | - |
| Accumulated deficit | (1,550,564) | (1,376,142) |
| **Total stockholders' deficit** | (569,017) | (398,890) |
| **Total liabilities and stockholders' deficit** | $ 1,064,815 | $ 1,214,700 |

*See the Notes to Unaudited Condensed Consolidated Financial Statements*

**Gogo Inc. and Subsidiaries**
**Unaudited Condensed Consolidated Statements of Operations**
*(in thousands, except per share amounts)*

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| **Revenue:** | | | | |
| Service revenue | $ 74,279 | $ 173,731 | $ 225,061 | $ 338,743 |
| Equipment revenue | 22,361 | 39,954 | 56,054 | 74,491 |
| **Total revenue** | 96,640 | 213,685 | 281,115 | 413,234 |
| **Operating expenses:** | | | | |
| Cost of service revenue (exclusive of items shown below) | 42,223 | 71,494 | 112,978 | 139,615 |
| Cost of equipment revenue (exclusive of items shown below) | 15,376 | 35,571 | 41,416 | 65,302 |
| Engineering, design and development | 15,409 | 26,912 | 38,272 | 51,640 |
| Sales and marketing | 5,880 | 12,994 | 15,532 | 25,312 |
| General and administrative | 22,505 | 27,081 | 49,671 | 49,535 |
| Impairment of long-lived assets | 987 | - | 47,376 | - |
| Depreciation and amortization | 48,690 | 29,967 | 81,360 | 60,716 |
| **Total operating expenses** | 151,070 | 204,019 | 386,605 | 392,120 |
| **Operating income (loss)** | (54,430) | 9,666 | (105,490) | 21,114 |
| **Other (income) expense:** | | | | |
| Interest income | (81) | (1,230) | (687) | (2,379) |
| Interest expense | 31,280 | 36,150 | 62,454 | 68,704 |
| Loss on extinguishment of debt | - | 57,962 | - | 57,962 |
| Other (income) expense | 233 | 443 | 3,226 | (2,922) |
| **Total other expense** | 31,432 | 93,325 | 64,993 | 121,365 |
| **Loss before income taxes** | (85,862) | (83,659) | (170,483) | (100,251) |
| Income tax provision | 117 | 304 | 274 | 511 |
| **Net loss** | $ (85,979) | $ (83,963) | $ (170,757) | $ (100,762) |
| **Net loss attributable to common stock per share—basic and diluted** | $ (1.05) | $ (1.04) | $ (2.10) | $ (1.25) |
| **Weighted average number of shares—basic and diluted** | 81,757 | 80,702 | 81,482 | 80,575 |

*See the Notes to Unaudited Condensed Consolidated Financial Statements*

**Gogo Inc. and Subsidiaries**
**Unaudited Condensed Consolidated Statements of Comprehensive Loss**
*(in thousands)*

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| **Net loss** | $ (85,979) | $ (83,963) | $ (170,757) | $ (100,762) |
| Currency translation adjustments, net of tax | 269 | 927 | (2,602) | 1,337 |
| **Comprehensive loss** | $ (85,710) | $ (83,036) | $ (173,359) | $ (99,425) |

*See the Notes to Unaudited Condensed Consolidated Financial Statements*

# Gogo Inc. and Subsidiaries
## Unaudited Condensed Consolidated Statements of Cash Flows
*(in thousands)*

| | For the Six Months Ended June 30, 2020 | 2019 |
|---|---|---|
| **Operating activities:** | | |
| **Net loss** | $ (170,757) | $ (100,762) |
| Adjustments to reconcile net loss to cash provided by (used in) operating activities: | | |
| Depreciation and amortization | 81,360 | 60,716 |
| Loss on asset disposals, abandonments and write-downs | 1,403 | 4,425 |
| Provision for expected credit losses | 11,875 | 4,825 |
| Impairment of long-lived assets | 47,376 | - |
| Impairment of cost-basis investment | 3,000 | - |
| Deferred income taxes | 89 | 89 |
| Stock-based compensation expense | 7,159 | 8,645 |
| Amortization of deferred financing costs | 2,872 | 2,573 |
| Accretion and amortization of debt discount and premium | 6,762 | 8,374 |
| Loss on extinguishment of debt | - | 57,962 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | 24,961 | 15,905 |
| Inventories | (12,948) | (5,297) |
| Prepaid expenses and other current assets | 5,720 | 6,409 |
| Contract assets | (13,152) | (20,313) |
| Accounts payable | 25,689 | 5,736 |
| Accrued liabilities | (24,053) | (6,877) |
| Deferred airborne lease incentives | (11,711) | (1,486) |
| Deferred revenue | (1,500) | (3,858) |
| Accrued interest | (5) | (28,375) |
| Warranty reserves | (715) | 948 |
| Right-of-use assets and operating lease liabilities | 3,205 | (1,756) |
| Other non-current assets and liabilities | 4,814 | (2,348) |
| **Net cash provided by (used in) operating activities** | (8,556) | 5,535 |
| **Investing activities:** | | |
| Purchases of property and equipment | (13,931) | (33,598) |
| Acquisition of intangible assets—capitalized software | (7,170) | (8,647) |
| Redemptions of short—term investments | - | 39,323 |
| Other, net | 89 | 360 |
| **Net cash used in investing activities** | (21,012) | (2,562) |
| **Financing activities:** | | |
| Proceeds from credit facility draw | 22,000 | - |
| Repayments of amounts drawn from credit facility | (5,000) | - |
| Repurchase of convertible notes | (2,498) | (158,954) |
| Proceeds from issuance of senior secured notes | - | 920,683 |
| Redemption of senior secured notes | - | (741,360) |
| Payment of debt issuance costs | - | (22,645) |
| Payments on financing leases | (310) | (383) |
| Stock-based compensation activity | (262) | (178) |
| **Net cash provided by (used in) financing activities** | 13,930 | (2,837) |
| Effect of exchange rate changes on cash | (90) | (378) |
| **Decrease in cash, cash equivalents and restricted cash** | (15,728) | (242) |
| Cash, cash equivalents and restricted cash at beginning of period | 177,675 | 191,116 |
| **Cash, cash equivalents and restricted cash at end of period** | $ 161,947 | $ 190,874 |
| Cash, cash equivalents and restricted cash at end of period | $ 161,947 | $ 190,874 |
| Less: current restricted cash | 560 | 1,035 |
| Less: non-current restricted cash | 5,101 | 7,972 |
| **Cash and cash equivalents at end of period** | $ 156,286 | $ 181,867 |
| **Supplemental Cash Flow Information:** | | |
| Cash paid for interest | $ 53,080 | $ 86,420 |
| Cash paid for taxes | 56 | 412 |
| **Noncash Investing and Financing Activities:** | | |
| Purchases of property and equipment in current liabilities | $ 5,637 | $ 16,014 |
| Purchases of property and equipment paid by commercial airlines | 6,086 | 9,914 |

*See the Notes to Unaudited Condensed Consolidated Financial Statements*

**Gogo Inc. and Subsidiaries**
**Unaudited Condensed Consolidated Statements of Stockholders' Equity (Deficit)**
**(in thousands, except share data)**

| | For the Three Months Ended June 30, 2020 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Common Stock | | Additional Paid-In Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Treasury Stock | | Total |
| | Shares | Par Value | | | | Shares | Amount | |
| **Balance at March 31, 2020** | 83,773,648 | $ 8 | $ 1,081,955 | $ (5,127) | $ (1,464,585) | 5,077,400 | $ (98,857) | $ (486,606) |
| Net loss | - | - | - | - | (85,979) | - | - | (85,979) |
| Currency translation adjustments, net of tax | - | - | - | 269 | - | - | - | 269 |
| Stock-based compensation expense | - | - | 3,164 | - | - | - | - | 3,164 |
| Issuance of common stock upon vesting of restricted stock units and restricted stock awards | 118,938 | - | - | - | - | - | - | - |
| Tax withholding related to vesting of restricted stock units | - | - | (127) | - | - | - | - | (127) |
| Issuance of common stock in connection with employee stock purchase plan | 139,757 | - | 262 | - | - | - | - | 262 |
| **Balance at June 30, 2020** | 84,032,343 | $ 8 | $ 1,085,254 | $ (4,858) | $ (1,550,564) | 5,077,400 | $ (98,857) | $ (569,017) |

| | For the Three Months Ended June 30, 2019 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Common Stock | | Additional Paid-In Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Treasury Stock | | Total |
| | Shares | Par Value | | | | Shares | Amount | |
| **Balance at March 31, 2019** | 87,797,614 | $ 9 | $ 967,727 | $ (3,144) | $ (1,248,566) | - | $ - | $ (283,974) |
| Net loss | - | - | - | - | (83,963) | - | - | (83,963) |
| Currency translation adjustments, net of tax | - | - | - | 927 | - | - | - | 927 |
| Stock-based compensation expense | - | - | 4,318 | - | - | - | - | 4,318 |
| Issuance of common stock upon vesting of restricted stock units and restricted stock awards | 183,446 | - | - | - | - | - | - | - |
| Tax withholding related to vesting of restricted stock units | - | - | (456) | - | - | - | - | (456) |
| Issuance of common stock in connection with employee stock purchase plan | 81,905 | - | 336 | - | - | - | - | 336 |
| Repurchase of 2020 Convertible Notes | - | - | (795) | - | - | - | - | (795) |
| **Balance at June 30, 2019** | 88,062,965 | $ 9 | $ 971,130 | $ (2,217) | $ (1,332,529) | - | $ - | $ (363,607) |

*See the Notes to Unaudited Condensed Consolidated Financial Statements*

**Gogo Inc. and Subsidiaries**
**Unaudited Condensed Consolidated Statements of Stockholders' Equity (Deficit)**
**(in thousands, except share data)**

| | For the Six Months Ended June 30, 2020 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Common Stock | | Additional Paid-In Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Treasury Stock | | Total |
| | Shares | Par Value | | | | Shares | Amount | |
| **Balance at January 1, 2020** | 88,240,877 | $ 9 | $ 979,499 | $ (2,256) | $ (1,376,142) | - | $ - | $ (398,890) |
| Net loss | - | - | - | - | (170,757) | - | - | (170,757) |
| Currency translation adjustments, net of tax | - | - | - | (2,602) | - | - | - | (2,602) |
| Stock-based compensation expense | - | - | 7,159 | - | - | - | - | 7,159 |
| Issuance of common stock upon vesting of restricted stock units and restricted stock awards | 641,428 | - | - | - | - | - | - | - |
| Tax withholding related to vesting of restricted stock units | - | - | (809) | - | - | - | - | (809) |
| Issuance of common stock in connection with employee stock purchase plan | 227,438 | - | 547 | - | - | - | - | 547 |
| Settlement of prepaid forward shares | (5,077,400) | (1) | 98,858 | | | 5,077,400 | (98,857) | - |
| Impact of the adoption of new accounting standards | - | - | - | - | (3,665) | - | - | (3,665) |
| **Balance at June 30, 2020** | 84,032,343 | $ 8 | $ 1,085,254 | $ (4,858) | $ (1,550,564) | 5,077,400 | $ (98,857) | $ (569,017) |

| | For the Six Months Ended June 30, 2019 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Common Stock | | Additional Paid-In Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Treasury Stock | | Total |
| | Shares | Par Value | | | | Shares | Amount | |
| **Balance at January 1, 2019** | 87,560,694 | $ 9 | $ 963,458 | $ (3,554) | $ (1,228,674) | - | $ - | $ (268,761) |
| Net loss | - | - | - | - | (100,762) | - | - | (100,762) |
| Currency translation adjustments, net of tax | - | - | - | 1,337 | - | - | - | 1,337 |
| Stock-based compensation expense | - | - | 8,645 | - | - | - | - | 8,645 |
| Issuance of common stock upon vesting of restricted stock units and restricted stock awards | 345,113 | - | - | - | - | - | - | - |
| Tax withholding related to vesting of restricted stock units | - | - | (807) | - | - | - | - | (807) |
| Issuance of common stock in connection with employee stock purchase plan | 157,158 | - | 629 | - | - | - | - | 629 |
| Repurchase of 2020 Convertible Notes | - | - | (795) | - | - | - | - | (795) |
| Impact of the adoption of new accounting standards | - | - | - | - | (3,093) | - | - | (3,093) |
| **Balance at June 30, 2019** | 88,062,965 | $ 9 | $ 971,130 | $ (2,217) | $ (1,332,529) | - | $ - | $ (363,607) |

*See the Notes to Unaudited Condensed Consolidated Financial Statements*

## 1. Basis of Presentation

***The Business*** - Gogo ("we," "us," "our") is the global leader in providing broadband connectivity solutions and wireless in-flight entertainment to the aviation industry. We operate through the following three reportable segments: Commercial Aviation North America, or "CA-NA," Commercial Aviation Rest of World, or "CA-ROW," and Business Aviation, or "BA." Services provided by our CA-NA and CA-ROW businesses include Passenger Connectivity, which allows passengers to connect to the Internet from their personal Wi-Fi-enabled devices; Passenger Entertainment, which offers passengers the opportunity to enjoy a broad selection of in-flight entertainment options on their personal Wi-Fi enabled devices; and Connected Aircraft Services ("CAS"), which offers airlines connectivity for various operations and currently include, among other services, real-time credit card transaction processing, electronic flight bags and real-time weather information. Services are provided by CA-NA on commercial aircraft flying routes that generally begin and end within North America, which for this purpose includes the United States, Canada and Mexico. CA-ROW provides service on commercial aircraft operated by foreign-based commercial airlines and flights outside of North America for North American-based commercial airlines. The routes included in our CA-ROW segment are those that begin and/or end outside of North America (as defined above) on which our international service is provided. BA provides in-flight Internet connectivity and other voice and data communications products and services and sells equipment for in-flight telecommunications to the business aviation market. BA services include Gogo Biz, our in-flight broadband service, Passenger Entertainment, our in-flight entertainment service, and satellite-based voice and data services through our strategic alliances with satellite companies.

***Basis of Presentation*** - The accompanying unaudited condensed consolidated financial statements and notes have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and in conformity with Article 10 of Regulation S-X promulgated under the Securities Act of 1933, as amended (the "Securities Act"). Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements and should be read in conjunction with our annual audited consolidated financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2019 as filed with the Securities and Exchange Commission ("SEC") on March 13, 2020 (the "2019 10-K"). These unaudited condensed consolidated financial statements reflect, in the opinion of management, all material adjustments (which include normal recurring adjustments) necessary to fairly state, in all material respects, our financial position, results of operations and cash flows for the periods presented.

The results of operations and cash flows for the three and six month periods ended June 30, 2020, including the impact of COVID-19, are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2020.

We have one class of common stock outstanding as of June 30, 2020 and December 31, 2019.

***Reclassifications*** **–** To conform with the current year presentation, $4,825 thousand of bad debt expense has been reclassified to a separate line from accounts receivable in our unaudited condensed consolidated statement of cash flows for the six month period ended June 30, 2019. Additionally, to conform with the current year presentation, $1,338 thousand and $418 thousand have been reclassified from Other non-current assets and liabilities and Accrued liabilities, respectively, to Right-of-use assets and operating lease liabilities in our statement of cash flows for the six month period ended June 30, 2019.

***Use of Estimates*** - The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates the significant estimates and bases such estimates on historical experience and on various other assumptions believed to be reasonable under the circumstances. However, actual results could differ materially from those estimates.

During the second quarter of 2020, our agreement with Delta Air Lines, Inc. ("Delta") to provide 2Ku service on certain Delta aircraft was amended to change the contract expiration date from February 2027 with respect to all aircraft to a staggered, fleet by fleet expiration schedule under which expiration dates will occur between November 2020 and July 2022 (the "Delta amendment"). As a result, the useful lives of the equipment installed on these fleets have been shortened to align with the expiration dates in the amended agreement. The change in estimated useful lives resulted in approximately $13.9 million of accelerated depreciation during the three and six month periods ended June 30, 2020. Additionally, the amortization periods for the remaining deferred airborne lease incentives, which is a reduction to cost of service revenue in our unaudited condensed consolidated statements of operations, associated with the equipment installed on the 2Ku fleets have been shortened to align with the new expiration dates, which resulted in approximately $6 million of accelerated amortization during the three and six month periods ended June 30, 2020.

## 2. Impact of COVID-19 Pandemic

In December 2019, a novel strain of coronavirus ("COVID-19") was reported in Wuhan, China, and the World Health Organization (the "WHO") subsequently declared COVID-19 a "Public Health Emergency of International Concern." The COVID-19 pandemic has caused a significant decline in commercial and business air travel, which has materially and adversely affected our business.

In our two commercial airline ("CA") segments, CA-NA and CA-ROW, passenger traffic on commercial airlines started to decline significantly in late March 2020 and while it has increased somewhat from mid-April lows, it has continued to be significantly below pre-COVID levels through July 2020. Our business aviation segment, BA, also saw a sharp decrease in flight activity, as well as an increase in requests for account suspensions and decreases in new plan activations. In BA, we are seeing positive signs that the business is recovering from mid-April lows, including increased flights, activations and sales in the months of June and July 2020. The duration and severity of the reduction in travel demand due to the COVID-19 pandemic in all three segments is uncertain. In CA, we expect these trends to continue until the global pandemic has moderated and demand for air travel returns. In BA, there can be no assurance that the recovery observed to date will continue.

In response to the significant decline in revenue caused by the pandemic, we have implemented the following liquidity-preservation initiatives:

- *Personnel actions* – We implemented several cost-cutting measures related to personnel, including a hiring freeze, a suspension of 2020 merit salary increases and a modification of the 2020 bonus program allowing awards to be paid in stock or a combination of stock and cash at our option. Additionally, the Chief Executive Officer's 2019 bonus payout was deferred and in July 2020 the Chief Executive Officer accepted common stock in lieu of cash for the after-tax portion of his 2019 bonus. We also furloughed approximately 54% of our workforce beginning May 4, 2020. Additionally, on July 30, 2020, we announced a reduction in force of approximately 14% of our workforce, effective August 14, 2020. Furloughed employees not affected by the reduction in force will return to full time work on August 31, 2020. Effective on May 4, 2020, we reduced compensation for salaried employees who were not furloughed. Salary reductions, which will be effective at least through the end of 2020, begin at 30% for the Chief Executive Officer, then 20% for the executive leadership team and reducing downward by staff level from there. In addition, the compensation for the members of our Board of Directors has been reduced by 30% for the last three quarters of 2020.
- *Expense management* – We have identified and are implementing or continuing to pursue action plans / levers in areas not involving personnel to further reduce costs, including the following:
    - Renegotiating terms with suppliers, including agreements executed with satellite capacity providers to reduce and defer payments;
    - Deferring purchases of capital equipment;
    - Delaying aircraft equipment installations;
    - Reducing marketing, travel and other non-essential spend; and
    - Renegotiating terms with airline partners.
- *Financing* – In March 2020, we drew $22 million under the ABL Credit Facility and in the second quarter we repaid $5 million of such amount. As of June 30, 2020, $17 million was outstanding and less than $1 million remained available for borrowing under the terms of the agreement that would allow for the company to meet the "payment conditions" criteria as described in our ABL Credit Agreement. See Note 10, "Long-Term Debt and Other Liabilities," for additional information.
- *Government Assistance* – We applied for an $81 million grant and a $150 million loan under the recently enacted Coronavirus Aid, Relief and Economic Security Act (the "CARES Act"). Based on criteria recently released by the U.S. Treasury Department, we do not believe that we will qualify for a loan, although we have not received a formal determination. If we receive grant assistance, we will be subject to certain restrictions and will likely be required to modify the personnel actions discussed above to comply with the terms of the government assistance.

We expect COVID-19 to continue to have a significant negative impact on our revenue and we are unable to predict how long that impact will continue. The extent of the impact of COVID-19 on our CA and BA businesses and our financial and operational performance will depend on future developments, including the duration, spread and severity of the outbreak, the duration and geographic scope of related travel advisories and restrictions and the extent of the impact of COVID-19 on overall demand for commercial and business aviation travel, all of which are highly uncertain and cannot be predicted. We are unable to predict how long the pandemic and its negative impact will persist, what additional measures may be introduced by governments or private parties or what effect any such additional measures may have on air travel, our business partners and our business. Not only is the duration of the pandemic and future combative measures unknown, the overall situation is extremely fluid, and it is impossible to predict the timing of future material changes in the situation and whether the Company's actions in response will be sufficient or successful. However, based on our current plans, including the measures taken in our response to COVID-19, we believe that our cash and cash equivalents and cash flows provided by operating activities will be sufficient to meet our operating obligations, including our capital expenditure requirements, for at least the next twelve months.

*Impairment assessments* - We review our long-lived assets and indefinite-lived intangible assets for potential impairment whenever events indicate that the carrying amount of such assets may not be recoverable. We conducted a review as of March 31, 2020 and June 30, 2020 in light of the COVID-19 pandemic and its impact on air travel, and recorded impairment charges for the three and six month periods ended June 30, 2020 with respect to certain long-lived assets. We are continuously monitoring the COVID-19 pandemic and its impact. If the impact of the pandemic exceeds management's estimates, we could incur additional material impairment charges in future periods. See Note 7, "Composition of Certain Balance Sheet Accounts," for additional information on our long-lived assets and Note 8, "Intangible Assets," for additional information on our indefinite-lived assets.

*Credit Losses* **—** We regularly evaluate our accounts receivable and contract assets for expected credit losses and recorded credit losses for the three and six month periods ended June 30, 2020. We are continuously monitoring our assumptions used to determine our expected credit losses, including the impact of the COVID-19 pandemic, which could cause us to record additional material credit losses in future periods. See Note 9, "Composition of Certain Reserves and Allowances," for additional information.

## 3. Recent Accounting Pronouncements

*Accounting standards adopted:*

On January 1, 2020, we adopted ASU 2016-13, *Financial Instruments-Credit Losses (ASC 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost.

The cumulative effect adjustment from using the modified retrospective approach for the adoption of ASC 326 impacted our unaudited condensed consolidated balance sheet as of January 1, 2020 by the recognition of allowance for credit losses as summarized below:

| | Balance at December 31, 2019 | Impact of ASC 326 | Balances with Adoption of ASC 326 |
|---|---|---|---|
| **Assets** | | | |
| Accounts receivable | 101,360 | (1,386) | 99,974 |
| Prepaid and other current assets | 36,305 | (356) | 35,949 |
| Other non-current assets | 89,672 | (1,923) | 87,749 |
| **Equity** | | | |
| Accumulated deficit | (1,376,142) | (3,665) | (1,379,807) |

See Note 9, "Composition of Certain Reserves and Allowances," for additional information.

On January 1, 2020, we adopted ASU 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"), which requires an entity in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. Adoption of this standard did not have a material impact on our unaudited condensed consolidated financial statements.

On January 1, 2020, we adopted ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"), which modifies the disclosure requirements related to recurring or nonrecurring fair value measurements. Currently all of our fair value measurements are classified as Level 2 within the fair value hierarchy, and as such, the adoption of this standard did not have an impact on our unaudited condensed consolidated financial statements. See Note 14, "Fair Value of Financial Assets and Liabilities," for additional information.

*New pronouncements:*

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU 2020-04"), which provides optional expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships and other transactions affected by the discontinuation of the London Interbank Offered Rate (LIBOR) and other interbank offered rates. This guidance is effective beginning on March 12, 2020 through December 31, 2022. We do not currently believe that the adoption of this standard will have a material impact on our consolidated financial statements.

## 4. Revenue Recognition

### Arrangements with commercial airlines

For CA-NA and CA-ROW, pursuant to contractual agreements with our airline partners, we place our equipment on commercial aircraft operated by the airlines in order to deliver our service to passengers on the aircraft. We currently have two types of commercial airline arrangements: turnkey and airline-directed. Under the airline-directed model, we have transferred control of the equipment to the airline and therefore the airline is our customer in these transactions. Under the turnkey model, we have not transferred control of our equipment to our airline partner and, as a result, the airline passenger is deemed to be our customer. Transactions with our airline partners under the turnkey model are accounted for as an operating lease of space on an aircraft. See Note 12, "Leases," for additional information on the turnkey model.

### Remaining performance obligations

As of June 30, 2020, the aggregate amount of the transaction price in our contracts allocated to the remaining unsatisfied performance obligations was approximately $319 million, most of which relate to our commercial aviation contracts. Approximately $49 million represents future equipment revenue that is expected to be recognized within the next one to three years. The remaining $270 million primarily represents connectivity and entertainment service revenues which are recognized as services are provided, which is expected to occur through the remaining term of the contract (approximately 1-8 years). We have excluded from this amount: all consideration related to contracts with customers that have filed for bankruptcy, which therefore fail to meet the GAAP definition of a contract; all variable consideration derived from our connectivity or entertainment services that is allocated entirely to our performance of obligations related to such services; consideration from contracts that have an original duration of one year or less; revenue from passenger service on airlines operating under the turnkey model; and revenue from contracts that have been executed but under which have not yet met the accounting definition of a contract since the airline has not yet determined which products in our portfolio it wishes to select, and, as a result we are unable to determine which products and services will be transferred to the customer.

**Disaggregation of revenue**

The following table presents our revenue disaggregated by category *(in thousands)*:

| | For the Three Months Ended June 30, 2020 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| **Service revenue** | | | | |
| Connectivity | $ 21,849 | $ 3,888 | $ 43,447 | $ 69,184 |
| Entertainment, CAS and other | 3,687 | 822 | 586 | 5,095 |
| **Total service revenue** | $ 25,536 | $ 4,710 | $ 44,033 | $ 74,279 |
| | | | | |
| **Equipment revenue** | | | | |
| ATG | $ 1,786 | $ - | $ 6,876 | $ 8,662 |
| Satellite | 2,709 | 7,267 | 3,518 | 13,494 |
| Other | - | - | 205 | 205 |
| **Total equipment revenue** | $ 4,495 | $ 7,267 | $ 10,599 | $ 22,361 |
| | | | | |
| **Customer type** | | | | |
| Airline passenger and aircraft owner/operator | $ 15,041 | $ 1,970 | $ 44,033 | $ 61,044 |
| Airline, OEM and aftermarket dealer | 14,001 | 10,040 | 10,599 | 34,640 |
| Third party | 989 | (33) | - | 956 |
| **Total revenue** | $ 30,031 | $ 11,977 | $ 54,632 | $ 96,640 |

| | For the Three Months Ended June 30, 2019 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| **Service revenue** | | | | |
| Connectivity | $ 90,233 | $ 21,656 | $ 54,176 | $ 166,065 |
| Entertainment, CAS and other | 6,169 | 917 | 580 | 7,666 |
| **Total service revenue** | $ 96,402 | $ 22,573 | $ 54,756 | $ 173,731 |
| | | | | |
| **Equipment revenue** | | | | |
| ATG | $ 5,636 | $ - | $ 12,344 | $ 17,980 |
| Satellite | 3,329 | 14,144 | 3,809 | 21,282 |
| Other | 360 | - | 332 | 692 |
| **Total equipment revenue** | $ 9,325 | $ 14,144 | $ 16,485 | $ 39,954 |
| | | | | |
| **Customer type** | | | | |
| Airline passenger and aircraft owner/operator | $ 55,900 | $ 6,767 | $ 54,756 | $ 117,423 |
| Airline, OEM and aftermarket dealer | 36,883 | 27,680 | 16,485 | 81,048 |
| Third party | 12,944 | 2,270 | - | 15,214 |
| **Total revenue** | $ 105,727 | $ 36,717 | $ 71,241 | $ 213,685 |

| | For the Six Months Ended June 30, 2020 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| **Service revenue** | | | | |
| Connectivity | $ 90,718 | $ 21,917 | $ 100,422 | $ 213,057 |
| Entertainment, CAS and other | 8,646 | 2,021 | 1,337 | 12,004 |
| **Total service revenue** | $ 99,364 | $ 23,938 | $ 101,759 | $ 225,061 |
| | | | | |
| **Equipment revenue** | | | | |
| ATG | $ 6,182 | $ - | $ 16,500 | $ 22,682 |
| Satellite | 4,541 | 21,451 | 6,892 | 32,884 |
| Other | 80 | - | 408 | 488 |
| **Total equipment revenue** | $ 10,803 | $ 21,451 | $ 23,800 | $ 56,054 |
| | | | | |
| **Customer type** | | | | |
| Airline passenger and aircraft owner/operator | $ 58,743 | $ 8,487 | $ 101,759 | $ 168,989 |
| Airline, OEM and aftermarket dealer | 40,259 | 35,439 | 23,800 | 99,498 |
| Third party | 11,165 | 1,463 | - | 12,628 |
| **Total revenue** | $ 110,167 | $ 45,389 | $ 125,559 | $ 281,115 |

| | For the Six Months Ended June 30, 2019 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| **Service revenue** | | | | |
| Connectivity | $ 170,051 | $ 40,510 | $ 106,861 | $ 317,422 |
| Entertainment, CAS and other | 18,378 | 1,835 | 1,108 | 21,321 |
| **Total service revenue** | $ 188,429 | $ 42,345 | $ 107,969 | $ 338,743 |
| | | | | |
| **Equipment revenue** | | | | |
| ATG | $ 8,508 | $ - | $ 23,679 | $ 32,187 |
| Satellite | 3,959 | 27,303 | 9,044 | 40,306 |
| Other | 900 | - | 1,098 | 1,998 |
| **Total equipment revenue** | $ 13,367 | $ 27,303 | $ 33,821 | $ 74,491 |
| | | | | |
| **Customer type** | | | | |
| Airline passenger and aircraft owner/operator | $ 110,249 | $ 12,618 | $ 107,969 | $ 230,836 |
| Airline, OEM and aftermarket dealer | 67,796 | 53,171 | 33,821 | 154,788 |
| Third party | 23,751 | 3,859 | - | 27,610 |
| **Total revenue** | $ 201,796 | $ 69,648 | $ 141,790 | $ 413,234 |

**Contract balances**

Our current and non-current deferred revenue balances totaled $55.1 million and $56.7 million as of June 30, 2020 and December 31, 2019, respectively. Deferred revenue includes, among other things, equipment, multi-pack and subscription connectivity products, sponsorship activities and airline-directed equipment and connectivity and entertainment service.

Our current and non-current contract asset balances totaled $69.4 million and $64.2 million as of June 30, 2020 and December 31, 2019, respectively. The contract asset balance as of June 30, 2020 was net of allowances of $11.1 million. See Note 9, “Composition of Certain Reserves and Allowances,” for additional information regarding allowances. Contract assets represent the aggregate amount of revenue recognized in excess of billings for our airline-directed contracts.

Capitalized supplemental type certificate ("STC") balances for our airline-directed contracts were $14.9 million and $17.5 million as of June 30, 2020 and December 31, 2019, respectively. The capitalized STC costs are amortized over the life of the associated airline-directed contracts as part of our engineering, design and development costs in our unaudited condensed consolidated statements of operations. Total amortization expense was $0.8 million and $1.6 million, respectively, for the three and six month periods ended June 30, 2020, and $0.3 million and $0.6 million for the respective prior-year periods. Additionally, during the three and six month periods ended June 30, 2020, we recorded an impairment charge of $1.0 million for the remaining carrying value of capitalized STC costs associated with three of our airline partners who are currently in bankruptcy.

## 5. Net Loss Per Share

Basic and diluted net loss per share have been calculated using the weighted average number of common shares outstanding for the period.

The shares of common stock effectively repurchased in connection with the Forward Transactions (as defined and described in Note 10, "Long-Term Debt and Other Liabilities") are considered participating securities requiring the two-class method to calculate basic and diluted earnings per share. Net earnings in future periods will be allocated between common shares and participating securities. In periods of a net loss, the shares associated with the Forward Transactions will not receive an allocation of losses, as the counterparties to the Forward Transactions are not required to fund losses. Additionally, the calculation of weighted average shares outstanding as of June 30, 2020 and 2019 excludes approximately 2.1 million shares and 7.2 million shares, respectively, associated with the Forward Transactions.

As a result of the net loss for the three and six month periods ended June 30, 2020 and 2019, all of the outstanding shares of common stock underlying stock options, deferred stock units and restricted stock units were excluded from the computation of diluted shares outstanding because they were anti-dilutive.

The following table sets forth the computation of basic and diluted earnings per share for the three and six month periods ended June 30, 2020 and 2019; however, because of the undistributed losses, the shares of common stock associated with the Forward Transactions are excluded from the computation of basic earnings per share in 2020 and 2019 as undistributed losses are not allocated to these shares (*in thousands*, *except per share amounts*):

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Net loss | $ (85,979) | $ (83,963) | $ (170,757) | $ (100,762) |
| Less: Participation rights of the Forward Transactions | - | - | - | - |
| Undistributed losses | $ (85,979) | $ (83,963) | $ (170,757) | $ (100,762) |
| Weighted-average common shares outstanding-basic and diluted | 81,757 | 80,702 | 81,482 | 80,575 |
| Net loss attributable to common stock per share-basic and diluted | $ (1.05) | $ (1.04) | $ (2.10) | $ (1.25) |

## 6. Inventories

Inventories consist primarily of telecommunications systems and parts and are recorded at the lower of average cost or market. We evaluate the need for write-downs associated with obsolete, slow-moving and nonsalable inventory by reviewing net realizable inventory values on a periodic basis.

Inventories as of June 30, 2020 and December 31, 2019 were as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| Work-in-process component parts | $ 21,752 | $ 23,141 |
| Finished goods | 108,340 | 94,003 |
| Total inventory | $ 130,092 | $ 117,144 |

## 7. Composition of Certain Balance Sheet Accounts

Prepaid expenses and other current assets as of June 30, 2020 and December 31, 2019 were as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| Contract assets, net of allowances of $1,491 and $0, respectively *(1)* | $ 14,944 | $ 12,364 |
| Prepaid satellite services | 7,202 | 11,299 |
| Restricted cash | 560 | 560 |
| Other | 9,705 | 12,082 |
| Total prepaid expenses and other current assets | $ 32,411 | $ 36,305 |

*(1)* Allowance for contract assets as of June 30, 2020 is due to the adoption of ASC 326. See Note 9, "Composition of Certain Reserves and Allowances," for additional information.

Property and equipment as of June 30, 2020 and December 31, 2019 were as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| Office equipment, furniture, fixtures and other | $ 57,335 | $ 56,205 |
| Leasehold improvements | 44,402 | 44,389 |
| Airborne equipment *(1)* | 708,587 | 737,593 |
| Network equipment | 226,502 | 229,451 |
| | 1,036,826 | 1,067,638 |
| Accumulated depreciation | (573,679) | (507,320) |
| Total property and equipment, net | $ 463,147 | $ 560,318 |

*(1)* Decrease in Airborne equipment is due primarily to the impairment of Airborne equipment associated with three of our airline agreements recorded during the three month period ended March 31, 2020. *See below for additional information.*

Other non-current assets as of June 30, 2020 and December 31, 2019 were as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| Contract assets, net of allowances of $9,568 and $0, respectively *(1)* | $ 54,470 | $ 51,829 |
| Deferred STC costs *(2)* | 14,851 | 17,453 |
| Restricted cash | 5,101 | 7,099 |
| Other *(3)* | 6,193 | 13,291 |
| Total other non-current assets | $ 80,615 | $ 89,672 |

*(1)* Allowances for contract assets as of June 30, 2020 is due to the adoption of ASC 326. See Note 9, "Composition of Certain Reserves and Allowances," for additional information.

*(2)* Decrease due in part to the $1.0 million impairment of STC costs associated with three of our airline agreements. See below for additional information.

*(3)* Decrease due in part to the $3.0 million impairment of a cost-basis investment which is included in Other (income) expense within our unaudited condensed consolidated statements of operations for the six month period ended June 30, 2020.

We review our long-lived assets, including property and equipment, right-of-use assets, and other non-current assets, for potential impairment whenever events indicate that the carrying amount of such assets may not be recoverable. We perform this review by comparing the carrying value of the long-lived assets to the estimated future undiscounted cash flows expected to result from the use of the assets. We group certain long-lived assets by airline contract and by connectivity technology. If we determine an impairment exists, the amount of the impairment is computed as the difference between the asset group’s carrying value and its estimated fair value, following which the assets are written down to their estimated fair value.

In light of the COVID-19 pandemic and its impact on air travel, including decreased flights, decreased gross passenger opportunity and our airline partners’ temporary parking of a significant number of their aircraft, we conducted a review as of March 31, 2020 and determined that the carrying values for the asset groups related to three of our airline agreements for the CA business exceeded their estimated undiscounted cash flows, which triggered the need to estimate the fair value of these assets. Fair value reflects our best estimate of the discounted cash flows of the impaired assets. For the airborne assets and right-of-use assets associated with the three airline agreements (the “impaired assets”), we recorded an impairment charge of $46.4 million for the three month period ended March 31, 2020, reflecting the difference between the carrying value and the estimated fair value of the impaired assets. We conducted another review as of June 30, 2020 due to the continuation of the COVID-19 pandemic as well as the signing of the Delta amendment, and determined that $1.0 million of deferred STC costs were impaired due to the bankruptcy of three other airline partners. As such, we recorded a $1.0 million charge for impairment of long-lived assets.

We are continuously monitoring the COVID-19 pandemic and its impact.  If the negative impact of the pandemic on the assets related to our airline agreements continues, including as a result of airline partners’ decisions to temporarily park certain aircraft to reduce capacity, we could incur additional material impairment charges in future periods.

Accrued liabilities as of June 30, 2020 and December 31, 2019 were as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| Airline related accrued liabilities | $ 30,680 | $ 43,592 |
| Accrued satellite network costs | 33,445 | 13,843 |
| Accrued interest | 17,043 | 17,048 |
| Warranty reserve | 12,450 | 13,165 |
| Employee compensation and benefits | 7,351 | 29,954 |
| Operating leases | 8,990 | 12,241 |
| Current portion of ABL Credit Facility *(1)* | 6,000 | - |
| Airborne equipment and installation costs | 5,363 | 11,466 |
| Other | 26,022 | 32,802 |
| Total accrued liabilities | $ 147,344 | $ 174,111 |

*(1)* See Note 10, “Long-Term Debt and Other Liabilities,” for additional information.

Other non-current liabilities as of June 30, 2020 and December 31, 2019 were as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| Deferred revenue | $ 25,400 | $ 21,889 |
| Asset retirement obligations | 12,024 | 11,560 |
| Deferred tax liabilities | 2,429 | 2,340 |
| Other | 13,500 | 10,704 |
| Total other non-current liabilities | $ 53,353 | $ 46,493 |

## 8. Intangible Assets

Our intangible assets are comprised of both indefinite-lived and finite-lived intangible assets. Intangible assets with indefinite lives and goodwill are not amortized; rather, they are reviewed for impairment at least annually or whenever events or circumstances indicate the carrying value of the asset may not be recoverable. We perform our annual impairment tests of our indefinite-lived intangible assets and goodwill during the fourth quarter of each fiscal year. We also reevaluate the useful life of indefinite-lived intangible assets each reporting period to determine whether events and circumstances continue to support an indefinite useful life. The results of our annual indefinite-lived intangible assets and goodwill impairment assessments in the fourth quarter of 2019 indicated no impairment. As of June 30, 2020, as a result of COVID-19, we reviewed the carrying value of our indefinite-lived intangible assets and goodwill and concluded there were no impairments.

As of both June 30, 2020 and December 31, 2019, our goodwill balance, all of which related to our BA segment, was $0.6 million.

Our intangible assets, other than goodwill, as of June 30, 2020 and December 31, 2019 were as follows (*in thousands, except for weighted average remaining useful life*):

| | Weighted Average Remaining Useful Life (in years) | As of June 30, 2020 | | | As of December 31, 2019 | | |
|---|---|---|---|---|---|---|---|
| | | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
| **Amortized intangible assets:** | | | | | | | |
| Software | 2.9 | $ 184,386 | $ (144,432) | $ 39,954 | $ 177,190 | $ (135,154) | $ 42,036 |
| Other intangible assets | 7.8 | 3,000 | (1,450) | 1,550 | 3,000 | (1,440) | 1,560 |
| Service customer relationships | | 8,081 | (8,081) | - | 8,081 | (8,081) | - |
| OEM and dealer relationships | | 6,724 | (6,724) | - | 6,724 | (6,724) | - |
| Total amortized intangible assets | | 202,191 | (160,687) | 41,504 | 194,995 | (151,399) | 43,596 |
| **Unamortized intangible assets:** | | | | | | | |
| FCC Licenses | | 32,283 | - | 32,283 | 32,283 | - | 32,283 |
| **Total intangible assets** | | $ 234,474 | $ (160,687) | $ 73,787 | $ 227,278 | $ (151,399) | $ 75,879 |

Amortization expense was $4.5 million and $9.3 million, respectively, for the three and six month periods ended June 30, 2020 and $5.1 million and $10.5 million, respectively, for the prior-year periods.

Amortization expense for each of the next five years and thereafter is estimated to be as follows (*in thousands*):

| Years ending December 31, | Amortization Expense |
|---|---|
| 2020 (period from July 1 to December 31) | $ 8,206 |
| 2021 | $ 15,622 |
| 2022 | $ 10,097 |
| 2023 | $ 3,796 |
| 2024 | $ 817 |
| Thereafter | $ 2,966 |

Actual future amortization expense could differ from the estimated amount as a result of future investments and other factors.

## 9. Composition of Certain Reserves and Allowances

**Credit Losses —** We regularly evaluate our accounts receivable and contract assets for expected credit losses. Our expected loss allowance methodology for accounts receivable is developed using historical collection experience, current and future economic and market conditions, and a review of the current status of each customer's trade accounts receivables. Due to the short-term nature of such receivables, the estimated amount of accounts receivable that may not be collected is based on the aging of the accounts receivable balances and the financial condition of customers. Additionally, specific allowance amounts are established to record the appropriate provision for customers that have a higher probability of default. Our monitoring activities include timely account reconciliation, dispute resolution, payment confirmation, consideration of each customer's financial condition and macroeconomic conditions. Balances are written off when determined to be uncollectible. We apply a similar methodology towards our current and non-current contract asset balances. However, due to the inherent additional risk associated with a long-term receivable, an additional provision is applied towards contract asset balances that will diminish over time as the contract nears its expiration date. For the three and six months ended June 30, 2020, we also considered the current and estimated future economic and market conditions resulting from the COVID-19 pandemic in the determination of our estimated credit losses.

Estimates are used to determine the expected loss allowances. Such allowances are based on management's assessment of anticipated payment, taking into account available historical and current information as well as management's assessment of potential future developments. We are continuously monitoring our assumptions used to determine our expected credit losses, including the impact of COVID-19, which could cause us to record additional material credit losses in future periods.

A summary of our allowances for credit losses were as follows (*in thousands*):

| | For the Three Months Ended June 30, 2020 | | |
|---|---|---|---|
| | Accounts receivable | Prepaid and other current assets | Other non-current assets |
| Balance at April 1, 2020 | $ 3,970 | $ 997 | $ 6,111 |
| Current-period provision for expected credit losses *(1)* | 1,160 | 494 | 3,457 |
| Write-offs charged against the allowances | (195) | - | - |
| Other, including dispositions and foreign currency | 113 | - | - |
| Balance at June 30, 2020 | $ 5,048 | $ 1,491 | $ 9,568 |

| | For the Six Months Ended June 30, 2020 | | |
|---|---|---|---|
| | Accounts receivable | Prepaid and other current assets | Other non-current assets |
| Balance at January 1, 2020 | $ 686 | $ - | $ - |
| Cumulative-effect adjustment of ASC 326 adoption | 1,386 | 356 | 1,923 |
| Current-period provision for expected credit losses *(1)* | 3,095 | 1,135 | 7,645 |
| Write-offs charged against the allowances | (195) | - | - |
| Other, including dispositions and foreign currency | 76 | - | - |
| Balance at June 30, 2020 | $ 5,048 | $ 1,491 | $ 9,568 |

*(1)* The current-period provision for expected credit losses was due primarily to the impact of COVID-19, with one international airline partner in particular accounting for approximately 94% and 80%, respectively, of the current-period provision recorded during the three and six month periods ended June 30, 2020.

**Warranties** — We provide warranties on parts and labor related to our products. Our warranty terms range from two to ten years. Warranty reserves are established for costs that are estimated to be incurred after the sale, delivery and installation of the products under warranty. The warranty reserves are determined based on known product failures, historical experience and other available evidence, and are included in accrued liabilities in our unaudited condensed consolidated balance sheets. Our warranty reserve balance was $12.5 million and $13.2 million, respectively, as of June 30, 2020 and December 31, 2019.

## 10. Long-Term Debt and Other Liabilities

Long-term debt as of June 30, 2020 and December 31, 2019 was as follows (*in thousands*):

| | June 30, 2020 | December 31, 2019 |
|---|---|---|
| 2024 Senior Secured Notes | $ 921,489 | $ 921,137 |
| 2022 Convertible Notes | 208,277 | 201,868 |
| ABL Credit Facility | 11,000 | - |
| 2020 Convertible Notes | - | 2,498 |
| Total debt | 1,140,766 | 1,125,503 |
| Less deferred financing costs | (22,164) | (24,255) |
| Total long-term debt | $ 1,118,602 | $ 1,101,248 |

**2024 Senior Secured Notes** - On April 25, 2019 (the "Issue Date"), Gogo Intermediate Holdings LLC ("GIH") (a wholly owned subsidiary of Gogo Inc.) and Gogo Finance Co. Inc. (a wholly owned subsidiary of GIH) ("Gogo Finance" and, together with GIH, the "Issuers") issued $905 million aggregate principal amount of 9.875% senior secured notes due 2024 (the "Initial Notes") under an indenture (the "Base Indenture"), dated as of April 25, 2019, among the Issuers, us, as guarantor, certain subsidiaries of GIH, as guarantors (the "Initial 2024 Subsidiary Guarantors" and, together with us, the "Initial 2024 Guarantors"), and U.S. Bank National Association, as trustee (the "Trustee") and collateral agent (the "Collateral Agent"). On May 3, 2019, the Issuers, the Initial 2024 Guarantors and the Trustee entered into the first supplemental indenture (the "First Supplemental Indenture") to increase the amount of indebtedness that may be incurred under Credit Facilities (as defined in the 2024 Indenture) by GIH or its subsidiaries that are 2024 Guarantors (as defined below) by $20 million in aggregate principal amount. On March 6, 2020, the Issuers, the Initial 2024 Guarantors, Gogo Air International GmbH (an indirect subsidiary of GIH) ("Gogo International") and the Trustee entered into a second supplemental indenture (the "Second Supplemental Indenture") to add Gogo International as a guarantor under the 2024 Indenture. On July 31, 2020, the Issuers, the Initial 2024 Guarantors, Gogo International and Gogo Inflight Internet Canada Ltd., Gogo ATG LLC and Gogo CA Licenses LLC (collectively, the "Additional Guarantors" and, together with the Initial 2024 Guarantors and Gogo International, the "2024 Guarantors") and the Trustee entered into a third supplemental indenture (together with the Base Indenture, the First Supplemental Indenture and the Second Supplemental Indenture, the "2024 Indenture") to add the Additional Guarantors as guarantors under the 2024 Indenture. On May 7, 2019, the Issuers issued an additional $20 million aggregate principal amount of 9.875% senior secured notes due 2024 (the "Additional Notes"). We refer to the Initial Notes and the Additional Notes collectively as the "2024 Senior Secured Notes". The Initial Notes were issued at a price equal to 99.512% of their face value, and the Additional Notes were issued at a price equal to 100.5% of their face value, resulting in aggregate gross proceeds of $920.7 million. Additionally, we received approximately $0.1 million for interest that accrued from April 25, 2019 through May 7, 2019 with respect to the Additional Notes that was included in our interest payment on November 1, 2019. The 2024 Senior Secured Notes are guaranteed on a senior secured basis by Gogo Inc. and all of GIH's existing and future restricted subsidiaries (other than Gogo Finance), subject to certain exceptions. The 2024 Senior Secured Notes and the related guarantees are secured by second-priority liens on the ABL Priority Collateral (as defined below) and by first-priority liens on the Cash Flow Priority Collateral (as defined below), including pledged equity interests of the Issuers and all of GIH's existing and future restricted subsidiaries guaranteeing the 2024 Senior Secured Notes, except for certain excluded assets and subject to permitted liens.

As of June 30, 2020 and December 31, 2019, the outstanding principal amount of the 2024 Senior Secured Notes was $925.0 million for both dates, the unaccreted debt discount was $3.5 million and $3.9 million, respectively, and the net carrying amount was $921.5 million and $921.1 million, respectively.

We used a portion of the net proceeds from the issuance of the 2024 Senior Secured Notes to fund the redemption of all the outstanding 2022 Senior Secured Notes (as defined below) and to repurchase $159 million aggregate principal amount of the 2020 Convertible Notes (as defined below).

The 2024 Senior Secured Notes will mature on May 1, 2024. The 2024 Senior Secured Notes bear interest at a rate of 9.875% per year, payable semiannually in arrears on May 1 and November 1 of each year, beginning November 1, 2019.

We paid approximately $22.0 million of origination fees and financing costs related to the issuance of the 2024 Senior Secured Notes, which have been accounted for as deferred financing costs. The deferred financing costs on our unaudited condensed consolidated balance sheet are being amortized over the contractual term of the 2024 Senior Secured Notes using the effective interest method. Total amortization expense was $0.9 million and $1.8 million for the three and six month periods ended June 30, 2020, respectively, and $0.6 million for both prior-year periods. Amortization expense is included in interest expense in the unaudited condensed consolidated statements of operations. As of June 30, 2020 and December 31, 2019, the balance of unamortized deferred financing costs related to the 2024 Senior Secured Notes was $17.9 million and $19.7 million, respectively, and was included as a reduction to long-term debt in our unaudited condensed consolidated balance sheet. See Note 11, “Interest Costs,” for additional information.

The 2024 Senior Secured Notes are the senior secured indebtedness of the Issuers and are:

- effectively senior to (i) all of the Issuers’ existing and future senior unsecured indebtedness to the extent of the value of the collateral securing the 2024 Senior Secured Notes and (ii) the Issuers’ indebtedness secured on a junior priority basis by the same collateral securing the 2024 Senior Secured Notes to the extent of the value of such collateral, including the obligations under the ABL Credit Facility (as defined below) to the extent of the value of the Cash Flow Priority Collateral;
- effectively equal in right of payment with the Issuers’ existing and future (i) unsecured indebtedness that is not subordinated in right of payment to the 2024 Senior Secured Notes and (ii) indebtedness secured on a junior priority basis by the same collateral securing the 2024 Senior Secured Notes, if any, in each case to the extent of any insufficiency in the collateral securing the 2024 Senior Secured Notes;
- structurally senior to all of our existing and future indebtedness, including our 2022 Convertible Notes (as defined below);
- senior in right of payment to any and all of the Issuers’ future indebtedness that is subordinated in right of payment to the 2024 Senior Secured Notes;
- structurally subordinated to all of the indebtedness and other liabilities of any non-2024 Guarantors (other than the Issuers); and
- effectively subordinated to all of our existing and future indebtedness secured on a senior priority basis by the same collateral securing the 2024 Senior Secured Notes to the extent of the value of such collateral, including the obligations under the ABL Credit Facility to the extent of the value of ABL Priority Collateral.

Each guarantee is a senior secured obligation of such 2024 Guarantor and is:

- effectively senior in right of payment to all existing and future (i) senior unsecured indebtedness to the extent of the value of the collateral securing such guarantee owned by such 2024 Guarantor and (ii) indebtedness secured on a junior priority basis by the same collateral securing the guarantee owned by such 2024 Guarantor to the extent of the value of the collateral securing the guarantee, including the obligations under the ABL Credit Facility to the extent of the value of the Cash Flow Priority Collateral;
- effectively equal in right of payment with all existing and future unsubordinated indebtedness and indebtedness secured on a junior priority basis by the same collateral securing the guarantee owned by such 2024 Guarantor, if any, in each case to the extent of any insufficiency in the collateral securing such guarantee;
- effectively subordinated to the obligations under the ABL Credit Facility of each 2024 Guarantor to the extent of the value of the ABL Priority Collateral owned by such 2024 Guarantor;
- effectively senior in right of payment to all existing and future subordinated indebtedness, if any, of such 2024 Guarantor; and
- structurally subordinated to all indebtedness and other liabilities of any non-2024 Guarantor subsidiary of such 2024 Guarantor (excluding, in the case of our guarantee, the Issuers).

The security interests in certain collateral may be released without the consent of holders of the 2024 Senior Secured Notes if such collateral is disposed of in a transaction that complies with the 2024 Indenture and related security agreements, and if any grantor of such security interests is released from its obligations with respect to the 2024 Senior Secured Notes in accordance with the applicable provisions of the 2024 Indenture and related security agreements. Under certain circumstances, GIH and the 2024 Guarantors have the right to transfer certain intellectual property assets that on the Issue Date constitute collateral securing the 2024 Senior Secured Notes or the guarantees to a restricted subsidiary organized under the laws of Switzerland, resulting in the release of such collateral. In addition, the 2024 Indenture permits indebtedness incurred under the ABL Credit Facility to be secured on a first-priority basis by certain of the same collateral that secures the 2024 Senior Secured Notes.

The Issuers may redeem the 2024 Senior Secured Notes, in whole or in part, at any time prior to May 1, 2021, at a redemption price equal to 100% of the principal amount of the 2024 Senior Secured Notes redeemed plus the make-whole premium set forth in the 2024 Indenture as of, and accrued and unpaid interest, if any, to (but not including) the applicable redemption date.

On or after May 1, 2021, the 2024 Senior Secured Notes will be redeemable at the following redemption prices (expressed in percentages of principal amount), plus accrued and unpaid interest, if any, to (but not including) the redemption date (subject to the right of holders of record on the relevant regular record date on or prior to the redemption date to receive interest due on an interest payment date), if redeemed during the twelve-month period commencing on May 1 of the following years:

| Year | Redemption Price |
|---|---|
| 2021 | 104.938% |
| 2022 | 102.469% |
| 2023 and thereafter | 100.000% |

In addition, at any time prior to May 1, 2021, the Issuers may redeem up to 40% of the aggregate principal amount of the 2024 Senior Secured Notes with the proceeds of certain equity offerings at a redemption price of 109.875% of the principal amount redeemed, plus accrued and unpaid interest, if any, to (but not including) the date of redemption; provided, however, that 2024 Senior Secured Notes representing at least 50% of the principal amount of the 2024 Senior Secured Notes remain outstanding immediately after each such redemption.

The 2024 Indenture contains covenants that, among other things, limit the ability of the Issuers and the 2024 Subsidiary Guarantors and, in certain circumstances, our ability, to: incur additional indebtedness; pay dividends, redeem stock or make other distributions; make investments; create restrictions on the ability of GIH's restricted subsidiaries to pay dividends to the Issuers or make other intercompany transfers; create liens; transfer or sell assets; merge or consolidate; and enter into certain transactions with the Issuers' affiliates. Most of these covenants will cease to apply if, and for as long as, the 2024 Senior Secured Notes have investment grade ratings from both Moody's Investment Services, Inc. and Standard & Poor's.

If we or the Issuers undergo specific types of change of control accompanied by a downgrade in the rating of the 2024 Senior Secured Notes prior to May 1, 2024, GIH is required to make an offer to repurchase for cash all of the 2024 Senior Secured Notes at a repurchase price equal to 101% of the principal amount thereof, plus accrued and unpaid interest, if any, to (but not including) the payment date.

The 2024 Indenture provides for events of default, which, if any of them occur, would permit or require the principal, premium, if any, and interest on all of the then outstanding 2024 Senior Secured Notes issued under the 2024 Indenture to be due and payable immediately. As of June 30, 2020, no event of default had occurred.

**ABL Credit Facility** – On August 26, 2019, Gogo Inc., GIH and Gogo Finance (together GIH and Gogo Finance are referred to as the "Borrowers") entered into a credit agreement (the "ABL Credit Agreement") among the Borrowers, the other loan parties party thereto, the lenders party thereto, JPMorgan Chase Bank, N.A., as administrative agent (the "Administrative Agent"), and Morgan Stanley Senior Funding, Inc., as syndication agent, which provides for an asset-based revolving credit facility (the "ABL Credit Facility") of up to $30 million, subject to borrowing base availability, and includes letter of credit and swingline sub-facilities.

Borrowing availability under the ABL Credit Facility is determined by a monthly borrowing base collateral calculation that is based on specified percentages of the value of eligible accounts receivable (including eligible unbilled accounts receivable) and eligible credit card receivables, less certain reserves and subject to certain other adjustments as set forth in the ABL Credit Agreement. Availability is reduced by issuance of letters of credit as well as any borrowings. As of June 30, 2020, less than $1 million remained available for borrowing under the terms of the agreement that would allow for the company to meet the "payment conditions" criteria as described in our ABL Credit Agreement. As of June 30, 2020 and December 31, 2019, $17.0 million and zero, were outstanding under the ABL Credit Facility, respectively. As a result of the borrowing base collateral that we have forecasted for the next twelve months, of the $17.0 million outstanding under the ABL Credit Facility as of June 30, 2020, $6.0 million was classified as current and included in accrued liabilities on our unaudited condensed consolidated balance sheet. During July 2020, we repaid $1.0 million of the outstanding amount.

The final maturity of the ABL Credit Facility is August 26, 2022, unless the aggregate outstanding principal amount of our 2022 Convertible Notes (as defined below) has not, on or prior to December 15, 2021, been repaid in full or refinanced with a new maturity date no earlier than February 26, 2023, in which case the final maturity date shall instead be December 16, 2021.

Loans outstanding under the ABL Credit Facility bear interest at a floating rate measured by reference to, at the Borrowers' option, either (i) an adjusted London Interbank Offered Rate (LIBOR) plus an applicable margin ranging from 1.50% to 2.00% per annum depending on a fixed charge coverage ratio, or (ii) an alternate base rate plus an applicable margin ranging from 0.50% to 1.00% per annum depending on a fixed charge coverage ratio. If LIBOR ceases to exist or otherwise becomes unsuitable for use as a benchmark, the alternate base rate will automatically apply unless we agree with the Administrative Agent on another rate that is the then prevailing market rate for syndicated loans. Unused commitments under the ABL Credit Facility are subject to a per annum fee ranging from 0.25% to 0.375% depending on the average quarterly usage of the revolving commitments.

The obligations under the ABL Credit Agreement are guaranteed by Gogo Inc. and all of its existing and future subsidiaries, subject to certain exceptions (collectively, the "ABL Guarantors"), and such obligations and the obligations of the ABL Guarantors are secured on a (i) senior basis by a perfected security interest in all present and after-acquired inventory, accounts receivable, deposit accounts, securities accounts, and any cash or other assets in such accounts and other related assets owned by each ABL Guarantor and the proceeds of the foregoing, subject to certain exceptions (the "ABL Priority Collateral") and (ii) junior basis by a perfected security interest in substantially all other tangible and intangible assets owned by each ABL Guarantor (the "Cash Flow Priority Collateral").

The ABL Credit Agreement contains customary representations and warranties and customary affirmative and negative covenants. The negative covenants include restrictions on, among other things: the incurrence of additional indebtedness; the incurrence of additional liens; dividends or other distributions on equity; the purchase, redemption or retirement of capital stock; the payment or redemption of certain indebtedness; loans, guarantees and other investments; entering into other agreements that create restrictions on the ability to pay dividends or make other distributions on equity, make or repay certain loans, create or incur certain liens or guarantee certain indebtedness; asset sales; sale-leaseback transactions; swap agreements; consolidations or mergers; amendment of certain material documents; certain regulatory matters; Canadian pension plans; and affiliate transactions. The negative covenants are subject to customary exceptions and also permit dividends and other distributions on equity, investments, permitted acquisitions and payments or redemptions of indebtedness upon satisfaction of the "payment conditions." The payment conditions are deemed satisfied upon Specified Availability (as defined in the ABL Credit Agreement) on the date of the designated action and Specified Availability for the prior 30-day period exceeding agreed-upon thresholds, the absence of the occurrence and continuance of any default and, in certain cases, pro forma compliance with a fixed charge coverage ratio of no less than 1.10 to 1.00.

The ABL Credit Agreement includes a minimum fixed charge coverage ratio test of no less than 1.00 to 1.00, which is tested only when Specified Availability is less than the greater of (A) $4.5 million and (B) 15.0% of the then effective commitments under the ABL Credit Facility, and continuing until the first day immediately succeeding the last day of the calendar month which includes the thirtieth (30th) consecutive day on which Specified Availability is in excess of such threshold so long as no default has occurred and is continuing and certain other conditions are met. As of June 30, 2020, Specified Availability had not fallen below the amount specified and therefore the minimum fixed charge coverage ratio test was not applicable. Full availability under the ABL Credit Facility may be limited by our ability to comply with the fixed charge coverage ratio in future periods.

The ABL Credit Agreement provides for events of default, which, if any of them occurs, would permit or require the principal, premium, if any, and interest on all of the then outstanding obligations under the ABL Credit Facility to be due and payable immediately and the commitments under the ABL Credit Facility to be terminated.

On August 26, 2019, the Borrowers and the ABL Guarantors entered into an ABL collateral agreement (the “ABL Collateral Agreement”), in favor of the Administrative Agent, whereby the Borrowers and the ABL Guarantors granted a security interest in substantially all tangible and intangible assets of each Borrower and each ABL Guarantor, to secure all obligations of the Borrowers and the ABL Guarantors under the ABL Credit Agreement, and U.S. Bank National Association, as cash flow collateral representative, and JPMorgan Chase Bank, N.A., as ABL agent, entered into a crossing lien intercreditor agreement (the “Intercreditor Agreement”) to govern the relative priority of liens on the collateral that secures the ABL Credit Agreement and the 2024 Senior Secured Notes and certain other rights, priorities and interests.

We paid approximately $0.9 million of origination fees and financing costs related to the issuance of the ABL Credit Facility, which have been accounted for as deferred financing costs. The deferred financing costs on our unaudited condensed consolidated balance sheet are being amortized over the contractual term of the ABL Credit Facility using the effective interest method. Total amortization expense was $0.1 million and $0.2 million, respectively, for the three and six month periods ended June 30, 2020. Amortization expense is included in interest expense in the unaudited condensed consolidated statements of operations. As of June 30, 2020 and December 31, 2019, the balance of unamortized deferred financing costs related to the ABL Credit Facility was $0.6 million and $0.8 million, respectively, and is included as a reduction to long-term debt in our unaudited condensed consolidated balance sheet. See Note 11, “Interest Costs,” for additional information.

**2022 Senior Secured Notes** – On June 14, 2016, the Issuers issued $525 million aggregate principal amount of 12.500% senior secured notes due 2022 (the “Original 2022 Senior Secured Notes”) under an Indenture, dated as of June 14, 2016 (as amended and supplemented thereafter, the “Indenture”), among the Issuers, us, as guarantor, certain subsidiaries of GIH, as guarantors (the “2022 Subsidiary Guarantors” and, together with us, the “2022 Guarantors”), and U.S. Bank National Association, as Trustee and as Collateral Agent. On January 3, 2017, the Issuers issued $65 million aggregate principal amount of additional 12.500% senior secured notes due 2022 (the “January 2017 Additional Notes”). The January 2017 Additional Notes were issued at a price equal to 108% of their face value resulting in gross proceeds of $70.2 million. On September 25, 2017, the Issuers issued $100 million aggregate principal amount of additional 12.500% senior secured notes due 2022 (the “September 2017 Additional Notes”). We refer to the Original 2022 Senior Secured Notes, the January 2017 Additional Notes and the September 2017 Additional Notes collectively as the “2022 Senior Secured Notes.”

On April 15, 2019, the Issuers elected to call for redemption in full all $690 million aggregate principal amount outstanding of the 2022 Senior Secured Notes in accordance with the terms of the Indenture. The redemption was conditioned, among other things, upon the incurrence of indebtedness in connection with the issuance of the 2024 Senior Secured Notes or from one or more other sources, in an amount satisfactory to the Issuers which condition was satisfied by the issuance of the 2024 Senior Secured Notes. On April 25, 2019, the Issuers irrevocably deposited, or caused to be irrevocably deposited, with the Trustee funds solely for the benefit of the holders of the 2022 Senior Secured Notes, cash in an amount sufficient to pay principal, premium, if any, and accrued interest on the 2022 Senior Secured Notes to, but not including, the date of redemption and all other sums payable under the Indenture. The Trustee executed and delivered an acknowledgement of satisfaction, discharge and release, dated as of April 25, 2019, among other documents, with respect to the satisfaction and discharge of the 2022 Senior Secured Notes. On May 15, 2019, the 2022 Senior Secured Notes were fully redeemed in accordance with the terms of the Indenture, and the amount deposited with the Trustee on April 25, 2019 was paid to the holders of the 2022 Senior Secured Notes. The make-whole premium paid in connection with the redemption was $51.4 million and we wrote off the remaining unamortized deferred financing costs of $9.1 million and the remaining debt premium of $11.7 million relating to the 2022 Senior Secured Notes in connection with the redemption thereof, which together are included in the loss on extinguishment of debt in our consolidated statements of operations for the year ended December 31, 2019.

We paid approximately $15.9 million of aggregate origination fees and financing costs related to the issuance of the 2022 Senior Secured Notes, which were accounted for as deferred financing costs. Additionally, we paid approximately $1.4 million of consent fees in connection with the Supplemental Indenture, which partially offset the net carrying value of the 2022 Senior Secured Notes. Total amortization expense was $0.2 million and $1.0 million, respectively, for the three and six month periods ended June 30, 2019. Amortization expense is included in interest expense in the unaudited condensed consolidated statements of operations. As noted above, the remaining unamortized deferred financing costs were written off as of May 15, 2019.

## Convertible Notes

### *2022 Convertible Notes*

On November 21, 2018, we issued $215.0 million aggregate principal amount of 6.00% Convertible Senior Notes due 2022 (the “2022 Convertible Notes”) in private offerings to qualified institutional buyers, including pursuant to Rule 144A under the Securities Act, and in concurrent private placements. We granted an option to the initial purchasers to purchase up to an additional $32.3 million aggregate principal amount of 2022 Convertible Notes to cover over-allotments, of which $22.8 million was subsequently exercised during December 2018, resulting in a total issuance of $237.8 million aggregate principal amount of 2022 Convertible Notes. The 2022 Convertible Notes mature on May 15, 2022, unless earlier repurchased or converted into shares of our common stock under certain circumstances described below. Upon maturity, we have the option to settle our obligation through cash, shares of common stock, or a combination of cash and shares of common stock. We pay interest on the 2022 Convertible Notes semi-annually in arrears on May 15 and November 15 of each year, beginning on May 15, 2019.

The $237.8 million of proceeds received from the issuance of the 2022 Convertible Notes was initially allocated between long-term debt (the liability component) at $188.7 million and additional paid-in capital (the equity component) at $49.1 million, within the consolidated balance sheet. The fair value of the liability component was measured using rates determined for similar debt instruments without a conversion feature. The carrying amount of the equity component, representing the conversion option, was determined by deducting the fair value of the liability component from the aggregate face value of the 2022 Convertible Notes. If we or the note holders elect not to settle the debt through conversion, we must settle the 2022 Convertible Notes at face value. Therefore, the liability component will be accreted up to the face value of the 2022 Convertible Notes, which will result in additional non-cash interest expense being recognized in the consolidated statements of operations through the 2022 Convertible Notes maturity date (see Note 11, “Interest Costs,” for additional information). The effective interest rate on the 2022 Convertible Notes, including accretion of the notes to par and debt issuance cost amortization, was approximately 13.6%. The equity component will not be remeasured as long as it continues to meet the conditions for equity classification.

As of June 30, 2020 and December 31, 2019, the outstanding principal on the 2022 Convertible Notes was $237.8 million on both dates, the unaccreted debt discount was $29.5 million and $35.9 million, respectively, and the net carrying amount of the liability component was $208.3 million and $201.9 million, respectively.

We incurred approximately $8.1 million of issuance costs related to the issuance of the 2022 Convertible Notes, of which $6.4 million and $1.7 million were recorded to deferred financing costs and additional paid-in capital, respectively, in proportion to the allocation of the proceeds of the 2022 Convertible Notes. The $6.4 million recorded as deferred financing costs on our consolidated balance sheet is being amortized over the term of the 2022 Convertible Notes using the effective interest method. Total amortization expense was $0.4 million and $0.9 million, respectively, for the three and six month periods ended June 30, 2020, and $0.4 million and $0.8 million, respectively, for the prior-year periods. Amortization expense is included in interest expense in the consolidated statements of operations. As of June 30, 2020 and December 31, 2019, the balance of unamortized deferred financing costs related to the 2022 Convertible Notes was $3.6 million and $4.5 million, respectively, and is included as a reduction to long-term debt in our consolidated balance sheets. See Note 11, “Interest Costs,” for additional information.

The 2022 Convertible Notes had an initial conversion rate of 166.6667 shares of common stock per $1,000 principal amount of 2022 Convertible Notes, which is equivalent to an initial conversion price of approximately $6.00 per share of our common stock. Upon conversion, we currently expect to deliver cash up to the principal amount of the 2022 Convertible Notes then outstanding. With respect to any conversion value in excess of the principal amount, we currently expect to deliver shares of our common stock. We may elect to deliver cash in lieu of all or a portion of such shares. The shares of common stock subject to conversion are excluded from diluted earnings per share calculations under the if-converted method as their impact is anti-dilutive.

Holders may convert the 2022 Convertible Notes, at their option, in multiples of $1,000 principal amount at any time prior to January 15, 2022, but only in the following circumstances:

- during any fiscal quarter beginning after the fiscal quarter ended December 31, 2018, if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days of the immediately preceding fiscal quarter is greater than or equal to 130% of the conversion price of the 2022 Convertible Notes on each applicable trading day;
- during the five-business day period following any five consecutive trading day period in which the trading price for the 2022 Convertible Notes is less than 98% of the product of the last reported sale price of our common stock and the conversion rate for the 2022 Convertible Notes on each such trading day; or
- upon the occurrence of specified corporate events.

None of the above events allowing for conversion prior to January 15, 2022 occurred during the three and six month periods ended June 30, 2020 or the year ended December 31, 2019. Regardless of whether any of the foregoing circumstances occurs, a holder may convert its 2022 Convertible Notes, in multiples of $1,000 principal amount, at any time on or after January 15, 2022 until the second scheduled trading day immediately preceding May 15, 2022.

In addition, if we undergo a fundamental change (as defined in the indenture governing the 2022 Convertible Notes), holders may, subject to certain conditions, require us to repurchase their 2022 Convertible Notes for cash at a price equal to 100% of the principal amount of the 2022 Convertible Notes to be purchased, plus any accrued and unpaid interest. In addition, following a make-whole fundamental change, we will increase the conversion rate in certain circumstances for a holder who elects to convert its 2022 Convertible Notes in connection with such make-whole fundamental change.

***2020 Convertible Notes***

On March 3, 2015, we issued $340.0 million aggregate principal amount of 3.75% Convertible Senior Notes due 2020 (the “2020 Convertible Notes”) in a private offering to qualified institutional buyers, pursuant to Rule 144A under the Securities Act. We granted an option to the initial purchasers to purchase up to an additional $60.0 million aggregate principal amount of 2020 Convertible Notes to cover over-allotments, of which $21.9 million was subsequently exercised during March 2015, resulting in a total issuance of $361.9 million aggregate principal amount of 2020 Convertible Notes. The 2020 Convertible Notes that were not repurchased prior to maturity, as described below, matured on March 1, 2020. We paid interest on the 2020 Convertible Notes semi-annually in arrears on March 1 and September 1 of each year from September 1, 2015 through March 1, 2020. In November 2018, in connection with the issuance of the 2022 Convertible Notes, we repurchased $199.9 million outstanding principal amount of the 2020 Convertible Notes at par value. As a result of the repurchase, the carrying value of the 2020 Convertible Notes was adjusted by $17.9 million to face value and included in the loss on extinguishment of debt in our consolidated statements of operations for the year ended December 31, 2018.

On April 18, 2019, we commenced a cash tender offer (the “Tender Offer”) to purchase any and all of the outstanding 2020 Convertible Notes for an amount equal to $1,000 per $1,000 principal amount of 2020 Convertible Notes purchased, plus accrued and unpaid interest from the last interest payment date on the 2020 Convertible Notes to, but not including, the date of payment for the 2020 Convertible Notes accepted in the Tender Offer. The Tender Offer expired on May 15, 2019, resulting in the purchase of $159.0 million of outstanding 2020 Convertible Notes. As a result of the Tender Offer, the carrying value of the 2020 Convertible Notes was adjusted by $8.5 million to face value and unamortized deferred financing costs of $0.6 million were expensed. These two items are included in the loss on extinguishment of debt in our consolidated statements of operations for the year ended December 31, 2019. During September 2019, we purchased an additional $0.5 million of outstanding 2020 Convertible Notes. The remaining $2.5 million of outstanding 2020 Convertible Notes matured on March 1, 2020 and we repaid the remaining outstanding aggregate principle amount of the 2020 Convertible Notes, plus accrued and unpaid interest, in order to satisfy our obligations in full and retire the securities.

The $361.9 million of proceeds received from the issuance of the 2020 Convertible Notes was initially allocated between long-term debt (the liability component) at $261.9 million and additional paid-in capital (the equity component) at $100.0 million, within the consolidated balance sheet. The fair value of the liability component was measured using rates determined for similar debt instruments without a conversion feature. The carrying amount of the equity component, representing the conversion option, was determined by deducting the fair value of the liability component from the aggregate face value of the 2020 Convertible Notes. If we or the holders of 2020 Convertible Notes elected not to settle the debt through conversion, we were required to settle the 2020 Convertible Notes at face value. Therefore, the liability component was accreted up to the face value of the 2020 Convertible Notes, which resulted in additional non-cash interest expense being recognized in the consolidated statements of operations (see Note 11, “Interest Costs,” for additional information). The effective interest rate on the 2020 Convertible Notes, including accretion of the notes to par and debt issuance cost amortization, was approximately 11.5%.

As noted above, the 2020 Convertible Notes were no longer outstanding upon maturity on March 1, 2020. As of December 31, 2019, the outstanding principal on the 2020 Convertible Notes and the net carrying amount of the liability component was $2.5 million and the unamortized debt discount was zero.

We incurred approximately $10.4 million of issuance costs related to the issuance of the 2020 Convertible Notes, of which $7.5 million and $2.9 million were recorded to deferred financing costs and additional paid-in capital, respectively, in proportion to the allocation of the proceeds of the 2020 Convertible Notes. The $7.5 million recorded as deferred financing costs on our consolidated balance sheet was amortized over the term of the 2020 Convertible Notes using the effective interest method. As of December 31, 2019, the balance of unamortized deferred financing costs related to the 2020 Convertible Notes was zero. Total amortization expense of the deferred financing costs was $0.1 million and $0.3 million, respectively, for the three and six month periods ended June 30, 2019 and is included in interest expense in the unaudited condensed consolidated statements of operations. See Note 11, “Interest Costs,” for additional information.

The 2020 Convertible Notes had an initial conversion rate of 41.9274 common shares per $1,000 principal amount of 2020 Convertible Notes, which was equivalent to an initial conversion price of approximately $23.85 per share of our common stock. The shares of common stock subject to conversion were excluded from diluted earnings per share calculations under the if-converted method as their impact was anti-dilutive.

***Forward Transactions***

In connection with the issuance of the 2020 Convertible Notes, we paid approximately $140 million to enter into prepaid forward stock repurchase transactions (the "Forward Transactions") with certain financial institutions (the "Forward Counterparties"), pursuant to which we purchased approximately 7.2 million shares of common stock for settlement on or around the March 1, 2020 maturity date for the 2020 Convertible Notes, subject to the ability of each Forward Counterparty to elect to settle all or a portion of its Forward Transactions early.

On December 11, 2019, we entered into an amendment to one of the Forward Transactions (the "Amended and Restated Forward Transaction") to extend the expected settlement date with respect to approximately 2.1 million shares of common stock held by one of the Forward Counterparties, JPMorgan Chase Bank, National Association (the "2022 Forward Counterparty"), to correspond with the May 15, 2022 maturity date for the 2022 Convertible Notes. In the future, we may request that the 2022 Forward Counterparty modify the settlement terms of the Amended and Restated Forward Transaction to provide that, in lieu of the delivery of the applicable number of shares of our common stock to us to settle a portion of the Amended and Restated Forward Transaction in accordance with its terms, the 2022 Forward Counterparty would pay to us the net proceeds from the sale by the 2022 Forward Counterparty (or its affiliate) of a corresponding number of shares of our common stock in a registered offering (which may include block sales, sales on the NASDAQ Global Select Market, sales in the over-the-counter market, sales pursuant to negotiated transactions or otherwise, at market prices prevailing at the time of sale or at negotiated prices). Any such sales could potentially decrease (or reduce the size of any increase in) the market price of our common stock. The 2022 Forward Counterparty is not required to effect any such settlement in cash in lieu of delivery of shares of our common stock and, if we request that the 2022 Forward Counterparty effect any such settlement, it will be entered into in the discretion of the 2022 Forward Counterparty on such terms as may be mutually agreed upon at the time. As a result of the Forward Transactions, total shareholders' equity within our consolidated balance sheet was reduced by approximately $140 million. During March 2020, approximately 5.1 million shares of common stock were delivered to us in connection with the Forward Transactions (as defined and described in Note 10, "Long-Term Debt and Other Liabilities"). We accounted for these shares as Treasury Stock and reclassified $98.9 million from Additional Paid-In Capital to Treasury Stock, at cost, in our unaudited condensed consolidated balance sheet.

**Restricted Cash** - Our restricted cash balances were $5.7 million and $7.7 million, respectively, as of June 30, 2020 and December 31, 2019 and primarily consist of letters of credit. Certain of the letters of credit require us to maintain restricted cash accounts in a similar amount, and are issued for the benefit of the landlords at our current office locations in Chicago, IL, Bensenville, IL and Broomfield, CO.

## 11. Interest Costs

We capitalize a portion of our interest on funds borrowed during the active construction period of major capital projects. Capitalized interest is added to the cost of the underlying assets and amortized over the useful lives of the assets.

The following is a summary of our interest costs for the three and six month periods ended June 30, 2020 and 2019 *(in thousands)*:

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Interest costs charged to expense | $ 26,392 | $ 31,226 | $ 52,821 | $ 57,757 |
| Amortization of deferred financing costs | 1,453 | 1,324 | 2,872 | 2,573 |
| Accretion of debt discount | 3,435 | 3,858 | 6,761 | 9,392 |
| Amortization of debt premium | - | (258) | - | (1,018) |
| Interest expense | 31,280 | 36,150 | 62,454 | 68,704 |
| Interest costs capitalized to property and equipment | - | 7 | - | 11 |
| Interest costs capitalized to software | 95 | 115 | 184 | 240 |
| Total interest costs | $ 31,375 | $ 36,272 | $ 62,638 | $ 68,955 |

## 12. Leases

**Operating and Financing Leases —** We determine whether a contract contains a lease at contract inception. For leases subsequent to adoption of ASC 842, lease liabilities are calculated using a discount rate based on our incremental borrowing rate at lease commencement. We have operating lease agreements for certain facilities and equipment as well as tower space and base stations. Certain tower space leases have renewal option terms that have been deemed to be reasonably certain to be exercised. These renewal options extend a lease up to 20 years. We recognize operating lease expense on a straight-line basis over the lease term. As of June 30, 2020, there were no significant leases which have not commenced.

The following is a summary of our lease expense included in the unaudited condensed consolidated statements of operations *(in thousands)*:

| | For the Three Months Ended June 30, 2020 | For the Three Months Ended June 30, 2019 |
|---|---|---|
| Operating lease cost | $ 4,889 | $ 5,194 |
| Financing lease cost | | |
| Amortization of leased assets | 94 | 171 |
| Interest on lease liabilities | 41 | 16 |
| Total lease cost | $ 5,024 | $ 5,381 |

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 |
|---|---|---|
| Operating lease cost | $ 9,746 | $ 10,112 |
| Financing lease cost | | |
| Amortization of leased assets | 185 | 376 |
| Interest on lease liabilities | 67 | 27 |
| Total lease cost | $ 9,998 | $ 10,515 |

Other information regarding our leases is as follows *(in thousands, except lease terms and discount rates)*:

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 |
|---|---|---|
| **Supplemental cash flow information** | | |
| Cash paid for amounts included in measurement of lease liabilities: | | |
| Operating cash flows used in operating leases | $ 11,225 | $ 11,908 |
| Operating cash flows used in financing leases | 67 | 27 |
| Financing cash flows used in financing leases | 310 | 383 |
| Non-cash items: | | |
| Operating leases obtained | 7,726 | 1,047 |
| **Weighted average remaining lease term** | | |
| Operating leases | 8 years | 8 years |
| Financing leases | 2 years | 1 year |
| **Weighted average discount rate** | | |
| Operating leases | 9.5% | 10.3% |
| Financing leases | 11.4% | 8.5% |

Annual future minimum lease payments as of June 30, 2020 *(in thousands)*:

| **Years ending December 31,** | **Operating Leases** | **Financing Leases** |
|---|---|---|
| 2020 (period from July 1 to December 31) | $ 7,694 | $ 637 |
| 2021 | 20,210 | 935 |
| 2022 | 19,142 | 855 |
| 2023 | 15,175 | 45 |
| 2024 | 11,607 | - |
| Thereafter | 57,303 | - |
| Total future minimum lease payments | 131,131 | 2,472 |
| Less: Amount representing interest | (41,158) | (205) |
| Present value of net minimum lease payments | $ 89,973 | $ 2,267 |
| | | |
| **Reported as of June 30, 2020** | | |
| Accrued liabilities | $ 8,990 | $ 858 |
| Non-current operating lease liabilities | 80,983 | - |
| Other non-current liabilities | - | 1,409 |
| Total lease liabilities | $ 89,973 | $ 2,267 |

**Arrangements with Commercial Airlines —** Under the turnkey model, we account for equipment transactions as operating leases of space for our equipment on the aircraft.  We may be responsible for the costs of installing and/or deinstalling the equipment. Under the turnkey model, the equipment transactions involve the transfer of legal title but do not meet sales recognition for accounting purposes because the risks and rewards of ownership are not fully transferred due to our continuing involvement with the equipment, the length of the term of our agreements with the airlines, and restrictions in the agreements regarding the airlines' use of the equipment. Under this model, we refer to the airline as a "partner."

Under the turnkey model, the assets are recorded as airborne equipment on our unaudited condensed consolidated balance sheets, as noted in Note 7, "Composition of Certain Balance Sheet Accounts." Any upfront equipment payments are accounted for as lease incentives and recorded as deferred airborne lease incentives on our unaudited condensed consolidated balance sheets and are recognized as a reduction of the cost of service revenue on a straight-line basis over the term of the agreement with the airline. We recognized $14.8 million and $21.9 million, respectively, for the three and six month periods ended June 30, 2020 and $6.1 million and $15.0 million, respectively, for the prior-year periods as a reduction to our cost of service revenue in our unaudited condensed consolidated statements of operations from the amortization of deferred airborne lease incentives. The increase during the three and six month periods ended June 30, 2020 was due to the Delta amendment.  See Note 1, "Basis of Presentation," for additional information. As of June 30, 2020, deferred airborne lease incentives of $73.2 million and $89.3 million, respectively, are included in current and non-current liabilities in our unaudited condensed consolidated balance sheet and reflect changes resulting from the Delta amendment. As of December 31, 2019, deferred airborne lease incentives of $26.6 million and $135.4 million, respectively, are included in current and non-current liabilities in our unaudited condensed consolidated balance sheet.

Under the turnkey model, the revenue share paid to our airline partners represents operating lease payments.  They are deemed to be contingent rental payments, as the payments due to each airline are based on a percentage of our CA-NA and CA-ROW service revenue generated from that airline's passengers, which is unknown until realized. Therefore, we cannot estimate the lease payments due to an airline at the commencement of our contract with such airline. This rental expense is included in cost of service revenue and is partially offset by the amortization of the deferred airborne lease incentives discussed above. Due to the accelerated amortization resulting from the Delta amendment and a significant reduction in revenue share as a result of COVID-19, the amortization of deferred airborne lease incentive exceeded our revenue share expense, by $11.8 million and $7.2 million, respectively, for the three and six month periods ended June 30, 2020. We incurred net rental expenses of $6.8 million and $10.6 million, respectively, for the prior-year periods.

## 13. Commitments and Contingencies

**Contractual Commitments** - We have agreements with vendors to provide us with satellite transponder and teleport services. These agreements vary in length and amount and as of June 30, 2020 commit us to purchase satellite transponder and teleport services totaling approximately $63.9 million in 2020 (July 1 through December 31), $131.4 million in 2021, $108.7 million in 2022, $91.4 million in 2023, $59.4 million in 2024 and $259.4 million thereafter. Subsequent to the issuance of the Company's 2019 financial statements, the Company determined that the amounts of contractual commitments for satellite transponder and teleport services disclosed in the 2019 Form 10-K were overstated by $26 million in the "3-5 years" column related to 2024 and by $30 million in the "Thereafter" column related to 2029-2032. During the current year, the Company corrected these disclosed contractual commitments amounts. These disclosure adjustments did not impact the amounts recorded in the consolidated financial statements and the Company believes the disclosure adjustments are not material.

We have agreements with various vendors under which we have remaining commitments to purchase satellite-based systems, certifications and development services. Such commitments will become payable as we receive the equipment or certifications, or as development services are provided.

**Damages and Penalties** - We have entered into a number of agreements with our airline partners that require us to provide a credit or pay penalties or liquidated damages to our airline partners on a per aircraft, per day or per hour basis if we are delayed in delivering our equipment, unable to install our equipment on aircraft by specified timelines or fail to comply with service level commitments. The maximum amount of future credits or payments we could be required to make under these agreements is uncertain because the amount of future credits or payments is based on certain variable inputs.

**Indemnifications and Guarantees** - In accordance with Delaware law, we indemnify our officers and directors for certain events or occurrences while the officer or director is, or was, serving at our request in such capacity. The maximum potential amount of future payments we could be required to make under this indemnification is uncertain and may be unlimited, depending upon circumstances. However, our Directors' and Officers' insurance does provide coverage for certain of these losses.

In the ordinary course of business we may occasionally enter into agreements pursuant to which we may be obligated to pay for the failure of the performance of others, such as the use of corporate credit cards issued to employees. Based on historical experience, we believe that the risk of sustaining any material loss related to such guarantees is remote.

We have entered into a number of agreements, including our agreements with commercial airlines, pursuant to which we indemnify the other party for losses and expenses suffered or incurred in connection with any patent, copyright, or trademark infringement or misappropriation claim asserted by a third party with respect to our equipment or services. The maximum potential amount of future payments we could be required to make under these indemnification agreements is uncertain and is typically not limited by the terms of the agreements.

**Linksmart Litigation** - On April 20, 2018, Linksmart Wireless Technology, LLC filed suit against us and eight of our airline partners in the U.S. District Court for the Central District of California alleging that our redirection server and login portal infringe a patent owned by the plaintiff. The suits seek an unspecified amount of damages. We are required under our contracts with these airlines to indemnify them for defense costs and any liabilities resulting from the suit. The Court has stayed the suits against our airline customers pending resolution of the suit against Gogo. Linksmart has also filed suit against other defendants asserting the same patent. Following the filing by one of those defendants of a petition to commence an *inter partes* review against the asserted patent in the U.S. Patent and Trademark Office, the Court stayed the litigation against such other defendant and Gogo, but such stay was lifted in July 2019 when the U.S. Patent and Trademark Office determined that the petitioner had not met the standard of proof required to commence the *inter partes* review. We believe that the plaintiff's claims are without merit and intend to defend them vigorously. The outcome of this litigation is inherently uncertain. No amounts have been accrued for any potential losses under this matter, as we cannot reasonably predict the outcome of the litigation or any potential losses.

**Securities Litigation** - On June 27, 2018, a purported stockholder of the Company filed a putative class action lawsuit in the United States District Court for the Northern District of Illinois, Eastern Division styled Pierrelouis v. Gogo Inc., naming the Company, its former Chief Executive Officer and Chief Financial Officer and its current Chief Financial Officer and President, Commercial Aviation as defendants purportedly on behalf of all purchasers of our securities from February 27, 2017 through May 4, 2018. The complaint asserts claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder, alleging misrepresentations or omissions by us purporting to relate to our 2Ku antenna's reliability and installation and remediation costs. The plaintiffs seek to recover from us and the individual defendants an unspecified amount of damages. In December 2018 the plaintiffs filed an amended complaint and in February 2019, we filed a motion to dismiss such amended complaint. In October 2019 the judge granted the motion to dismiss on two independent grounds, finding that plaintiffs failed to plausibly allege that defendants made materially false or misleading statements and that plaintiffs failed to plead with particularity that defendants acted with scienter. The amended complaint was dismissed without prejudice, and in December 2019, plaintiffs filed a second amended complaint. In February 2020 we filed a motion to dismiss such second amended complaint. In July 2020, plaintiffs filed a motion requesting leave to file a proposed third amendment complaint, which was granted by the Court. We believe that the claims are without merit and intend to file a motion to dismiss the third amended complaint and to continue to defend the claims vigorously. In accordance with Delaware law, we will indemnify the individual named defendants for their defense costs and any damages they incur in connection with the suit. We have filed a claim with the issuer of our Directors' and Officers' insurance policy with respect to this suit. No amounts have been accrued for any potential losses under this matter, as we cannot reasonably predict the outcome of the litigation or any potential losses.

**Derivative Litigation** - On September 25, 2018 and September 26, 2018, two purported stockholders of the Company filed substantively identical derivative lawsuits in the United States District Court for the Northern District of Illinois, Eastern Division, styled Nanduri v. Gogo Inc. and Hutsenpiller v. Gogo Inc., respectively. Both lawsuits were purportedly brought derivatively on behalf of us and name us as a nominal defendant and name as defendants each member of the Company's Board of Directors, its former Chief Executive Officer and Chief Financial Officer and its current Chief Executive Officer, Chief Financial Officer and President, Commercial Aviation. The complaints assert claims under Section 14(a) of the Securities Exchange Act of 1934, breach of fiduciary duty, unjust enrichment, and waste of corporate assets, and allege misrepresentations or omissions by us purporting to relate to our 2Ku antenna's reliability and installation and remediation costs, as well as allegedly excessive bonuses, stock options, and other compensation paid to current Officers and Directors and excessive severance paid to former Officers. The two lawsuits were consolidated and are stayed until a final disposition of the motion to dismiss in the class action suit. We believe that the claims are without merit and intend to defend them vigorously if the litigation resumes. The plaintiffs seek to recover, on our behalf, an unspecified amount of damages from the individual defendants. We have filed a claim with the issuer of our Directors' and Officers' insurance policy with respect to these suits. No amounts have been accrued for any potential costs under this matter, as we cannot reasonably predict the outcome of the litigation or any potential costs.

## 14. Fair Value of Financial Assets and Liabilities

A three-tier fair value hierarchy has been established which prioritizes the inputs used in measuring fair value. These tiers include:

- *Level 1* - defined as observable inputs such as quoted prices in active markets;
- *Level 2* - defined as observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- *Level 3* - defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

*Long-Term Debt:*

Our financial assets and liabilities that are disclosed but not measured at fair value include the 2024 Senior Secured Notes and the 2022 Convertible Notes, and, while outstanding, the 2020 Convertible Notes, which are reflected on the consolidated balance sheet at cost. The fair value measurements are classified as Level 2 within the fair value hierarchy since they are based on quoted market prices of our instruments in markets that are not active. We estimated the fair value of the 2024 Senior Secured Notes, the 2022 Convertible Notes, and, while outstanding, the 2020 Convertible Notes, by calculating the upfront cash payment a market participant would require to assume these obligations. The upfront cash payments used in the calculations of fair value on our June 30, 2020 unaudited condensed consolidated balance sheet, excluding any issuance costs, are the amount that a market participant would be willing to lend at June 30, 2020 to an entity with a credit rating similar to ours and that would allow such an entity to achieve sufficient cash inflows to cover the scheduled cash outflows under the 2024 Senior Secured Notes, the 2022 Convertible Notes and, while outstanding, the 2020 Convertible Notes. The calculated fair value of each of the 2022 Convertible Notes and, while outstanding, the 2020 Convertible Notes is correlated to our stock price and as a result, significant changes to our stock price could have a significant impact on their calculated fair values.

The fair value and carrying value of long-term debt as of June 30, 2020 and December 31, 2019 were as follows *(in thousands)*:

| | June 30, 2020 | | | December 31, 2019 | | |
|---|---|---|---|---|---|---|
| | Fair Value *(1)* | Carrying Value | | Fair Value *(1)* | Carrying Value | |
| 2024 Senior Secured Notes | $ 777,000 | $ 921,489 | *(2)* | $ 982,000 | $ 921,137 | *(2)* |
| 2022 Convertible Notes | 168,000 | 208,277 | *(3)* | 297,000 | 201,868 | *(3)* |
| 2020 Convertible Notes | - | - | | 2,498 | 2,498 | |

*(1)* Fair value amounts are rounded to the nearest million, except for the 2020 Convertible Notes, as of December 31, 2019.
*(2)* Carrying value of the 2024 Senior Secured Notes reflects the unaccreted debt discount of $3.5 million and $3.9 million, respectively, as of June 30, 2020 and December 31, 2019. See Note 10, "Long-Term Debt and Other Liabilities," for further information.
*(3)* Carrying value of the 2022 Convertible Notes reflects the unaccreted debt discount of $29.5 million and $35.9 million, respectively, as of June 30, 2020 and December 31, 2019. See Note 10, "Long-Term Debt and Other Liabilities," for further information.

We have held-to-maturity financial instruments where carrying value approximates fair value. There were no fair value adjustments to these financial instruments during the three and six month periods ended June 30, 2020 and 2019.

## 15. Income Tax

The effective income tax rates for the three and six month periods ended June 30, 2020 and 2019 were (0.1)% and (0.2)%, respectively, as compared with (0.4)% and (0.5)%, respectively, for the prior-year periods. For the three and six month periods ended June 30, 2020 and 2019, our income tax expense was not significant primarily due to the full valuation allowance against our net deferred tax assets.

We are subject to income taxation in the United States, various states within the United States, Canada, Switzerland, Japan, Mexico, Brazil, Singapore, the United Kingdom, Hong Kong, Australia, China, India, France, Germany and the Netherlands. With few exceptions, as of June 30, 2020, we are no longer subject to U.S. federal, state, local or foreign examinations by tax authorities for years before 2016.

We record penalties and interest relating to uncertain tax positions in the income tax provision line item in the unaudited condensed consolidated statement of operations. No penalties or interest related to uncertain tax positions were recorded for the three and six month periods ended June 30, 2020 and 2019. As of June 30, 2020 and December 31, 2019, we did not have a liability recorded for interest or potential penalties.

We do not expect a change in the unrecognized tax benefits within the next 12 months.

## 16. Business Segments and Major Customers

We operate our business through three operating segments: Commercial Aviation North America, or "CA-NA," Commercial Aviation Rest of World, or "CA-ROW," and Business Aviation, or "BA." See Note 1, "Basis of Presentation," for further information regarding our segments.

The accounting policies of the operating segments are the same as those described in Note 2, "Summary of Significant Accounting Policies," in our 2019 10-K. Intercompany transactions between segments are excluded as they are not included in management's performance review of the segments. For the three and six month periods ended June 30, 2020 and 2019, our foreign revenue accounted for less than 15% of our consolidated revenue. We do not segregate assets between segments for internal reporting. Therefore, asset-related information has not been presented. Additionally, assets outside of the United States totaled less than 15% of our unaudited condensed consolidated assets as of June 30, 2020 and December 31, 2019, respectively. For our airborne assets, we consider only those assets installed in aircraft associated with international commercial airline partners to be owned outside of the United States.

Management evaluates performance and allocates resources to each segment based on reportable segment profit (loss), which is calculated internally as net income (loss) attributable to common stock before unallocated corporate costs, interest expense, interest income, income taxes, depreciation and amortization, and certain non-cash items (including stock-based compensation expense, amortization of deferred airborne lease incentives, amortization of STC costs, impairment of long-lived assets, impairment of cost-basis investment, loss on extinguishment of debt and proceeds from litigation settlement) and other income (expense). Reportable segment profit (loss) is a measure of performance reported to the chief operating decision maker for purposes of making decisions about allocating resources to the segments and evaluating segment performance. In addition, reportable segment profit (loss) is included herein in conformity with ASC 280-10, *Segment Reporting*. Management believes that reportable segment profit (loss) provides useful information for analyzing and evaluating the underlying operating results of each segment. However, reportable segment profit (loss) should not be considered in isolation or as a substitute for net income (loss) attributable to common stock or other measures of financial performance prepared in accordance with GAAP. Additionally, our computation of reportable segment profit (loss) may not be comparable to other similarly titled measures computed by other companies.

As noted in our 2019 10-K, during the fourth quarter of 2019, we revised the presentation of our reportable segments' operating results in order to exclude the impact of certain corporate costs from the calculation of total reportable segment profit (loss). As such, all amounts for the three and six month periods ended June 30, 2019 have been recast to conform to the current year's presentation. Beginning in 2020, we adopted a new allocation methodology for the ATG network costs utilizing aircraft online, pricing and usage for each of CA-NA and BA. Under this new methodology, BA will continue to be allocated the majority of the ATG network costs.

Information regarding our reportable segments is as follows (*in thousands*):

| | For the Three Months Ended June 30, 2020 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| Service revenue | $ 25,536 | $ 4,710 | $ 44,033 | $ 74,279 |
| Equipment revenue | 4,495 | 7,267 | 10,599 | 22,361 |
| Total revenue | $ 30,031 | $ 11,977 | $ 54,632 | $ 96,640 |
| Reportable segment profit (loss) | $ (10,572) | $ (26,670) | $ 27,206 | $ (10,036) |

| | For the Three Months Ended June 30, 2019 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| Service revenue | $ 96,402 | $ 22,573 | $ 54,756 | $ 173,731 |
| Equipment revenue | 9,325 | 14,144 | 16,485 | 39,954 |
| Total revenue | $ 105,727 | $ 36,717 | $ 71,241 | $ 213,685 |
| Reportable segment profit (loss) | $ 34,123 | $ (16,402) | $ 31,395 | $ 49,116 |

| | For the Six Months Ended June 30, 2020 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| Service revenue | $ 99,364 | $ 23,938 | $ 101,759 | $ 225,061 |
| Equipment revenue | 10,803 | 21,451 | 23,800 | 56,054 |
| Total revenue | $ 110,167 | $ 45,389 | $ 125,559 | $ 281,115 |
| Reportable segment profit (loss) | $ 5,311 | $ (44,041) | $ 63,060 | $ 24,330 |

| | For the Six Months Ended June 30, 2019 | | | |
|---|---|---|---|---|
| | CA-NA | CA-ROW | BA | Total |
| Service revenue | $ 188,429 | $ 42,345 | $ 107,969 | $ 338,743 |
| Equipment revenue | 13,367 | 27,303 | 33,821 | 74,491 |
| Total revenue | $ 201,796 | $ 69,648 | $ 141,790 | $ 413,234 |
| Reportable segment profit (loss) | $ 64,785 | $ (34,595) | $ 65,150 | $ 95,340 |

A reconciliation of total reportable segment profit (loss) to the relevant consolidated amounts is as follows (*in thousands*):

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| CA-NA segment profit (loss) | $ (10,572) | $ 34,123 | $ 5,311 | $ 64,785 |
| CA-ROW segment loss | (26,670) | (16,402) | (44,041) | (34,595) |
| BA segment profit | 27,206 | 31,395 | 63,060 | 65,150 |
| Total reportable segment profit (loss) | (10,036) | 49,116 | 24,330 | 95,340 |
| Unallocated corporate costs (1) | (5,589) | (10,920) | (14,225) | (19,253) |
| Interest income | 81 | 1,230 | 687 | 2,379 |
| Interest expense | (31,280) | (36,150) | (62,454) | (68,704) |
| Depreciation and amortization | (48,690) | (29,967) | (81,360) | (60,716) |
| Amortization of deferred airborne lease incentives | 14,841 | 6,077 | 21,912 | 15,030 |
| Amortization of STC costs | (805) | (322) | (1,612) | (642) |
| Stock-based compensation expense | (3,164) | (4,318) | (7,159) | (8,645) |
| Impairment of long-lived assets | (987) | - | (47,376) | - |
| Impairment of cost-basis investment | - | - | (3,000) | - |
| Loss on extinguishment of debt | - | (57,962) | - | (57,962) |
| Proceeds from litigation settlement | - | - | - | 3,215 |
| Other expense | (233) | (443) | (226) | (293) |
| Loss before income taxes | $ (85,862) | $ (83,659) | $ (170,483) | $ (100,251) |

*(1)* Represents costs that are not directly attributable to the reportable segments, comprised primarily of the costs of corporate functions, including executive, legal, finance and human resources, but excluding stock-based compensation expense for those functions of $0.6 million and $2.3 million, respectively, for the three and six month periods ending June 30, 2020 and $1.5 million and $3.0 million, respectively, for the prior-year periods.

**Major Customers and Airline Partnerships —** Revenue earned from Delta and its passengers accounted for approximately 16% and 24% of consolidated revenue, respectively, for the three and six month periods ended June 30, 2020 and approximately 28% for both prior-year periods. Delta accounted for approximately 24% and 11% of consolidated accounts receivable, respectively, as of June 30, 2020 and December 31, 2019.

## 17. Employee Retirement and Postretirement Benefits

**Stock-Based Compensation —** As of June 30, 2020, we maintained three stock-based incentive compensation plans ("Stock Plans"), as well as an Employee Stock Purchase Plan ("ESPP"). See Note 12, "Stock-Based Compensation," in our 2019 10-K for further information regarding these plans. Most of our equity grants are awarded on an annual basis.

Effective March 17, 2020, the performance-vesting conditions for all outstanding options to purchase shares of common stock and restricted stock units ("RSUs") subject to both service and performance vesting requirements that were granted in 2017, 2018, and 2019 were eliminated. The performance modification resulted in the immediate issuance of 186,139 shares of common stock, corresponding to the portion of RSUs for which service-vesting dates had previously elapsed.

For the six month period ended June 30, 2020, options to purchase 1,209,686 shares of common stock were granted, no options to purchase shares of common stock were exercised, options to purchase 50,383 shares of common stock were forfeited and options to purchase 2,854,006 shares of common stock expired. In addition, pursuant to an option exchange program that closed on June 12, 2020, we accepted for exchange, in the aggregate, eligible options (which excluded options granted for service by non-executive members of our board of directors) to purchase 6,664,773 shares of common stock. The surrendered eligible options were cancelled, and we granted replacement options to purchase an aggregate of 2,896,383 shares of our common stock in exchange for the tendered eligible options, subject to the terms and conditions of the exchange program.

The stock-based compensation expense resulting from the option exchange program was less than $1.0 million, and the amount will be recorded on a straight-line basis through December 31, 2022.

For the six month period ended June 30, 2020, 3,013,949 RSUs were granted, 901,487 RSUs vested (of which 192,267 were RSUs that vested in connection with the performance modification) and 311,569 RSUs were forfeited.

For the six month period ended June 30, 2020, 25,977 restricted shares vested and no shares were cancelled. These shares are deemed issued as of the date of grant, but not outstanding until they vest.

For the six month period ended June 30, 2020, 175,449 Deferred Stock Units were granted and 26,508 vested.

For the six month period ended June 30, 2020, 227,438 shares of common stock were issued under the ESPP.

In July 2020, due to the impact of COVID-19 and in order to conserve cash, our compensation committee determined that the annual bonus earned in 2020 would be paid in shares of Gogo common stock. Depending on our cash position at the time of bonus payout, the compensation committee may elect instead to have some or all of the bonus paid in cash.

The following is a summary of our stock-based compensation expense by operating expense line in the unaudited condensed consolidated statements of operations *(in thousands)*:

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Cost of service revenue | $ 390 | $ 374 | $ 867 | $ 802 |
| Cost of equipment revenue | 62 | 80 | 135 | 151 |
| Engineering, design and development | 588 | 780 | 1,341 | 1,554 |
| Sales and marketing | 589 | 967 | 1,341 | 1,937 |
| General and administrative | 1,535 | 2,117 | 3,475 | 4,201 |
| Total stock-based compensation expense | $ 3,164 | $ 4,318 | $ 7,159 | $ 8,645 |

**401(k) Plan —** Under our 401(k) plan, all employees who are eligible to participate are entitled to make tax-deferred contributions, subject to Internal Revenue Service limitations. We match 100% of the employee's first 4% of contributions made, subject to annual limitations. Our matching contributions were $0.9 million and $2.1 million, respectively, during the three and six month periods ended June 30, 2020 and $1.4 million and $2.6 million, respectively, for the prior-year periods.

## 18. Research and Development Costs

Expenditures for research and development are charged to expense as incurred and totaled $10.9 million and $26.6 million, respectively, during the three and six month periods ended June 30, 2020 and $17.6 million and $31.7 million, respectively, for the prior-year periods. Research and development costs are reported as a component of engineering, design and development expenses in our unaudited condensed consolidated statements of operations.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this report may constitute "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, statements regarding our industry, business strategy, plans, goals and expectations concerning our market position, international expansion, future technologies, future operations, margins, profitability, future efficiencies, capital expenditures, liquidity and capital resources and other financial and operating information. When used in this discussion, the words "anticipate," "assume," "believe," "budget," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "future" and the negative of these or similar terms and phrases are intended to identify forward-looking statements in this Quarterly Report on Form 10-Q.

Forward-looking statements reflect our current expectations regarding future events, results or outcomes. These expectations may or may not be realized. Although we believe the expectations reflected in the forward-looking statements are reasonable, we can give you no assurance these expectations will prove to have been correct. Some of these expectations may be based upon assumptions, data or judgments that prove to be incorrect. Actual events, results and outcomes may differ materially from our expectations due to a variety of known and unknown risks, uncertainties and other factors. Although it is not possible to identify all of these risks and factors, they include, among others, the following:

- the duration for which and the extent to which the COVID-19 pandemic continues to impact demand for commercial and business aviation travel globally, including as a result of governmental restrictions on travel and business and social gatherings and overall economic conditions;
- the failure to successfully implement our cost reduction plan and other measures taken to mitigate the impact of COVID-19 on our business and financial condition, including efforts to renegotiate contractual terms with certain suppliers and customers;
- the loss of, or failure to realize the anticipated benefits from, agreements with our airline partners or customers on a timely basis or any failure to renew any existing agreements upon expiration or termination including the results of our ongoing discussions with Delta Air Lines, Inc. ("Delta") with respect to its transition to free service, the amendment to our agreement with Delta to provide 2Ku service on certain Delta aircraft to change the contract expiration date from February 2027 with respect to all aircraft to a staggered, fleet by fleet expiration schedule under which expiration dates will occur between November 2020 and July 2022 (the "Delta amendment") and Delta's stated intent to pursue supplier diversification for its domestic mainline fleet;
- the failure to maintain airline and passenger satisfaction with our equipment or our service;
- any inability to timely and efficiently deploy and operate our 2Ku service or implement our technology roadmap, including developing and deploying upgrades and installations of our ATG-4, 2Ku and 2Ka technologies, Gogo 5G, any technology to which our ATG or satellite networks evolve and other new technologies, for any reason, including technological issues, manufacturing defects and related remediation efforts, changes in regulations or regulatory delays affecting us, or our suppliers, some of whom are single source, or the failure by our airline partners or customers to roll out equipment upgrades or new services or adopt new technologies in order to support increased demand and network capacity constraints, including as a result of airline partners shifting to a free-to-passenger business model;
- the timing of deinstallation of our equipment from aircraft, including deinstallations resulting from aircraft retirements and other deinstallations permitted by certain airline contract provisions;
- the loss of relationships with original equipment manufacturers or dealers;
- our ability to make our equipment factory linefit available on a timely basis;
- our ability to develop or purchase ATG and satellite network capacity sufficient to accommodate current and expected growth in passenger demand in North America and internationally as we expand;
- our reliance on third-party suppliers, some of whom are single source, for satellite capacity and other services and the equipment we use to provide services to commercial airlines and their passengers and business aviation customers;
- unfavorable economic conditions in the airline industry and/or the economy as a whole;
- governmental action restricting trade with China or other foreign countries;
- our ability to expand our international or domestic operations, including our ability to grow our business with current and potential future airline partners and customers and the effect of shifts in business models, including a shift toward airlines providing free service to passengers;

- an inability to compete effectively with other current or future providers of in-flight connectivity services and other products and services that we offer, including on the basis of price, service performance and linefit availability;
- our ability to successfully develop and monetize new products and services, including those that were recently released, are currently being offered on a limited or trial basis, or are in various stages of development;
- our ability to certify and install our equipment and deliver our products and services, including newly developed products and services, on schedules consistent with our contractual commitments to customers;
- the failure of our equipment or material defects or errors in our software resulting in recalls or substantial warranty claims;
- a revocation of, or reduction in, our right to use licensed spectrum, the availability of other air-to-ground spectrum to a competitor or the repurposing by a competitor of other spectrum for air-to-ground use;
- our use of open source software and licenses;
- the effects of service interruptions or delays, technology failures and equipment failures or malfunctions arising from defects or errors in our software or defects in or damage to our equipment;
- the limited operating history of our CA-ROW segment;
- contract changes and implementation issues resulting from decisions by airlines to transition from the turnkey model to the airline-directed model or vice versa;
- increases in our projected capital expenditures due to, among other things, unexpected costs incurred in connection with the roll-out of our technology roadmap or our international expansion;
- compliance with U.S. and foreign government regulations and standards, including those related to regulation of the Internet, including e-commerce or online video distribution changes, and the installation and operation of satellite equipment and our ability to obtain and maintain all necessary regulatory approvals to install and operate our equipment in the United States and foreign jurisdictions;
- our, or our technology suppliers', inability to effectively innovate;
- obsolescence of, and our ability to access, parts, products, equipment and support services compatible with our existing products and technologies;
- costs associated with defending existing or future intellectual property infringement, securities and derivative litigation and other litigation or claims and any negative outcome or effect of pending or future litigation;
- our ability to protect our intellectual property;
- breaches of the security of our information technology network, resulting in unauthorized access to our customers' credit card information or other personal information;
- our substantial indebtedness;
- limitations and restrictions in the agreements governing our current and future indebtedness and our ability to service our indebtedness;
- our ability to obtain additional financing for operations, or financing intended to refinance our existing indebtedness, on acceptable terms or at all, including any grants pursuant to the CARES Act;
- fluctuations in our operating results;
- our ability to attract and retain customers and to capitalize on revenue from our platform;
- the demand for and market acceptance of our products and services;
- changes or developments in the regulations that apply to us, our business and our industry, including changes or developments affecting the ability of passengers or airlines to use our in-flight connectivity services;
- a future act or threat of terrorism, cyber-security attack or other events that could result in adverse regulatory changes or developments as referenced above, or otherwise adversely affect our business and industry;
- our ability to attract and retain qualified employees, including key personnel, including in light of recent furloughs and salary reductions;
- the effectiveness of our marketing and advertising and our ability to maintain and enhance our brands;

- our ability to manage our growth in a cost-effective manner and integrate and manage acquisitions;
- compliance with anti-corruption laws and regulations in the jurisdictions in which we operate, including the Foreign Corrupt Practices Act and the (U.K.) Bribery Act 2010;
- restrictions on the ability of U.S. companies to do business in foreign countries, including, among others, restrictions imposed by the U.S. Office of Foreign Assets Control;
- difficulties in collecting accounts receivable;
- our ability to successfully implement improvements to systems, operations, strategy and procedures needed to support our growth and to effectively evaluate and pursue strategic opportunities; and
- other risks and factors listed under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission (“SEC”) on March 13, 2020 (the “2019 10-K”), in Item 1A of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, as filed with the SEC on May 11, 2020 (the “2020 1Q 10-Q”), and in Item 1A of this report.

Any one of these factors or a combination of these factors could materially affect our financial condition or future results of operations and could influence whether any forward-looking statements contained in this report ultimately prove to be accurate. Our forward-looking statements are not guarantees of future performance, and you should not place undue reliance on them. All forward-looking statements speak only as of the date made and we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

In addition, while we do, from time to time, communicate with securities analysts, it is against our policy to disclose to them any material non-public information or other confidential information.  Accordingly, stockholders should not assume that we agree with any statement or report issued by any analyst irrespective of the content of the statement or report.  Thus, to the extent that reports issued by securities analysts contain any projections, forecasts, or opinions, such reports are not our responsibility.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*The following discussion and analysis is intended to help the reader understand our business, financial condition, results of operations, liquidity and capital resources. You should read this discussion in conjunction with our unaudited condensed consolidated interim financial statements and the related notes contained elsewhere in this Quarterly Report on Form 10-Q. Unless the context otherwise indicates or requires, the terms "we," "our," "us," "Gogo," and the "Company," as used in this report, refer to Gogo Inc. and its directly and indirectly owned subsidiaries as a combined entity, except where otherwise stated or where it is clear that the terms refer only to Gogo Inc. exclusive of its subsidiaries.*

*The statements in this discussion regarding industry outlook, our expectations regarding our future performance, liquidity and capital resources and other non-historical statements in this discussion are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described under "Risk Factors" in the 2019 10-K, in Item 1A of the 2020 1Q 10-Q and in Item 1A and "Special Note Regarding Forward-Looking Statements" in this report. Our actual results may differ materially from those contained in or implied by any forward-looking statements.*

*Our fiscal year ends December 31 and, unless otherwise noted, references to "years" or "fiscal" are for fiscal years ended December 31. See "—Results of Operations."*

### Company Overview

Gogo ("we," "us," "our") is the global leader in providing broadband connectivity solutions and wireless in-flight entertainment to the aviation industry. We operate through the following three segments: Commercial Aviation North America, or "CA-NA," Commercial Aviation Rest of World, or "CA-ROW," and Business Aviation, or "BA."

Services provided by our CA-NA and CA-ROW businesses include Passenger Connectivity, which allows passengers to connect to the Internet from their personal Wi-Fi-enabled devices; Passenger Entertainment, which offers passengers the opportunity to enjoy a broad selection of in-flight entertainment options on their personal Wi-Fi enabled devices; and Connected Aircraft Services ("CAS"), which offers airlines connectivity for various operations and currently include, among others, real-time credit card transaction processing, electronic flight bags and real-time weather information. Services are provided by CA-NA on commercial aircraft flying routes that generally begin and end within North America, which for this purpose includes the United States, Canada and Mexico. CA-ROW provides service on commercial aircraft operated by foreign-based commercial airlines and flights outside of North America for North American-based commercial airlines. The routes included in our CA-ROW segment are those that begin and/or end outside of North America (as defined above) on which our international service is provided. BA provides in-flight Internet connectivity and other voice and data communications products and services and sells equipment for in-flight telecommunications to the business aviation market. BA services include Gogo Biz, our in-flight broadband service, Gogo Vision, our in-flight entertainment service, and satellite-based voice and data services through our strategic alliances with satellite companies.

### Impact of COVID-19 Pandemic

In December 2019, a novel strain of coronavirus ("COVID-19") was reported in Wuhan, China, and the World Health Organization (the "WHO") subsequently declared COVID-19 a "Public Health Emergency of International Concern." The COVID-19 pandemic has caused a significant decline in commercial and business air travel, which has materially and adversely affected our business.

In our two commercial airline ("CA") segments, CA-NA and CA-ROW, passenger traffic on commercial airlines started to decline significantly in late March 2020 and while it has increased somewhat from mid-April lows, it has continued to be significantly below pre-COVID levels through July 2020. Our business aviation segment, BA, also saw a sharp decrease in flight activity, as well as an increase in requests for account suspensions and decreases in new plan activations. In BA, we are seeing positive signs that the business is recovering from mid-April lows, including increased flights, activations and sales in the months of June and July 2020. The duration and severity of the reduction in travel demand due to the COVID-19 pandemic in all three segments is uncertain. In CA, we expect these trends to continue until the global pandemic has moderated and demand for air travel returns. In BA, there can be no assurance that the recovery observed to date will continue.

In response to the significant decline in revenue caused by the pandemic, we have implemented the following liquidity-preservation initiatives:

- *Personnel actions* – We implemented several cost-cutting measures related to personnel, including a hiring freeze, a suspension of 2020 merit salary increases and a modification of the 2020 bonus program allowing awards to be paid in stock or a combination of stock and cash at our option. Additionally, the Chief Executive Officer's 2019 bonus payout was deferred and in July 2020 the Chief Executive Officer accepted common stock in lieu of cash for the after-tax portion of his 2019 bonus.

  We also furloughed approximately 54% of our workforce beginning May 4, 2020. Additionally, on July 30, 2020, we announced a reduction in force of approximately 14% of our workforce, effective August 14, 2020. Furloughed employees not affected by the reduction in force will return to full time work on August 31, 2020. Effective on May 4, 2020, we reduced compensation for salaried employees who were not furloughed. Salary reductions, which will be effective at least through the end of 2020, begin at 30% for the Chief Executive Officer, then 20% for the executive leadership team and reducing downward by staff level from there. In addition, the compensation for the members of our Board of Directors has been reduced by 30% for the last three quarters of 2020.

- *Expense management* – We have identified and are implementing or continuing to pursue action plans / levers in areas not involving personnel to further reduce costs, including the following:

  - Renegotiating terms with suppliers, including agreements executed with satellite capacity providers to reduce and defer payments;
  - Deferring purchases of capital equipment;
  - Delaying aircraft equipment installations;
  - Reducing marketing, travel and other non-essential spend; and
  - Renegotiating terms with airline partners.

- *Financing* – In March 2020, we drew $22 million under the ABL Credit Facility and in the second quarter we repaid $5 million of such amount. As of June 30, 2020, $17 million was outstanding and less than $1 million remained available for borrowing under the terms of the agreement that would allow for the company to meet the "payment conditions" criteria as described in our ABL Credit Agreement. See Note 10, "Long-Term Debt and Other Liabilities," for additional information.
- *Government Assistance* – We applied for an $81 million grant and a $150 million loan under the recently enacted Coronavirus Aid, Relief and Economic Security Act (the "CARES Act"). Based on criteria recently released by the U.S. Treasury Department, we do not believe that we will qualify for a loan, although we have not received a formal determination. If we receive grant assistance, we will be subject to certain restrictions and will likely be required to modify the personnel actions discussed above to comply with the terms of the government assistance.

We expect COVID-19 to continue to have a significant negative impact on our revenue and we are unable to predict how long that impact will continue. The extent of the impact of COVID-19 on our CA and BA businesses and our financial and operational performance will depend on future developments, including the duration, spread and severity of the outbreak, the duration and geographic scope of related travel advisories and restrictions and the extent of the impact of COVID-19 on overall demand for commercial and business aviation travel, all of which are highly uncertain and cannot be predicted. We are unable to predict how long the pandemic and its negative impact will persist, what additional measures may be introduced by governments or private parties or what effect any such additional measures may have on air travel, our business partners and our business. Not only is the duration of the pandemic and future combative measures unknown, the overall situation is extremely fluid, and it is impossible to predict the timing of future material changes in the situation and whether the Company's actions in response will be sufficient or successful. However, based on our current plans, including the measures taken in our response to COVID-19, we believe that our cash and cash equivalents and cash flows provided by operating activities will be sufficient to meet our operating obligations, including our capital expenditure requirements, for at least the next twelve months.

### Factors and Trends Affecting Our Results of Operations

We believe that our operating and business performance is driven by various factors that affect the commercial airline and business aviation industries, including trends affecting the travel industry and trends affecting the customer bases that we target, as well as factors that affect wireless Internet service providers and general macroeconomic factors. Key factors that may affect our future performance include:

- the extent to which the COVID-19 pandemic continues to impact demand for commercial and business air travel globally, including as a result of governmental restrictions on travel and social gatherings and overall economic conditions;
- the effectiveness of our cost reduction plan and other measures taken to mitigate the impact of COVID-19 on our business and financial stability, including efforts to renegotiate contractual terms with suppliers, and the impact such actions have on our operations and long-term success;
- costs associated with the implementation of, and our ability to implement on a timely basis our technology roadmap, upgrades and installation of our ATG-4, 2Ku and 2Ka technologies, Gogo 5G, any technology to which our ATG or satellite networks evolve and other new technologies (including technological issues, manufacturing defects and related remediation efforts and failures or delays on the part of antenna and other equipment developers and providers, some of which are single source, or delays in obtaining STCs including as a result of any government shutdown), the potential licensing of additional spectrum, and the improvements to our network and operations as technology changes and we experience increased demand and network capacity constraints, including as a result of airline partners deciding to provide free service to passengers;
- costs associated with, and our ability to execute, our continued international expansion, including our ability to obtain and comply with foreign telecommunications, aviation and other licenses and approvals necessary for our international operations;
- our ability to obtain sufficient satellite capacity, including for heavily-trafficked areas, in the United States and internationally;
- costs of satellite capacity in the United States and internationally, to which we may have to commit well in advance, including our ability to renegotiate the terms of such agreements in light of the COVID-19 pandemic;
- the pace and extent of adoption of our service for use on domestic and international commercial aircraft by our current and new airline partners and customers;
- the number of aircraft in service in our markets, including consolidation of the airline industry or changes in fleet size or bankruptcies by one or more of our commercial airline partners or BA large-fleet customers;
- the extent of passengers' and aviation partners' adoption of our products and services, which is affected by, among other things, willingness to pay for the services that we provide, the quality and reliability of our products and services, changes in technology and competition from current competitors and new market entrants;
- our ability to enter into and maintain long-term connectivity arrangements with airline partners and customers, which depends on numerous factors including the real or perceived availability, quality and price of our services and product offerings as compared to those offered by our competitors;
- the impact of a change in business models and contract terms on the profitability of our connectivity agreements with airline partners, including as a result of changes in accounting standards;
- the results of our ongoing discussions with Delta with respect to its transition to free service and its stated intent to pursue supplier diversification for its domestic mainline fleet, and our ability to offset the impact of the Delta amendment and any deinstalled aircraft through increased demand and revenue;
- our ability to engage suppliers of equipment components and network services on a timely basis and on commercially reasonable terms;
- continued demand for connectivity and proliferation of Wi-Fi enabled devices, including smartphones, tablets and laptops;
- changes in domestic or foreign laws, regulations or policies that affect our business or the business of our customers and suppliers;
- changes in laws, regulations and interpretations affecting telecommunications services, including those affecting our ability to maintain our licenses for ATG spectrum in the United States, obtain sufficient rights to use additional ATG spectrum and/or other sources of broadband connectivity to deliver our services, expand our service offerings and manage our network; and
- changes in laws, regulations and interpretations affecting aviation, including, in particular, changes that impact the design of our equipment and our ability to obtain required certifications for our equipment.

**Key Business Metrics**

Our management regularly reviews financial and operating metrics, including the following key operating metrics for the CA-NA, CA-ROW and BA reportable segments, to evaluate the performance of our business and our success in executing our business plan, make decisions regarding resource allocation and corporate strategies, and evaluate forward-looking projections.

**Commercial Aviation North America**

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | **2020** | **2019** | **2020** | **2019** |
| Aircraft online (at period end) | 2,455 | 2,443 | 2,455 | 2,443 |
| Satellite | 924 | 777 | 924 | 777 |
| ATG | 1,531 | 1,666 | 1,531 | 1,666 |
| Total aircraft equivalents (average during the period) | 2,562 | 2,480 | 2,558 | 2,500 |
| Net annualized average monthly service revenue per aircraft equivalent (annualized ARPA) (in thousands) | $ 37 | $ 136 | $ 68 | $ 131 |

**Commercial Aviation Rest of World**

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | **2020** | **2019** | **2020** | **2019** |
| Aircraft online (at period end) | 842 | 691 | 842 | 691 |
| Total aircraft equivalents (average during the period) | 734 | 619 | 735 | 585 |
| Net annualized ARPA (in thousands) | $ 25 | $ 135 | $ 61 | $ 135 |

- *Aircraft online.* We define aircraft online as the total number of commercial aircraft on which our equipment is installed and service has been made commercially available as of the last day of each period presented. We assign aircraft to CA-NA or CA-ROW at the time of contract signing as follows: (i) all aircraft operated by North American airlines and under contract for ATG or ATG-4 service are assigned to CA-NA, (ii) all aircraft operated by North American airlines and under a contract for satellite service are assigned to CA-NA or CA-ROW based on whether the routes flown by such aircraft under the contract are anticipated to be predominantly within or outside of North America at the time the contract is signed, and (iii) all aircraft operated by non-North American airlines and under a contract are assigned to CA-ROW. All aircraft online for the CA-ROW segment are equipped with our satellite equipment. We are aware that, beginning March 2020 and continuing through the date of this filing, our airline partners have parked a significant number of aircraft due to the impact of COVID-19 on the aviation industry. We do not know the specific number of such parked aircraft. The CA-NA and CA-ROW aircraft online disclosed above as of June 30, 2020 still include such aircraft, which is consistent with our historical practice of not removing temporarily parked aircraft from the online count as those have historically been immaterial and temporary. Should the duration of the aircraft being parked extend deeper into 2020, we may revisit this methodology for counting aircraft online.
- *Aircraft equivalents*. We define aircraft equivalents for a segment as the number of commercial aircraft online (as defined above) multiplied by the percentage of flights flown by such aircraft within the scope of that segment, rounded to the nearest whole aircraft and expressed as an average of the month-end figures for each month in the period. This methodology takes into account the fact that during a particular period certain aircraft may fly routes outside the scope of the segment to which they are assigned for purposes of the calculation of aircraft online.
- *Net annualized average monthly service revenue per aircraft equivalent* ("ARPA"). We define net annualized ARPA as the aggregate service revenue plus monthly service fees, some of which are reported as a reduction to cost of service revenue for that segment for the period, less revenue share expense and other transactional expenses which are included in cost of service revenue for that segment, divided by the number of months in the period, and further divided by the number of aircraft equivalents (as defined above) for that segment during the period, which is then annualized and rounded to the nearest thousand.

| Business Aviation | | | | |
|---|---|---|---|---|
| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
| | 2020 | 2019 | 2020 | 2019 |
| Aircraft online (at period end) | | | | |
| Satellite | 4,704 | 5,099 | 4,704 | 5,099 |
| ATG | 5,399 | 5,462 | 5,399 | 5,462 |
| Average monthly service revenue per aircraft online | | | | |
| Satellite | $ 185 | $ 249 | $ 205 | $ 243 |
| ATG | 2,570 | 3,091 | 2,867 | 3,081 |
| Units Sold | | | | |
| Satellite | 67 | 78 | 123 | 208 |
| ATG | 100 | 186 | 225 | 373 |
| Average equipment revenue per unit sold (in thousands) | | | | |
| Satellite | $ 53 | $ 49 | $ 56 | $ 43 |
| ATG | 69 | 66 | 73 | 63 |

- *Satellite aircraft online*. We define satellite aircraft online as the total number of business aircraft for which we provide satellite services as of the last day of each period presented.
- *ATG aircraft online.* We define ATG aircraft online as the total number of business aircraft for which we provide ATG services as of the last day of each period presented.
- *Average monthly service revenue per satellite aircraft online*. We define average monthly service revenue per satellite aircraft online as the aggregate satellite service revenue for the period divided by the number of months in the period, divided by the number of satellite aircraft online during the period (expressed as an average of the month-end figures for each month in such period).
- *Average monthly service revenue per ATG aircraft online.* We define average monthly service revenue per ATG aircraft online as the aggregate ATG service revenue for the period divided by the number of months in the period, divided by the number of ATG aircraft online during the period (expressed as an average of the month-end figures for each month in such period).
- *Units sold*. We define units sold as the number of satellite or ATG units for which we recognized revenue during the period.
- *Average equipment revenue per satellite unit sold*. We define average equipment revenue per satellite unit sold as the aggregate equipment revenue earned from all satellite units sold during the period, divided by the number of satellite units sold.
- *Average equipment revenue per ATG unit sold.* We define average equipment revenue per ATG unit sold as the aggregate equipment revenue from all ATG units sold during the period, divided by the number of ATG units sold.

**Key Components of Consolidated Statements of Operations**

There have been no material changes to our key components of unaudited condensed consolidated statements of operations and segment profit (loss) as described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” (“MD&A”) in our 2019 10-K.

**Off-Balance Sheet Arrangements**

We do not have any obligations that meet the definition of an off-balance sheet arrangement.

## Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of our unaudited condensed consolidated financial statements and related disclosures require us to make estimates, assumptions and judgments that affect the reported amount of assets, liabilities, revenue, costs and expenses, and related exposures. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. In some instances, we could reasonably use different accounting estimates, and in some instances results could differ significantly from our estimates. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the assumptions and estimates associated with revenue recognition, long-lived assets, indefinite-lived assets and stock-based compensation have the greatest potential impact on our unaudited condensed consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

*Revenue Recognition*:

We account for revenue in accordance with Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* ("ASC 606"). Our CA-NA and CA-ROW airline-directed contracts contain multiple performance obligations, which primarily include the sale of equipment, installation services, connectivity services and entertainment services. For these contracts, we account for each distinct good or service as a separate performance obligation. We allocate the contract's transaction price to each performance obligation using the relative standalone selling price, which is based on the actual selling price for any good or service sold separately to a similar class of customer, if available. To the extent a good or service is not sold separately, we use our best estimate of the standalone selling price and maximize the use of observable inputs. The primary method we use to estimate the standalone selling price is the expected cost-plus margin approach.

The contractual consideration used for allocation purposes includes connectivity and entertainment services, which may be based on a fixed monthly fee per aircraft or a variable fee based on the volume of connectivity activity, or a combination of both. Examples of variable consideration within our contracts include megabyte overages and pay-per-use sessions.

We constrain our estimates to reduce the probability of a significant revenue reversal in future periods, allocate variable consideration to the identified performance obligations and recognize revenue in the period the services are provided. Our estimates are based on historical experience, anticipated future performance, market conditions and our best judgment at the time. For the three months ended March 31, 2020, our estimates included management's best assumptions for the impact of COVID-19, which includes decreased flights and gross passenger opportunity ("GPO").

A significant change in one or more of these estimates could affect our estimated contract value. For example, estimates of variable revenue within certain contracts require estimation of the number of sessions or megabytes that will be purchased over the contract term and the average revenue per connectivity session, which varies based on the connectivity options available to passengers on each airline. Estimated revenue under these contracts anticipates increases in take rates over time and assumes an average revenue per session consistent with our historical experience. Our estimated contract revenue may differ significantly from our initial estimates to the extent actual take rates and average revenue per session differ from our historical experience.

We regularly review and update our estimates, especially in light of COVID-19, and recognize adjustments under the cumulative catch-up method. Any adjustments under this method are recorded as a cumulative adjustment in the period identified and revenue for future periods is recognized using the new adjusted estimate.

See Note 4, "Revenue Recognition," to our unaudited condensed consolidated financial statements for additional information.

*Long-Lived Assets:*

Our long-lived assets (other than goodwill and indefinite-lived assets which are separately tested for impairment) are reviewed for potential impairment whenever events indicate that the carrying amount of such assets may not be recoverable. Within the Commercial Aviation segment, certain certification and installation programs under some of our turnkey airline contracts are still in progress. Accordingly, we evaluate whether an indication of impairment exists for turnkey airline contracts based on our projected future cash flows associated with such contracts. We group certain long-lived assets by airline contract and by connectivity technology.

When an indication of impairment exists, we review long-lived assets for impairment by comparing the carrying value of the long-lived assets with the estimated future undiscounted cash flows expected to result from the use of the assets. If the future undiscounted cash flows are less than the carrying value, we then calculate an impairment loss equal to the difference between the long-lived asset's carrying value and its estimated fair value following which the long-lived assets are written down to estimated fair value and the adjusted balance becomes the new cost basis and is depreciated (amortized) over the remaining useful life of the assets. We also periodically reassess the useful lives of our long-lived assets due to advances and changes in our technologies.

Our impairment loss calculations contain uncertainties because they require management to make assumptions and to apply judgment to estimate future cash flows and long-lived asset fair values, including forecasting useful lives of the long-lived assets and selecting discount rates.

In light of the COVID-19 pandemic and its impact on air travel, including decreased flights, decreased gross passenger opportunity and our airline partners' temporary parking of a significant number of their aircraft, we conducted a review as of March 31, 2020 and determined that the carrying value for the asset groups related to three of our airline agreements for the CA business exceeded their estimated undiscounted cash flows, which triggered the need to estimate the fair value of these assets. For the airborne assets and right-of-use assets associated with the three airline agreements (the "impaired assets"), we recorded an impairment charge of $46.4 million for the three month period ended March 31, 2020. We conducted another review as of June 30, 2020 due to the continuation of the COVID-19 pandemic and the signing of the Delta amendment, and determined that $1.0 million of deferred STC costs were impaired due to the bankruptcy of three other airline partners. As such, we recorded a $1.0 million charge for impairment of long-lived assets.

We are continuously monitoring the COVID-19 pandemic and its impact. If the negative impact of the pandemic on the assets related to our airline agreements continues, including as a result of airline partners' decisions to temporarily park certain aircraft to reduce capacity, we could incur additional material impairment charges in future periods.

*Indefinite-Lived Intangible Assets:*

Our indefinite-lived intangible assets consist of our FCC spectrum licenses. Indefinite-lived intangible assets are not amortized but are reviewed for impairment at least annually or whenever events indicate that the carrying amount of such assets may not be recoverable. We perform our annual impairment test during the fourth quarter of each fiscal year. We assess qualitative factors to determine the likelihood of impairment. Our qualitative analysis includes, but is not limited to, assessing the changes in macroeconomic conditions, regulatory environment, industry and market conditions or events, such as COVID-19, financial performance versus budget and any other events or circumstances specific to the FCC licenses. We believed the impact of COVID-19 could indicate that the carrying value of our FCC spectrum licenses may not be recoverable and as such we reviewed the FCC spectrum licenses for impairment as of March 31, 2020. If it is more likely than not that the fair value of the FCC spectrum licenses is greater than the carrying value, no further testing is required. Otherwise, we apply the quantitative impairment test method. In determining which quantitative approach is most appropriate, we consider the cost approach, market approach and income approach. We determined that the income approach, utilizing the Greenfield method, is the most appropriate way to value our indefinite-lived assets.

For the Greenfield method we estimate the value of our FCC spectrum licenses by calculating the present value of the cash flows of a hypothetical new market participant whose only assets are such licenses to determine the enterprise value of the entire company. It includes all necessary costs and expenses to build the company's infrastructure during the start-up period, projected revenue, and cash flows once the infrastructure is completed. Since there is no corroborating data available in the marketplace that would demonstrate a market participant's experience in establishing an "air-to-ground" business, we utilize our historic results and future projections as the underlying basis for the application of the Greenfield method. We follow the traditional discounted cash flow method, calculating the present value of a new market participant's estimated debt free cash flows.

Our impairment calculations contain uncertainties, including the impact of COVID-19, because they require management to make assumptions and to apply judgment to estimate future projected cash flows and estimated growth rates and discount rates, as well as new market participant assumptions. Estimates of future projected cash flows used in connection with the discounted cash flow analysis were consistent with the plans and estimates that we used to manage the business, including the impact of COVID-19, although there was inherent uncertainty in these estimates. The discount rate used in the calculation was based on our weighted average cost of capital. Our assessment as of June 30, 2020 indicated no impairment.

We are continuously monitoring the COVID-19 pandemic and its impact. If the negative impact of the pandemic exceeds management's estimates, we could incur material impairment charges in future periods.

*Credit Losses*:

We regularly evaluate our accounts receivable and contract assets for expected credit losses and on January 1, 2020 adopted ASC 326.

Our expected loss methodology for accounts receivable is developed using historical collection experience, current and future economic and market conditions and a review of the current status of each customer's trade accounts receivables. Due to the short-term nature of such receivables, the estimated amount of accounts receivable that may not be collected is based on aging of the accounts receivable balances and the financial condition of customers. Additionally, specific allowance amounts are established to record the appropriate provision for customers that have a higher probability of default. Our monitoring activities include timely account reconciliation, dispute resolution, payment confirmation, consideration of each customer's financial condition and macroeconomic conditions.

We apply a similar methodology towards our current and non-current contract asset balances. However, due to the inherent additional risk associated with a long-term receivable, an additional provision is applied towards contract asset balances that will diminish over time as the contract nears its expiration date.

The estimates used to determine the allowances are based on management's assessment of anticipated payment, taking into account available historical and current information as well as management's assessment of potential future developments.

For the three months ended March 31, 2020, we also considered the current and estimated future economic and market conditions resulting from the COVID-19 pandemic in the determination of our estimated credit losses.

As such, we recorded a noncash cumulative effect adjustment to retained earnings of $3.7 million as a result of the adoption of ASC 326 for estimated credit losses. During the three and six month periods ended June 30, 2020 we recorded $5.1 million and $11.9 million, respectively, of additional estimated credit losses, which was primarily driven by the impact of COVID-19 on one international airline partner in particular.

We are continuously monitoring our assumptions used to determine our expected credit losses, including the impact of the COVID-19 pandemic, which could cause us to record additional material credit losses in future periods.

**Recent Accounting Pronouncements**

See Note 3, "Recent Accounting Pronouncements," to our unaudited condensed consolidated financial statements for additional information.

## Results of Operations

The following table sets forth, for the periods presented, certain data from our unaudited condensed consolidated statements of operations. The information contained in the table below should be read in conjunction with our unaudited condensed consolidated financial statements and related notes.

**Unaudited Condensed Consolidated Statement of Operations Data**
*(in thousands)*

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| **Revenue:** | | | | |
| Service revenue | $ 74,279 | $ 173,731 | $ 225,061 | $ 338,743 |
| Equipment revenue | 22,361 | 39,954 | 56,054 | 74,491 |
| **Total revenue** | 96,640 | 213,685 | 281,115 | 413,234 |
| **Operating expenses:** | | | | |
| Cost of service revenue (exclusive of items shown below) | 42,223 | 71,494 | 112,978 | 139,615 |
| Cost of equipment revenue (exclusive of items shown below) | 15,376 | 35,571 | 41,416 | 65,302 |
| Engineering, design and development | 15,409 | 26,912 | 38,272 | 51,640 |
| Sales and marketing | 5,880 | 12,994 | 15,532 | 25,312 |
| General and administrative | 22,505 | 27,081 | 49,671 | 49,535 |
| Impairment of long-lived assets | 987 | - | 47,376 | - |
| Depreciation and amortization | 48,690 | 29,967 | 81,360 | 60,716 |
| **Total operating expenses** | 151,070 | 204,019 | 386,605 | 392,120 |
| **Operating income (loss)** | (54,430) | 9,666 | (105,490) | 21,114 |
| **Other (income) expense:** | | | | |
| Interest income | (81) | (1,230) | (687) | (2,379) |
| Interest expense | 31,280 | 36,150 | 62,454 | 68,704 |
| Loss on extinguishment of debt | - | 57,962 | - | 57,962 |
| Other (income) expense | 233 | 443 | 3,226 | (2,922) |
| **Total other expense** | 31,432 | 93,325 | 64,993 | 121,365 |
| **Loss before income taxes** | (85,862) | (83,659) | (170,483) | (100,251) |
| Income tax provision | 117 | 304 | 274 | 511 |
| **Net loss** | $ (85,979) | $ (83,963) | $ (170,757) | $ (100,762) |

**Three and Six Months Ended June 30, 2020 and 2019**

***Revenue:***

Revenue by segment and percent change for the three and six month periods ended June 30, 2020 and 2019 were as follows *(in thousands, except for percent change)*:

| | For the Three Months Ended June 30, 2020 | For the Three Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| **Service Revenue:** | | | |
| CA-NA | $ 25,536 | $ 96,402 | (73.5)% |
| BA | 44,033 | 54,756 | (19.6)% |
| CA-ROW | 4,710 | 22,573 | (79.1)% |
| Total Service Revenue | $ 74,279 | $ 173,731 | (57.2)% |
| **Equipment Revenue:** | | | |
| CA-NA | $ 4,495 | $ 9,325 | (51.8)% |
| BA | 10,599 | 16,485 | (35.7)% |
| CA-ROW | 7,267 | 14,144 | (48.6)% |
| Total Equipment Revenue | $ 22,361 | $ 39,954 | (44.0)% |
| **Total Revenue:** | | | |
| CA-NA | $ 30,031 | $ 105,727 | (71.6)% |
| BA | 54,632 | 71,241 | (23.3)% |
| CA-ROW | 11,977 | 36,717 | (67.4)% |
| Total Revenue | $ 96,640 | $ 213,685 | (54.8)% |

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| **Service Revenue:** | | | |
| CA-NA | $ 99,364 | $ 188,429 | (47.3)% |
| BA | 101,759 | 107,969 | (5.8)% |
| CA-ROW | 23,938 | 42,345 | (43.5)% |
| Total Service Revenue | $ 225,061 | $ 338,743 | (33.6)% |
| **Equipment Revenue:** | | | |
| CA-NA | $ 10,803 | $ 13,367 | (19.2)% |
| BA | 23,800 | 33,821 | (29.6)% |
| CA-ROW | 21,451 | 27,303 | (21.4)% |
| Total Equipment Revenue | $ 56,054 | $ 74,491 | (24.8)% |
| **Total Revenue:** | | | |
| CA-NA | $ 110,167 | $ 201,796 | (45.4)% |
| BA | 125,559 | 141,790 | (11.4)% |
| CA-ROW | 45,389 | 69,648 | (34.8)% |
| Total Revenue | $ 281,115 | $ 413,234 | (32.0)% |

*Commercial Aviation North America:*

CA-NA revenue decreased to $30.0 million and $110.2 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $105.7 million and $201.8 million, respectively, for the prior-year periods, due to decreases in both service and equipment revenue.

A summary of the components of CA-NA's service revenue for the three and six month periods ended June 30, 2020 and 2019 is as follows *(in thousands, except for percent change)*:

| | For the Three Months Ended June 30, 2020 | For the Three Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| Connectivity revenue (1) | $ 21,849 | $ 90,233 | (75.8)% |
| Entertainment and CAS revenue | 3,687 | 6,169 | (40.2)% |
| Total service revenue | $ 25,536 | $ 96,402 | (73.5)% |

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| Connectivity revenue (1) | $ 90,718 | $ 170,051 | (46.7)% |
| Entertainment and CAS revenue | 8,646 | 18,378 | (53.0)% |
| Total service revenue | $ 99,364 | $ 188,429 | (47.3)% |

*(1)* Includes non-session related revenue of $1.1 million and $3.3 million, respectively, for the three and six month periods ended June 30, 2020, and $5.3 million and $6.7 million, respectively, for the prior-year periods.

CA-NA service revenue decreased to $25.5 million and $99.4 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $96.4 million and $188.4 million, respectively, for the prior-year periods, due to decreases in both Connectivity revenue and Entertainment and CAS revenue.

Connectivity revenue decreased to $21.8 million and $90.7 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $90.2 million and $170.1 million, respectively, for the prior-year periods primarily due the impact of COVID-19, which includes decreases in flights and gross passenger opportunity ("GPO"), and, to a lesser extent, the full impact of American Airlines switching to the airline-directed model.

CA-NA Entertainment and CAS revenue decreased to $3.7 million and $8.6 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $6.2 million and $18.4 million, respectively, for the prior-year periods primarily due to the impact of COVID-19. The decrease for the six months ended June 30, 2020 also reflects product development-related revenue for one of our airline partners in the first quarter of 2019, while the current year period included no such activity.

Net annualized ARPA decreased to $37 thousand and $68 thousand, respectively, for the three and six month periods ended June 30, 2020, as compared with $136 thousand and $131 thousand, respectively, for the prior-year periods primarily due to the impact of COVID-19, which includes decreases in flights and GPO, as well as the full impact of American Airlines' switch to the airline-directed model, and product development-related revenue in the first quarter of 2019. Equipment revenue decreased to $4.5 million and $10.8 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $9.3 million and $13.4 million, respectively, for the prior-year periods, primarily due to fewer installations under the airline-directed model.

The length and severity of the reduction in travel demand resulting from the COVID-19 pandemic are uncertain. We expect these trends in revenue to continue until the global pandemic has moderated and demand for air travel returns. We anticipate that service revenue for CA-NA will be significantly lower during the three month period ending September 30, 2020 as compared with the three month period ended September 30, 2019 as a result of the impact of COVID-19, which includes decreases in flights and GPO.

As the recognition of CA-NA equipment revenue is a function of equipment installation schedules, equipment revenue in future periods will be driven by our ability to execute our existing airline partner contracts and enter into new contracts.

*Business Aviation:*

BA revenue decreased to $54.6 million and $125.6 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $71.2 million and $141.8 million, respectively, for the prior-year periods, due to decreases in service revenue and equipment revenue.

BA service revenue decreased to $44.0 million and $101.8 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $54.8 million and $108.0 million, respectively, for the prior-year periods primarily due to the impact of COVID-19. The decrease resulted primarily from ATG deactivations and suspensions related to COVID-19. ATG aircraft online decreased 1% to 5,399 as of June 30, 2020, as compared with 5,462 as of June 30, 2019.

BA equipment revenue decreased to $10.6 million and $23.8 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $16.5 million and $33.8 million, respectively, for the prior-year periods primarily due to decreases in the number of ATG and satellite units sold as a result of COVID-19.

COVID-19 continues to impact our BA segment, resulting in a decrease in flights, suspension of subscriptions and fewer activations. We do not currently anticipate nearly as significant of an impact on our BA segment as our CA-NA or CA-ROW segments but do expect service and equipment revenues to decline during the three month period ending September 30, 2020, as compared with the three month period ended September 30, 2019.

*Commercial Aviation Rest of World:*

CA-ROW revenue decreased to $12.0 million and $45.4 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $36.7 million and $69.6 million, respectively, for the prior-year periods, due to decreases in both service and equipment revenue.

CA-ROW equipment revenue decreased to $7.3 million and $21.5 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $14.1 million and $27.3 million, respectively, for the prior-year periods primarily due to fewer installations under the airline-directed model.

CA-ROW service revenue decreased to $4.7 million and $23.9 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $22.6 million and $42.3 million, respectively, for the prior-year periods, primarily due to the impact of COVID-19, which includes decreases in flights and GPO. Net annualized ARPA for the CA-ROW segment decreased to $25 thousand and $61 thousand, respectively, for the three and six month periods ended June 30, 2020, as compared with $135 thousand for both prior-year periods due to the impact of COVID-19, which includes a decrease in flights and GPO.

The length and severity of the reduction in travel demand due to the COVID-19 pandemic are uncertain. We expect these trends in revenue to continue until the global pandemic has moderated and demand for air travel returns. We anticipate that service revenue for CA-ROW will be significantly lower during the three month period ending September 30, 2020 as compared with the three month period ended September 30, 2019 as a result of the impact of COVID-19, which includes decreases in flights and GPO.

Additionally, our airline partners have significantly delayed the installation of our equipment as a result of COVID-19, and, as a result, we anticipate significant declines in our equipment revenue during the three month period ending September 30, 2020 as compared with the three month period ended September 30, 2019.

***Cost of Service Revenue:***

Cost of service revenue by segment and percent change for the three and six month periods ended June 30, 2020 and 2019 were as follows *(in thousands, except for percent change)*:

| | For the Three Months Ended June 30, 2020 | For the Three Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| CA-NA | $ 15,308 | $ 38,645 | (60.4)% |
| BA | 10,167 | 13,101 | (22.4)% |
| CA-ROW | 16,748 | 19,748 | (15.2)% |
| Total | $ 42,223 | $ 71,494 | (40.9)% |

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| CA-NA | $ 55,373 | $ 75,070 | (26.2)% |
| BA | 21,174 | 26,153 | (19.0)% |
| CA-ROW | 36,431 | 38,392 | (5.1)% |
| Total | $ 112,978 | $ 139,615 | (19.1)% |

CA-NA cost of service revenue decreased to $15.3 million and $55.4 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $38.6 million and $75.1 million, respectively, for the prior-year periods, due to decreased revenue share resulting from lower CA-NA service revenue, increased amortization of deferred airborne lease incentives and decreased operational costs as a result of cost controls implemented by management, partially offset by increases in satellite service fees and allocated ATG network costs.

BA cost of service revenue decreased to $10.2 million and $21.2 million, respectively, for the three and six month period ended June 30, 2020, as compared with $13.1 million and $26.2 million, respectively, for the prior-year periods, primarily due to a decrease in allocated ATG network costs.

CA-ROW cost of service revenue decreased to $16.7 million and $36.4 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $19.7 million and $38.4 million, respectively, for the prior-year periods primarily due to decreased revenue share, increased amortization of deferred airborne lease incentives and decreased operational costs as a result of cost controls implemented by management, partially offset by an increase in satellite service fees.

A significant portion of CA-NA and CA-ROW costs of service revenue are satellite service fees which are relatively fixed in nature. We are continuing discussions with certain of our satellite service providers to reduce our satellite service charges as a result of the lower utilization from decreased flights and GPO resulting from COVID-19.

We expect cost of service revenue for BA to increase over time, primarily due to increasing ATG network costs associated with Gogo 5G.

As noted in Note 2, “Impact of COVID-19 Pandemic,” we implemented various expense management and personnel actions to manage our costs. We continue to work with our vendors and evaluate projects. The personnel actions, which include furloughs and salary reductions, began May 4, 2020 and a reduction in force is to take effect August 14, 2020.

***Cost of Equipment Revenue:***

Cost of equipment revenue by segment and percent change for the three and six month periods ended June 30, 2020 and 2019 were as follows *(in thousands, except for percent change)*:

| | For the Three Months Ended June 30, 2020 | For the Three Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| CA-NA | $ 2,147 | $ 5,865 | (63.4)% |
| BA | 6,982 | 11,809 | (40.9)% |
| CA-ROW | 6,247 | 17,897 | (65.1)% |
| Total | $ 15,376 | $ 35,571 | (56.8)% |

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| CA-NA | $ 7,829 | $ 7,456 | 5.0% |
| BA | 15,493 | 23,207 | (33.2)% |
| CA-ROW | 18,094 | 34,639 | (47.8)% |
| Total | $ 41,416 | $ 65,302 | (36.6)% |

Cost of equipment revenue decreased to $15.4 million and $41.4 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $35.6 million and $65.3 million, respectively, for the prior-year periods.

The decrease in CA-NA for the three month period ended June 30, 2020 and the decreases in CA-ROW for the three and six month periods ended June 30, 2020, as compared with the prior-year periods were due to fewer installations under the airline-directed model during 2020 as compared with the respective prior-year periods. The increase in CA-NA for the six month period ended June 30, 2020 was due to more installations under the airline-directed model as compared with the prior-year period.

BA cost of equipment decreased for the three and six month periods ended June 30, 2020 as compared with the prior-year period, due to a decrease in equipment revenue and changes in product mix.

We expect that CA-ROW cost of equipment revenue will decrease significantly during the three month period ending September 30, 2020 as compared with the three month period ended September 30, 2019 due to the delays in airline equipment installations, as noted above. CA-NA cost of equipment revenue will vary with installations under the airline-direct model and BA cost of equipment revenue will vary with changes in equipment revenue.

***Engineering, Design and Development Expenses:***

Engineering, design and development (“EDD”) expenses decreased to $15.4 million and $38.3 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $26.9 million and $51.6 million, respectively, for the prior-year periods primarily due to decreased personnel costs as a result of cost controls implemented by management and STC and project-related spend in CA-NA and CA-ROW, offset in part by increased Gogo 5G network development costs at BA.

As noted in Note 2, “Impact of COVID-19 Pandemic,” we implemented various expense management and personnel actions to manage our costs. We continue to work with our vendors and evaluate projects. The personnel actions, which include furloughs and salary reductions, began May 4, 2020 and a reduction in force is to take effect August 14, 2020.

***Sales and Marketing Expenses:***

Sales and marketing expenses decreased to $5.9 million and $15.5 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $13.0 million and $25.3 million, respectively, for the prior-year periods primarily due to decreased personnel and advertising expenses in all three segments as a result of cost controls implemented by management.

As noted in Note 2, “Impact of COVID-19 Pandemic,” we implemented various expense management and personnel actions to manage our costs. We continue to work with our vendors and evaluate projects. The personnel actions, which include furloughs and salary reductions, began May 4, 2020 and a reduction in force is to take effect August 14, 2020.

***General and Administrative Expenses:***

General and administrative expenses decreased to $22.5 million for the three month period ended June 30, 2020, as compared with $27.1 million, for the prior-year period, while general and administrative expenses increased to $49.7 million for the six month period ended June 30, 2020, as compared with $49.5 million for the prior-year period. The decreases are primarily due to cost controls implemented by management, partially offset by increases in allowances for credit reserves. The three and six month periods ended June 30, 2020 included allowances for credit losses of approximately $5.1 million and $11.9 million, respectively, which was primarily driven by the impact of COVID-19 on one international airline partner in particular.

We are continuously monitoring our assumptions used to determine our expected credit losses, including the impact of the COVID-19 pandemic, which could cause us to record additional material credit losses in future periods. As noted in Note 2, "Impact of COVID-19 Pandemic," we implemented various expense management and personnel actions to manage our costs. We continue to work with our vendors and evaluate projects. The personnel actions, which include furloughs and salary reductions, began May 4, 2020 and a reduction in force is to take effect August 14, 2020.

***Segment Profit (Loss):***

CA-NA's segment profit decreased to a loss of $10.6 million and profit of $5.3 million, respectively, for the three and six month periods ended June 30, 2020, as compared with profit of $34.1 million and $64.8 million, respectively, for the prior-year periods, primarily due to the changes discussed above.

BA's segment profit decreased to $27.2 million and $63.1 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $31.4 million and $65.2 million, respectively, for the prior-year periods, primarily due to the changes discussed above.

CA-ROW's segment loss increased to $26.7 million and $44.0 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $16.4 million and $34.6 million, respectively, for the prior-year periods, primarily due to the changes discussed above.

Unallocated corporate costs decreased to $6.2 million and $16.5 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $12.5 million and $22.3 million, respectively, for the prior-year periods. Unallocated corporate costs are primarily included within general and administrative expenses.

***Impairment of Long-Lived Assets:***

We recorded impairment charges of $1.0 million and $47.4 million for the three and six month periods ended June 30, 2020, respectively, for the impaired assets related to six of our airline agreements for the CA business, while we had no such charges in the prior year. See Note 7, "Composition of Certain Balance Sheet Accounts" to our unaudited condensed consolidated financial statements for additional information.

***Depreciation and Amortization:***

Depreciation and amortization expense increased to $48.7 million and $81.4 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $30.0 million and $60.7 million, respectively, for the prior-year periods, due primarily to the Delta amendment. See Note 1, "Basis of Presentation," to our unaudited condensed consolidated financial statements for additional information.

We expect that our depreciation and amortization expense will vary in the future depending upon the number of installations under the turnkey model.

***Other (Income) Expense:***

Other (income) expense and percent change for the three and six month periods ended June 30, 2020 and 2019 were as follows *(in thousands, except for percent change)*:

| | For the Three Months Ended June 30, 2020 | For the Three Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| Interest income | $ (81) | $ (1,230) | (93.4)% |
| Interest expense | 31,280 | 36,150 | (13.5)% |
| Loss on extinguishment of debt | - | 57,962 | n/a |
| Other expense | 233 | 443 | (47.4)% |
| Total | $ 31,432 | $ 93,325 | (66.3)% |

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 | % Change 2020 over 2019 |
|---|---|---|---|
| Interest income | $ (687) | $ (2,379) | (71.1)% |
| Interest expense | 62,454 | 68,704 | (9.1)% |
| Loss on extinguishment of debt | - | 57,962 | n/a |
| Other expense | 3,226 | (2,922) | n/a |
| Total | $ 64,993 | $ 121,365 | (46.4)% |

Total other expense decreased to $31.4 million and $65.0 million, respectively, for the three and six month periods ended June 30, 2020, as compared with $93.3 million and $121.4 million, respectively, for the prior-year periods, due primarily to the loss on extinguishment of debt included in the three and six month periods ended June 30, 2019, while no such activity occurred in the current year. The six month period ended June 30, 2020 included a $3.0 million impairment of a cost-based investment in the current year while the prior year had no such activity. The six month period ended June 30, 2019 included $3.2 million in proceeds from a litigation settlement, while the current year had no such activity.

We expect our full-year 2020 interest expense to be down slightly as compared with 2019, primarily due to the reduction in interest expense related to the 2022 Senior Secured Notes, which were redeemed in full in May 2019, the partial repurchase of the 2020 Convertible Notes in April 2019 and the maturity of the remaining outstanding principal amount of 2020 Convertible Notes in March 2020. These decreases will be partially offset by higher average debt outstanding from the issuances of the 2024 Senior Secured Notes in April and May 2019, the drawdown of the ABL Credit Facility in March 2020 and the associated accretion expense and amortization of deferred financing costs. See Note 10, “Long-Term Debt and Other Liabilities,” in our unaudited condensed consolidated financial statements for additional information.

***Income Taxes:***

The effective income tax rates for the three and six month periods ended June 30, 2020 were (0.1)% and (0.2)%, respectively, as compared with (0.4)% and (0.5)%, respectively, for the prior-year periods. For the three and six month periods ended June 30, 2020 and 2019, our income tax expense was not significant primarily due to the full valuation allowance against our net deferred tax assets.

We expect our income tax provision to increase in future periods to the extent we become profitable.

**Non-GAAP Measures**

In our discussion below, we discuss certain non-GAAP financial measurements, including Adjusted EBITDA, Free Cash Flow and Unlevered Free Cash Flow as defined below. Management uses Adjusted EBITDA, Free Cash Flow and Unlevered Free Cash Flow for business planning purposes, including managing our business against internally projected results of operations and measuring our performance and liquidity. These supplemental performance measures also provide another basis for comparing period-to-period results by excluding potential differences caused by non-operational and unusual or non-recurring items. These supplemental performance measurements may vary from and may not be comparable to similarly titled measures used by other companies. Adjusted EBITDA, Free Cash Flow and Unlevered Free Cash Flow are not recognized measurements under accounting principles generally accepted in the United States, or GAAP; when analyzing our performance with Adjusted EBITDA or liquidity with Free Cash Flow or Unlevered Free Cash Flow, as applicable, investors should (i) evaluate each adjustment in our reconciliation to the corresponding GAAP measure, and the explanatory footnotes regarding those adjustments, (ii) use Adjusted EBITDA in addition to, and not as an alternative to, net loss attributable to common stock as a measure of operating results, and (iii) use Free Cash Flow or Unlevered Free Cash Flow in addition to, and not as an alternative to, consolidated net cash provided by (used in) operating activities when evaluating our liquidity.

*Definition and Reconciliation of Non-GAAP Measures*

EBITDA represents net loss attributable to common stock before interest expense, interest income, income taxes and depreciation and amortization expense.

Adjusted EBITDA represents EBITDA adjusted for (i) stock-based compensation expense, (ii) amortization of deferred airborne lease incentives, (iii) amortization of STC costs, (iv) impairment of long-lived assets, (v) impairment of cost-basis investment, (vi) loss on extinguishment of debt and (vii) proceeds from litigation settlement. Our management believes that the use of Adjusted EBITDA eliminates items that, management believes, have less bearing on our operating performance, thereby highlighting trends in our core business which may not otherwise be apparent. It also provides an assessment of controllable expenses, which are indicators management uses to determine whether current spending decisions need to be adjusted in order to meet financial goals and achieve optimal financial performance.

We believe that the exclusion of stock-based compensation expense from Adjusted EBITDA is appropriate given the significant variation in expense that can result from using the Black-Scholes model to determine the fair value of such compensation. The fair value of our stock options is determined using the Black-Scholes model and varies based on fluctuations in the assumptions used in this model, including inputs that are not necessarily directly related to the performance of our business, such as the expected volatility, the risk-free interest rate and the expected life of the options. Therefore, we believe that the exclusion of this cost provides a clearer view of the operating performance of our business. Further, stock option grants made at a certain price and point in time do not necessarily reflect how our business is performing at any particular time. While we believe that investors should have information about any dilutive effect of outstanding options and the cost of that compensation, we also believe that stockholders should have the ability to consider our performance using a non-GAAP financial measure that excludes these costs and that management uses to evaluate our business.

We believe that the exclusion of the amortization of deferred airborne lease incentives and amortization of STC costs from Adjusted EBITDA is useful as it allows an investor to view operating performance across time periods in a manner consistent with how management measures reportable segment profit and loss (see Note 16, “Business Segments and Major Customers,” for a description of reportable segment profit (loss) in our unaudited condensed consolidated financial statements). Management evaluates reportable segment profit and loss in this manner, excluding the amortization of deferred airborne lease incentives and amortization of STC costs, because such presentation reflects operating decisions and activities from the current period, without regard to the prior period decisions or the business model applicable to various connectivity agreements.

We believe that the exclusion of the impairment of long-lived assets from Adjusted EBITDA is appropriate because of the non-recurring nature of the activity to our operating performance.

We believe that the exclusion of the impairment of cost-basis investment from Adjusted EBITDA is appropriate because of the non-operating and non-recurring nature of the activity.

We believe it is useful for an understanding of our operating performance to exclude the loss on extinguishment of debt from Adjusted EBITDA because of the non-recurring nature of this activity.

We believe that the exclusion of litigation proceeds from Adjusted EBITDA is appropriate as this is non-recurring in nature and represents an infrequent financial benefit to our operating performance.

We also present Adjusted EBITDA as a supplemental performance measure because we believe that this measure provides investors, securities analysts and other users of our financial statements with important supplemental information with which to evaluate our performance and to enable them to assess our performance on the same basis as management.

Free Cash Flow represents net cash provided by (used in) operating activities, less purchases of property and equipment and the acquisition of intangible assets. We believe that Free Cash Flow provides meaningful information regarding the Company’s liquidity.

Unlevered Free Cash Flow represents Free Cash Flow adjusted for cash interest payments and interest income. We believe that Unlevered Free Cash Flow provides an additional view of the Company's liquidity, excluding the impact of our capital structure.

**Gogo Inc. and Subsidiaries**
**Reconciliation of GAAP to Non-GAAP Measures**
*(in thousands, except per share amounts)*
*(unaudited)*

| | For the Three Months Ended June 30, | | For the Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| **Adjusted EBITDA:** | | | | |
| Net loss attributable to common stock (GAAP) | $ (85,979) | $ (83,963) | $ (170,757) | $ (100,762) |
| Interest expense | 31,280 | 36,150 | 62,454 | 68,704 |
| Interest income | (81) | (1,230) | (687) | (2,379) |
| Income tax provision | 117 | 304 | 274 | 511 |
| Depreciation and amortization | 48,690 | 29,967 | 81,360 | 60,716 |
| EBITDA | (5,973) | (18,772) | (27,356) | 26,790 |
| Stock-based compensation expense | 3,164 | 4,318 | 7,159 | 8,645 |
| Amortization of deferred airborne lease incentives | (14,841) | (6,077) | (21,912) | (15,030) |
| Amortization of STC costs | 805 | 322 | 1,612 | 642 |
| Impairment of long-lived assets | 987 | - | 47,376 | - |
| Impairment of cost-basis investment | - | - | 3,000 | - |
| Loss on extinguishment of debt | - | 57,962 | - | 57,962 |
| Proceeds from litigation settlement | - | - | - | (3,215) |
| Adjusted EBITDA | $ (15,858) | $ 37,753 | $ 9,879 | $ 75,794 |
| **Unlevered Free Cash Flow:** | | | | |
| Net cash provided by (used in) operating activities (GAAP) (1) | $ (46,583) | $ 11,691 | $ (8,556) | $ 5,535 |
| Consolidated capital expenditures (1) | (5,791) | (14,534) | (21,101) | (42,245) |
| Free cash flow | (52,374) | (2,843) | (29,657) | (36,710) |
| Cash paid for interest (1) | 53,014 | 40,257 | 53,080 | 86,420 |
| Interest income (2) | (81) | (1,230) | (687) | (2,379) |
| Unlevered free cash flow | $ 559 | $ 36,184 | $ 22,736 | $ 47,331 |

(1) See unaudited condensed consolidated statements of cash flows.
(2) See unaudited condensed consolidated statements of operations.

*Material limitations of Non-GAAP measures*

Although EBITDA, Adjusted EBITDA, Free Cash Flow and Unlevered Free Cash Flow are measurements frequently used by investors and securities analysts in their evaluations of companies, EBITDA, Adjusted EBITDA, Free Cash Flow and Unlevered Free Cash Flow each have limitations as an analytical tool, and you should not consider them in isolation or as a substitute for, or more meaningful than, amounts determined in accordance with GAAP.

Some of these limitations include:

- EBITDA and Adjusted EBITDA do not reflect interest income or expense;
- EBITDA and Adjusted EBITDA do not reflect cash requirements for our income taxes;
- EBITDA and Adjusted EBITDA do not reflect depreciation and amortization, which are significant and unavoidable operating costs given the level of capital expenditures needed to maintain our business;
- Adjusted EBITDA does not reflect non-cash components of employee compensation;
- Free Cash Flow and Unlevered Free Cash Flow do not represent the total increase or decrease in our cash balance for the period; and
- since other companies in our or related industries may calculate these measures differently from the way we do, their usefulness as comparative measures may be limited.

## Liquidity and Capital Resources

The following table presents a summary of our cash flow activity for the periods set forth below *(in thousands)*:

| | For the Six Months Ended June 30, | |
|---|---|---|
| | 2020 | 2019 |
| Net cash provided by (used in) operating activities | $ (8,556) | $ 5,535 |
| Net cash used in investing activities | (21,012) | (2,562) |
| Net cash provided by (used in) financing activities | 13,930 | (2,837) |
| Effect of foreign exchange rate changes on cash | (90) | (378) |
| Net decrease in cash, cash equivalents and restricted cash | (15,728) | (242) |
| Cash, cash equivalents and restricted cash at the beginning of period | 177,675 | 191,116 |
| Cash, cash equivalents and restricted cash at the end of period | $ 161,947 | $ 190,874 |
| Supplemental information: | | |
| Cash, cash equivalents and restricted cash at the end of period | $ 161,947 | $ 190,874 |
| Less: current restricted cash | 560 | 1,035 |
| Less: non-current restricted cash | 5,101 | 7,972 |
| Cash and cash equivalents at the end of the period | $ 156,286 | $ 181,867 |

We have historically financed our growth and cash needs primarily through the issuance of common stock, non-convertible debt, senior convertible preferred stock, convertible debt, term facilities and cash from operating activities. We continually evaluate our ongoing capital needs in light of increasing demand for our services, capacity requirements, evolving technologies in our industry and related strategic, operational and technological opportunities. We actively consider opportunities to raise additional capital in the public and private markets utilizing one or more of the types of capital raising transactions through which we have historically financed our growth and cash needs, as well as other means of capital raising not previously used by us.

In April 2020, we applied for an $81 million grant and a $150 million loan under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). Based on criteria recently released by the U.S. Treasury Department, we do not believe that we will qualify for the loan, although we have not received a formal determination. If we receive a grant under the CARES Act, we would be subject to certain restrictions, including, but not limited to, requirements to maintain certain levels of service and employment (which could require modifying certain personnel actions we have undertaken), limits on certain executive compensation and limits on the use of the funds granted. In addition, we would likely be obligated to issue warrants to the U.S. Department of the Treasury to purchase shares of our common stock.

*Liquidity:*

As disclosed elsewhere in this report, the extent of the impact of COVID-19 on the CA and BA businesses and our financial and operational performance will depend on future developments, including the duration, spread and severity of the outbreak, the duration and geographic scope of related travel advisories and restrictions and the extent of the impact of COVID-19 on overall demand for commercial and business aviation travel, all of which are highly uncertain and cannot be predicted. If our airline partners continue to experience significantly reduced demand for passenger traffic for an extended period and/or if the recent recovery observed in the BA business does not continue, our liquidity and financial condition may be materially adversely affected. The extent to which the outbreak affects our liquidity and financial condition will depend in part on our ability to successfully implement various measures intended to reduce expenses and/or conserve cash, including:

- Personnel actions, including the implementation of a hiring freeze, a suspension of 2020 merit salary increases, a modification of the 2020 bonus program allowing awards to be paid in stock or a combination of stock and cash at our option, paying the after-tax portion of the CEO's bonus payout in stock, a furlough of approximately 54% of our workforce which began May 4, 2020 and is expected to end on August 31, 2020, a reduction in force of approximately 14% of our workforce and a reduction in salary for most other employees;
- Expense management, including deferring purchases of capital equipment, delaying equipment installations, renegotiating agreements with suppliers, reducing other non-essential spend and renegotiating certain terms of our contracts with our airline partners; and
- Financing activities, including drawing from the ABL Credit Facility.

See Note 2, “Impact of COVID-19 Pandemic” to our unaudited condensed consolidated financial statements and “Risk Factors – *The COVID-19 pandemic, and the measures implemented to combat it, are having, and are likely to continue to have, a material adverse effect on our business. Moreover, the longer the pandemic persists, the more material the ultimate effects are likely to be. It is likely that there will be future negative effects that we cannot presently predict, including near-term effects*.”

Excluding the impact of our initial public offering, our prior credit facility, the 2022 Convertible Notes, the 2020 Convertible Notes, the 2024 Senior Secured Notes, the 2022 Senior Secured Notes and the ABL Credit Facility, to date we have not generated positive cash flows on a consolidated basis. However, based on our current plans, including the measures taken in our response to COVID-19, we believe that our cash and cash equivalents and cash flows provided by operating activities will be sufficient to meet our operating obligations, including our capital expenditure requirements, for at least the next twelve months. As detailed in Note 10, “Long-Term Debt and Other Liabilities,” in March 2020, in order to enhance our liquidity in response to the uncertainty in the global markets resulting from the COVID-19 pandemic, we drew $22 million under our previously undrawn revolving ABL Credit Facility, of which $17 million was outstanding as of June 30, 2020. As of June 30, 2020, less than $1 million remained available for borrowing under the terms of the agreement that would allow for the company to meet the “payment conditions” criteria as described in our ABL Credit Agreement. Our intent is to continue to access the capital markets to refinance our future debt obligations on an as-needed basis.

The 2024 Indenture and the ABL Credit Agreement contain covenants that limit the ability of GIH and its subsidiaries to incur additional indebtedness. Further, market conditions and/or our financial performance may limit our access to additional sources of equity or debt financing, or our ability to pursue potential strategic alternatives. As a result, we may be unable to finance growth of our business to the extent that our cash, cash equivalents and short-term investments and cash generated through operating activities prove insufficient or we are unable to raise additional financing through the issuance of additional equity, permitted incurrences of debt by us or by GIH and its subsidiaries, or the pursuit of potential strategic alternatives.

For additional information on the 2024 Senior Secured Notes, the ABL Credit Facility, the 2022 Senior Secured Notes, the 2022 Convertible Notes and the 2020 Convertible Notes, see Note 10, “Long-Term Debt and Other Liabilities,” to our unaudited condensed consolidated financial statements.

***Cash flows provided by (used in) Operating Activities:***

The following table presents a summary of our cash flows from operating activities for the periods set forth below *(in thousands)*:

| | For the Six Months Ended June 30, 2020 | For the Six Months Ended June 30, 2019 |
|---|---|---|
| Net loss | $ (170,757) | $ (100,762) |
| Non-cash charges and credits | 161,896 | 147,609 |
| Changes in operating assets and liabilities | 305 | (41,312) |
| Net cash provided by (used in) operating activities | $ (8,556) | $ 5,535 |

For the six month period ended June 30, 2020, cash used in operating activities was $8.6 million as compared with net cash provided by operating activities of $5.5 million in the prior-year period. The principal contributors to the year-over-year change in operating cash flows were:

- A $55.7 million decrease in net loss and non-cash charges and credits, primarily due to a decrease in reportable segment profit for all three segments, as noted above under “—Results of Operations.”
- Partially offset by a $41.6 million increase in cash flows related to operating assets and liabilities resulting from:
  - An increase in cash flows due to the following:
    - Changes in accrued interest due to changes in the timing of payments as compared to the prior-year;
    - Changes in CA-NA’s and BA’s accounts payable due primarily to the timing of payments;
    - Changes in CA-NA’s and BA’s accounts receivable due primarily to the timing of collections and a decrease in revenue as a result of COVID-19; and
    - Changes in CA-NA’s and CA-ROW’s contract assets due to fewer installations in the current year as compared with the prior year.

- Offset in part by a decrease in cash flows due to the following:
  - Changes in the accrued liabilities of all three segments due primarily to the timing of payments;
  - Changes in CA-ROW's accounts receivable due to a larger reduction in accounts receivable balances in the first half of 2019 as compared with the first half of 2020;
  - Changes in CA-NA's and CA-ROW's deferred airborne lease proceeds due to fewer installs in the current year as compared with the prior year and the acceleration of Delta related balances; and
  - Changes in CA-NA's and BA's inventories due to the timing of inventory purchases.

***Cash flows provided by (used in) Investing Activities:***

Cash used in investing activities is primarily for capital expenditures related to airborne equipment, cell site construction, software development, and data center upgrades. See "— Capital Expenditures" below. Additionally, cash used in investing activities includes net changes in our short-term investments of a cash inflow of $39.3 million for the six month period ended June 30, 2019, while no such activity occurred in the current year as we no longer hold any short-term investments.

***Cash flows provided by (used in) Financing Activities:***

Cash provided by financing activities for the six month period ended June 30, 2020 was $13.9 million primarily due to the $22.0 million of proceeds from the ABL Credit Facility offset in part by the repayment of $5.0 million of the ABL Credit Facility and repayment on maturity of the outstanding $2.5 million in aggregate principal amount of the 2020 Convertible Notes on March 1, 2020.

Cash used in financing activities for the six month period ended June 30, 2019 was $2.8 million primarily due to the redemption of all of our outstanding 2022 Senior Secured Notes (including the make-whole premium payable under the indenture governing the 2022 Senior Secured Notes), at a redemption price totaling $741.4 million, the repurchase of $159.0 million of outstanding 2020 Convertible Notes and the payment of $22.6 million of deferred financing costs associated with the issuance of the 2024 Senior Secured Notes, offset in part by $920.7 million of proceeds from the issuance of the 2024 Senior Secured Notes.

**Capital Expenditures**

Our operations continue to require significant capital expenditures, primarily for technology development, equipment and capacity expansion. Capital expenditures for the CA-NA and CA-ROW segments include the purchase of airborne equipment for the turnkey model, which correlates directly to the roll out and/or upgrade of service to our airline partners' fleets. Capital spending is also associated with the expansion of our ATG and satellite network and data centers. We capitalize software development costs related to network technology solutions, the Gogo platform and new product/service offerings. We also capitalize costs related to the build out of our office locations.

Capital expenditures for the six month periods ended June 30, 2020 and 2019 were $21.1 million and $42.2 million, respectively. The decrease in capital expenditures was primarily due to a decrease in airborne equipment purchases as well as a decrease in capitalized software.

We expect that our airborne-related capital expenditures will vary in the future depending upon the number of installations under the turnkey model. Network-related capital expenditures and investments in capitalized software will increase over time as we build out Gogo 5G.

**Other**

*Contractual Commitments:* We have agreements with vendors to provide us with transponder and teleport satellite services that vary in length and amount. See Note 13, "Commitments and Contingencies," to our unaudited condensed consolidated financial statements for additional information.

We have agreements with various vendors under which we have remaining commitments to purchase satellite-based systems, certifications and development services. Such commitments will become payable as we receive the equipment or certifications, or as development services are provided.

*Leases and Cell Site Contracts:* We have lease agreements relating to certain facilities and equipment, which are considered operating leases. See Note 12, "Leases," to our unaudited condensed consolidated financial statements for additional information.

The revenue share paid to our airline partners represents operating lease payments and is deemed to be contingent rental payments, as the payments due to each airline are based on a percentage of our CA-NA and CA-ROW service revenue generated from that airline's passengers, which is unknown until realized. As such, we cannot estimate the lease payments due to an airline at the commencement of our contract with such airline. Rental expense related to the arrangements with commercial airlines included in cost of service revenue is primarily comprised of these revenue share payments offset by the amortization of the deferred airborne lease incentive discussed above. See Note 12, "Leases," to our unaudited condensed consolidated financial statements for additional information**.**

*Indemnifications and Guarantees*: In accordance with Delaware law, we indemnify our officers and directors for certain events or occurrences while the officer or director is, or was, serving at our request in such capacity. The maximum potential amount of future payments we could be required to make under this indemnification is uncertain and may be unlimited, depending upon circumstances. However, our Directors' and Officers' insurance does provide coverage for certain of these losses.

In the ordinary course of business we may occasionally enter into agreements pursuant to which we may be obligated to pay for the failure of performance of others, such as the use of corporate credit cards issued to employees. Based on historical experience, we believe that the risk of sustaining any material loss related to such guarantees is remote.

We have entered into a number of agreements, including our agreements with commercial airlines, pursuant to which we indemnify the other party for losses and expenses suffered or incurred in connection with any patent, copyright, or trademark infringement or misappropriation claim asserted by a third party with respect to our equipment or services. The maximum potential amount of future payments we could be required to make under these indemnification agreements is uncertain and is typically not limited by the terms of the agreements.

## ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

Our exposure to market risk is currently confined to our cash and cash equivalents, short-term investments and our debt. We have not used derivative financial instruments for speculation or trading purposes. The primary objectives of our investment activities are to preserve our capital for the purpose of funding operations while at the same time maximizing the income we receive from our investments without significantly increasing risk. To achieve these objectives, our investment policy allows us to maintain a portfolio of cash equivalents and short-term investments through a variety of securities, including U.S. Treasury securities, U.S. government agency securities, and money market funds. Our cash and cash equivalents as of June 30, 2020 and December 31, 2019 primarily included amounts in bank deposit accounts and money market funds. We believe that a change in average interest rates would not affect our interest income and results of operations by a material amount.

The risk inherent in our market risk sensitive instruments and positions is the potential loss arising from interest rates as discussed below. The sensitivity analyses presented do not consider the effects that such adverse changes may have on the overall economic activity, nor do they consider additional actions we may take to mitigate our exposure to such changes. Actual results may differ.

*Interest:* Our earnings are affected by changes in interest rates due to the impact those changes have on interest income generated from our cash, cash equivalents and short-term investments. Our cash and cash equivalents as of June 30, 2020 and December 31, 2019 included amounts in bank deposit accounts and money market funds. We believe we have minimal interest rate risk as a 10% decrease in the average interest rate on our portfolio would have reduced interest income for the three and six month periods ended June 30, 2020 and 2019 by an immaterial amount.

*Inflation:* We do not believe that inflation has had a material effect on our results of operations. However, there can be no assurance that our business will not be affected by inflation in the future.

*Seasonality:* Our results of operations for any interim period are not necessarily indicative of those for any other interim period for the entire year because the demand for air travel, including business travel, is subject to significant seasonal fluctuations. We generally expect overall passenger opportunity to be greater in the second and third quarters compared to the rest of the year due to an increase in leisure travel offset in part by a decrease in business travel during the summer months and holidays. We expect seasonality of the air transportation business to continue, which may affect our results of operations in any one period.

## ITEM 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Management, with the participation of our Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) as of June 30, 2020. Based upon this evaluation, our Chief Executive Officer and the Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of June 30, 2020.

(b) Changes in Internal Control over Financial Reporting

There have been no changes to our internal control over financial reporting in connection with the evaluation required by Rules 13a-15(f) and 15d-15(f) under the Exchange Act during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

# PART II. OTHER INFORMATION

## ITEM 1. Legal Proceedings

**Linksmart Litigation** - On April 20, 2018, Linksmart Wireless Technology, LLC filed suit against us and eight of our airline partners in the U.S. District Court for the Central District of California alleging that our redirection server and login portal infringe a patent owned by the plaintiff. The suits seek an unspecified amount of damages. We are required under our contracts with these airlines to indemnify them for defense costs and any liabilities resulting from the suit. The Court has stayed the suits against our airline customers pending resolution of the suit against Gogo. Linksmart has also filed suit against other defendants asserting the same patent. Following the filing by one of those defendants of a petition to commence an *inter partes* review against the asserted patent in the U.S. Patent and Trademark Office, the Court stayed the litigation against such other defendant and Gogo, but such stay was lifted in July 2019 when the U.S. Patent and Trademark Office determined that the petitioner had not met the standard of proof required to commence the *inter partes* review. We believe that the plaintiff's claims are without merit and intend to defend them vigorously. The outcome of this litigation is inherently uncertain. No amounts have been accrued for any potential losses under this matter, as we cannot reasonably predict the outcome of the litigation or any potential losses.

**Securities Litigation** - On June 27, 2018, a purported stockholder of the Company filed a putative class action lawsuit in the United States District Court for the Northern District of Illinois, Eastern Division styled Pierrelouis v. Gogo Inc., naming the Company, its former Chief Executive Officer and Chief Financial Officer and its current Chief Financial Officer and President, Commercial Aviation as defendants purportedly on behalf of all purchasers of our securities from February 27, 2017 through May 4, 2018. The complaint asserts claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder, alleging misrepresentations or omissions by us purporting to relate to our 2Ku antenna's reliability and installation and remediation costs. The plaintiffs seek to recover from us and the individual defendants an unspecified amount of damages. In December 2018 the plaintiffs filed an amended complaint and in February 2019, we filed a motion to dismiss such amended complaint. In October 2019 the judge granted the motion to dismiss on two independent grounds, finding that plaintiffs failed to plausibly allege that defendants made materially false or misleading statements and that plaintiffs failed to plead with particularity that defendants acted with scienter. The amended complaint was dismissed without prejudice, and in December 2019, plaintiffs filed a second amended complaint. In February 2020 we filed a motion to dismiss such second amended complaint. In July 2020, plaintiffs filed a motion requesting leave to file a proposed third amendment complaint, which the Court granted. We believe that the claims are without merit and intend to file a motion to dismiss the third amended complaint and continue to defend the claims vigorously. In accordance with Delaware law, we will indemnify the individual named defendants for their defense costs and any damages they incur in connection with the suit. We have filed a claim with the issuer of our Directors' and Officers' insurance policy with respect to this suit. No amounts have been accrued for any potential losses under this matter, as we cannot reasonably predict the outcome of the litigation or any potential losses.

**Derivative Litigation** - On September 25, 2018 and September 26, 2018, two purported stockholders of the Company filed substantively identical derivative lawsuits in the United States District Court for the Northern District of Illinois, Eastern Division, styled Nanduri v. Gogo Inc. and Hutsenpiller v. Gogo Inc., respectively. Both lawsuits were purportedly brought derivatively on behalf of us and name us as a nominal defendant and name as defendants each member of the Company's Board of Directors, its former Chief Executive Officer and Chief Financial Officer and its current Chief Executive Officer, Chief Financial Officer and President, Commercial Aviation. The complaints assert claims under Section 14(a) of the Securities Exchange Act of 1934, breach of fiduciary duty, unjust enrichment, and waste of corporate assets, and allege misrepresentations or omissions by us purporting to relate to our 2Ku antenna's reliability and installation and remediation costs, as well as allegedly excessive bonuses, stock options, and other compensation paid to current Officers and Directors and excessive severance paid to former Officers. The two lawsuits were consolidated and are stayed until a final disposition of the motion to dismiss in the class action suit. We believe that the claims are without merit and intend to defend them vigorously if the litigation resumes. The plaintiffs seek to recover, on our behalf, an unspecified amount of damages from the individual defendants. We have filed a claim with the issuer of our Directors' and Officers' insurance policy with respect to these suits. No amounts have been accrued for any potential costs under this matter, as we cannot reasonably predict the outcome of the litigation or any potential costs.

From time to time we may become involved in other legal proceedings arising in the ordinary course of our business. We cannot predict with certainty the potential for or outcome of any future litigation. Regardless of the outcome of any particular litigation and the merits of any particular claim, litigation can have a material adverse impact on our company due to, among other reasons, any injunctive relief granted, which could inhibit our ability to operate our business, amounts paid as damages or in settlement of any such matter, diversion of management resources and defense costs.

## ITEM 1A. Risk Factors

"Item 1A. Risk Factors" of our Form 10-K includes a discussion of our risk factors. The information presented below updates, and should be read in conjunction with, the risk factors and information disclosed in our Form 10-K and our first quarter 2020 10-Q. Except as set forth below, there have been no material changes to the risk factors previously disclosed in our 2019 10-K or first quarter 2020 10-Q.

***The COVID-19 pandemic, and the measures implemented to combat it, are having, and are likely to continue to have, a material adverse effect on our business. Moreover, the longer the pandemic persists, the more material the ultimate effects are likely to be. It is likely that there will be future negative effects that we cannot presently predict, including near term effects.***

In December 2019, a novel strain of coronavirus ("COVID-19") was reported in Wuhan, China, and the World Health Organization (the "WHO") subsequently declared COVID-19 a "Public Health Emergency of International Concern." On March 13, 2020, the U.S. government declared a national emergency and on March 19, 2020, the U.S. Department of State issued a global Level 4 "do not travel" advisory advising U.S. citizens to avoid all international travel due to the global impact of COVID-19. The U.S. government has also implemented enhanced screenings, mandatory quarantine requirements and other travel restrictions in connection with the COVID-19 pandemic, including restrictions on travel from Asia, Europe, Mexico and Canada, and many foreign and U.S. state governments have instituted similar measures (including travel restrictions to and within the European Union) and declared states of emergency. At various points, most states and U.S. territories have issued instructions for their residents to stay home or "shelter in place" and to avoid any non-essential travel for varied durations of time and may lift, have lifted or will be lifting or easing these instructions at varied times, often with certain restrictions still in place. In addition, depending on the results of any easing or lifting of instructions and other restrictions, federal, state or local governments or authorities may determine to reinstate, enhance or enforce the same or other instructions or restrictions in the future. Governments, non-governmental organizations and entities in the private sector have also issued and may continue to issue non-binding advisories or recommendations regarding air travel or other social distancing measures, including limitations on the number of persons that should be present at public gatherings.

The COVID-19 pandemic has caused a significant decline in international and domestic commercial and business aviation travel, which has materially and adversely affected our business. Passenger traffic on commercial airlines using Gogo's service started to decline in late March 2020 and while it has increased somewhat from mid-April lows, it has continued to be significantly below pre-COVID levels through July 2020. Our airline partners have significantly reduced capacity in response to the reduced demand, both by taking a significant number of aircraft out of service and by reducing the number of flights flown by aircraft that remain in service and we are unable to predict how long such capacity reductions will continue. Our BA business also saw a sharp decrease in flight activity, as well as an increase in requests for account suspensions and decreases in new plan activations. Though we have seen signs of recovery in the BA business from mid-April lows, there can be no assurance that such recovery will continue at the current pace or at all.

We expect COVID-19 to continue to negatively impact our CA and BA businesses and we are unable to predict how long or with what degree of severity that impact will continue. The extent of the impact of COVID-19 on our financial and operational performance will depend on future developments, including the duration, spread and severity of the outbreak, the duration and geographic scope of related travel advisories and restrictions and the extent of the impact of COVID-19 on overall demand for commercial and business aviation travel, all of which are highly uncertain and cannot be predicted. If our airline partners continue to experience significantly reduced demand for passenger traffic, or continue to keep a significant number of aircraft out of service, for an extended period, our business, results of operations, liquidity and financial condition may be materially adversely affected.

In addition to directly impacting demand for air travel, COVID-19 and related restrictions may have a material and adverse impact on other aspects of our business, including:

- enhanced risk of delays or defaults in payments by airline partners and other third parties due to liquidity constraints that extend in some cases to bankruptcy;
- delays and difficulties in completing installations on certain aircraft;
- delays or shortages in our supply chain;

- our competitive position, including with respect to connectivity providers that do not operate exclusively in the aviation industry; and
- limitations on our ability to market and grow our business and to promote technological innovation.

At this time we are also not able to predict whether the COVID-19 pandemic will result in long-term changes to business practices and consumer behavior, with such changes including but not limited to a long-term reduction in travel as a result of increased usage of "virtual" and "teleconferencing" products, a general reluctance to travel by consumers and the impact on demand and capacity, which could result from government mandates on commercial aviation service including, for instance, any requirement for passengers to wear masks while traveling or any limitation on the number of seats that can be occupied on an aircraft to allow for social distancing. Each of these factors could have a material impact on our business. The full extent of the ongoing impact of COVID-19 on our longer-term operational and financial performance will depend on future developments, many of which are outside of our control.

The extent to which the outbreak affects our future earnings and liquidity will depend in part on our ability to implement various measures intended to reduce expenses and/or conserve cash, which themselves may have negative consequences with respect to our business and operations. In April 2020, we applied for an $81 million grant and a $150 million loan under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). Based on criteria recently released by the U.S. Treasury Department, we do not believe that we will qualify for a loan, although we have not received a formal determination. We can provide no assurance that we will receive the grant in the amount for which we applied, or at all. If we do accept relief under the CARES Act, we will be subject to certain restrictions, including, but not limited to, requirements to maintain employment levels for a period of time, requirements to issue warrants for our common stock to the U.S. Treasury Department and certain limitations on executive compensation. The substance and duration of these restrictions may materially affect our operations, and we may not be successful in managing this impact. In addition, we have taken various actions with respect to our workforce, including the furlough of approximately 54% of our workforce which began May 4, 2020 and is expected to end on August 31, 2020, a reduction in force affecting approximately 14% of our workforce that will take effect on August 14, 2020 and reductions in compensation for certain active employees. Such actions could adversely affect employee morale, reduce overall productivity, lead to departures of key personnel or otherwise adversely impact normal operations. We may also be unsuccessful in amending contracts with certain suppliers, service providers and airline partners, including satellite service providers. We are implementing and may consider other cost-saving or other measures, such as delaying aircraft equipment installations, deferring purchases of capital equipment, freezing new hires, reducing marketing and travel expenses and eliminating non-essential spend. There can be no assurances that any of the cost-saving or other measures described above, or any other actions, will successfully mitigate the impact of COVID-19 or the related decrease in demand for commercial air travel.

We are unable to predict how long these conditions will persist, what additional measures may be introduced by governments or private parties or what effect any such additional measures may have on air travel and our business. Furthermore, not only is the duration of the pandemic and future measures taken to combat it presently unknown, the overall situation is extremely fluid, and it is impossible to predict the timing of future material changes in the situation. It therefore is impossible to predict whether any such unknown future developments will occur in the near, medium or long term, and depending on the duration of the pandemic, such negative developments may occur over the entirety of the event.

***We depend upon third parties, many of which are single-source providers, to manufacture equipment components, provide services for our network and install and maintain our equipment.***

We rely on third-party suppliers for equipment components and services that we use to provide our ATG and satellite services. Many suppliers of critical components of our equipment are single-source providers. Components for which we rely on single-source suppliers include, among others, the antennas and modems for all systems, the radomes for our satellite systems and the equipment used at our ATG cell site base stations. If we are required for any reason (including expiration of the contract, termination by one party for material breach or other termination events) to find one or more alternative suppliers, we estimate that the replacement process could take up to two years depending upon the component, and we may not be able to contract with such alternative suppliers on a timely basis, on commercially reasonable terms, or at all. Finding and contracting with suppliers of some components may be delayed or made more difficult by current suppliers' ownership of key intellectual property that requires alternative suppliers to either obtain rights to such intellectual property or develop new designs that do not infringe on such intellectual property. Operational issues relating to our suppliers, including delays or defects in components, failure to meet specifications or failure to achieve required regulatory approvals, could result in significant costs and delays in installations. For example, certain manufacturer defects have recently been identified relating to certain satellite radomes. As a result, we are unable to install certain radomes currently in inventory except for use in maintenance programs and may be required to replace radomes already on certain aircraft. If we are unable to successfully enforce our warranty with the supplier of such components, we could incur significant remediation costs and, if we fail to remediate such problems or implement satisfactory alternatives when and as required to meet our contract requirements, we may be in breach of the affected contracts, which could result in liquidated damages, or termination rights and associated claims or damages, all of which could have a material adverse effect on our business, financial condition and results of operations. In addition, many of our components, such as the equipment used in our base stations, are highly integrated with other system components, which may further lengthen the time required for an alternative supplier to deliver a component that meets our system requirements. We also rely on a third party to provide the links between our data centers and our ground network. If we are not able to continue to engage suppliers with the capabilities or capacities required by our business, or if such suppliers fail to deliver quality products, parts, equipment and services in sufficient quantities or on a timely basis consistent with our schedule, our business, financial condition and results of operations may be materially adversely affected.

In our CA business, installation and maintenance of our airborne ATG and satellite equipment is performed by employees of third-party service providers with whom we contract, and in some cases, by our airline partners, third-party service providers with whom the airline partners contract, or OEMs. In our BA segment, installation of our equipment is performed by the OEMs or dealers who purchase our equipment. Having third parties or our customers install or maintain our equipment reduces our control over the processes, including timeliness and quality. If there is an equipment failure, including due to problems with the installation or maintenance processes, our reputation and our relationships with our customers could be harmed. The passenger jets operated by our airline partners are very costly to repair and therefore damages for claims related to faulty installation or maintenance could be material. Additionally, we may be forced to pay significant remediation costs and/or penalties to airlines to cover equipment failure due to installation or maintenance problems and we may not be able to be indemnified for these costs.

The supply of third party components and services could be interrupted or halted by a termination of our relationships, a failure of quality control or other operational problems at such suppliers or a significant decline in their financial condition. If we are not able to continue to engage suppliers with the capabilities or capacities required by our business, or if such suppliers fail to deliver quality products, parts, equipment and services on a timely basis consistent with our schedule, our business, financial condition and results of operations may be materially adversely affected.

Our agreements with our equipment and service providers may contain terms, such as those related to termination, pricing and service levels and related penalties, that are not consistent with our obligations under our agreements with customers that rely on such equipment for connectivity. Should we breach such customers' agreements, we may be unable to seek indemnification for such losses from our providers. Further, if our suppliers were to increase their prices and we could not pass these increased costs on to our customers, it would increase our cost of service, which may have a material adverse effect on our business and results of operations.

## ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

***a) Sales of Unregistered Securities***

None.

***b) Use of Proceeds from Public Offering of Common Stock***

None.

## ITEM 3. Defaults Upon Senior Securities

None.

## ITEM 4. Mine Safety Disclosures

None.

## ITEM 5. Other Information

None.

## ITEM 6. Exhibits

| Exhibit Number | Description of Exhibits |
|---|---|
| 4.12 | Third Supplemental Indenture, dated as of July 31, 2020, by and among Gogo Inflight Internet Canada Ltd., Gogo ATG LLC, Gogo CA Licenses LLC, Gogo Intermediate Holdings LLC, Gogo Finance Co. Inc., each of the other guarantors party thereto and U.S. Bank National Association, as trustee |
| 10.1.45 | Amendment No. 6 to the 2Ku In-Flight Connectivity Services Agreement, dated as of June 5, 2020, by and between Gogo LLC and Delta Air Lines, Inc. (incorporated by reference to Exhibit 10.1 to Form 8-K filed on June 11, 2020 (File Number 001-35975)) |
| 10.1.46† | Amended and Restated Amendment #3 to the Unified In-Flight Connectivity Hardware, Services and Maintenance Agreement, effective as of October 1, 2019, between Gogo LLC and American Airlines, Inc. |
| 10.9.1# | Form of Director Stock Option Agreement for Amended and Restated Gogo Inc. 2016 Omnibus Incentive Plan (effective April 29, 2020) |
| 10.9.2# | Amendment to Non-Employee Director Stock Option Agreements for Amended and Restated Gogo Inc. 2016 Omnibus Incentive Plan granted before April 29, 2020 (effective April 29, 2020) |
| 10.9.3# | Temporary Director Compensation Policy Adjustment (effective April 28, 2020) |
| 31.1 | Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 31.2 | Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 32.1 * | Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |
| 32.2 * | Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |
| 101.INS | Inline XBRL Instance Document – The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document |
| 101.SCH | Inline XBRL Taxonomy Extension Schema Document |
| 101.CAL | Inline XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.LAB | Inline XBRL Taxonomy Extension Labels Linkbase Document |
| 101.PRE | Inline XBRL Taxonomy Extension Presentation Linkbase Document |
| 101.DEF | Inline XBRL Taxonomy Extension Definition Linkbase Document |
| 104 | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) |

* This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

\# Indicates management contract or compensatory plan or arrangement

† Certain provisions of this exhibit have been omitted pursuant to Item 601 (b)(10)(iv) of Regulation S-K.

## SIGNATURES

Pursuant to the requirements of the Securities and Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Gogo Inc.

Date: August 10, 2020

/s/ Oakleigh Thorne

Oakleigh Thorne
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Barry Rowan

Barry Rowan
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 4.12

THIRD SUPPLEMENTAL INDENTURE

THIRD SUPPLEMENTAL INDENTURE (this "*Supplemental Indenture*"), dated as of July 31, 2020, among GOGO INFLIGHT INTERNET CANADA LTD., a British Columbia limited company ("*Canadian Guaranteeing Subsidiary*"), GOGO ATG LLC, a Delaware limited liability company ("*Delaware Guaranteeing Subsidiary 1*"), GOGO CA LICENSES LLC, a Delaware limited liability company ("*Delaware Guaranteeing Subsidiary 2*" and, together with Canadian Guaranteeing Subsidiary and Delaware Guaranteeing Subsidiary 1, the "*Guaranteeing Subsidiaries*"), each of which is a direct or indirect subsidiary of Gogo Inc. (or its permitted successor), a Delaware corporation, Gogo Intermediate Holdings LLC, a Delaware limited liability company, and Gogo Finance Co. Inc., a Delaware corporation (together, the "*Issuers*"), the other Guarantors (as defined in the Indenture referred to herein) and U.S. Bank National Association, as trustee (the "*Trustee*") and as collateral agent under the Indenture referred to below.

W I T N E S S E T H

WHEREAS, the Issuers have heretofore executed and delivered to the Trustee an indenture, dated as of April 25, 2019 (as amended or supplemented from time to time, the "*Indenture*") providing for the issuance of 9.875% Senior Secured Notes due 2024 (the "*notes*");

WHEREAS, the Indenture provides that under certain circumstances the Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Issuers' Obligations under the notes and the Indenture on the terms and conditions set forth herein (the "*Guarantee*"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. The Guaranteeing Subsidiaries each hereby agree to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Guarantee and in the Indenture including but not limited to Article 11 thereof.

3. No Recourse Against Others. No director, officer, employee, incorporator or stockholder of the Issuers or any Guarantor, as such, will have any liability for any obligations of the Issuers or the Guarantors under the notes, the Indenture, the Guarantees or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of notes by accepting a note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the notes. The waiver may not be effective to waive liabilities under the federal securities laws.

4. NEW YORK LAW TO GOVERN. THE INTERNAL LAW OF THE STATE OF NEW YORK SHALL GOVERN AND BE USED TO CONSTRUE THIS SUPPLEMENTAL INDENTURE WITHOUT GIVING EFFECT TO APPLICABLE PRINCIPLES OF CONFLICTS OF LAW TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY.

5. Counterparts. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

6. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

7. The Trustee. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by the Guaranteeing Subsidiaries and the Issuers.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed and attested, all as of the date first above written.

GOGO INFLIGHT INTERNET CANADA LTD.

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO ATG LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO CA LICENSES LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

**ISSUERS**

GOGO INTERMEDIATE HOLDINGS LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO FINANCE CO. INC.

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

**GUARANTORS**

GOGO INC.

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

AC BIDCO LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO BUSINESS AVIATION LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO INTERNATIONAL HOLDINGS LLC

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO CONNECTIVITY LTD.

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

GOGO AIR INTERNATIONAL GMBH

By: /s/ Marguerite M. Elias
Name: Marguerite M. Elias
Title: Executive Vice President, General Counsel and Secretary

U.S. BANK NATIONAL ASSOCIATION,
as Trustee

By: /s/ Linda Garcia
Authorized Signatory

U.S. BANK NATIONAL ASSOCIATION,
as Collateral Agent

By: /s/ Linda Garcia
Authorized Signatory

[Signature Page to Third Supplemental Indenture]

**THE USE OF THE FOLLOWING NOTATION IN THIS EXHIBIT INDICATES THAT THE CONFIDENTIAL PORTION HAS BEEN OMITTED PURSUANT TO ITEM 601(b)(10)(iv) WHEREBY CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED BECAUSE IT IS BOTH NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED: [***]**

# AMENDED AND RESTATED AMENDMENT THREE (TO UNIFIED IN-FLIGHT CONNECTIVITY HARDWARE, SERVICES AND MAINTENANCE AGREEMENT)

This Amended and Restated Amendment Three (this "**Amendment**") to the Unified In-Flight Connectivity Hardware, Services and Maintenance Agreement, dated as of February 1, 2017, as previously amended (as so amended, the "**Original Agreement**"), by and between American Airlines, Inc. ("**American**") and Gogo LLC ("**Gogo**") (collectively the "**Parties**" and individually a "**Party**"), is entered into on April 15, 2020 (the "**Execution Date**"), and made effective as of October 1, 2019 (the "**Amendment and Restatement Effective Date**").

**Whereas**, American desires to continue to provide IPTV Services on Retrofit A/C in the 2Ku Fleet to provide live television programming to passengers on such aircraft;

**Whereas**, American and DISH Network LLC ("**Dish**") have entered into an agreement under which American has been granted rights by Dish to receive, distribute, transmit, exhibit and display certain live television programming on the Retrofit A/C in the 2Ku Fleet (the "**AA-Dish Agreement**");

**Whereas**, Gogo, American, and Dish have entered into an agreement under which Dish granted all licenses to Gogo that are required for Gogo to provide the IPTV Services to American (the "**Gogo-American-Dish Agreement**");

**Whereas**, Gogo and American have previously amended the Original Agreement to reflect the addition of IPTV Services on the Retrofit A/C in the 2Ku Fleet pursuant to that certain Amendment Three to the Original Agreement between the Parties dated September 4, 2018 (the "**Prior IPTV Amendment**") and IPTV Services have been provided pursuant to the Prior IPTV Amendment from the September 4, 2018 (the "**Prior IPTV Amendment Effective Date**") through the Amendment and Restatement Effective Date; and

**Whereas**, the Parties desire to amend and restate the Prior IPTV Amendment to the Original Agreement to reflect the continued provision of the IPTV Services on IPTV A/C as of the Amendment and Restatement Effective Date.

**Now, Therefore**, in consideration of the foregoing premises and the covenants contained herein, American and Gogo agree as follows:

1. **Amendments to Original Agreement**.

A. Section 9.4.4 of the Original Agreement is deleted in its entirety and replaced with the following:

9.4.4 **IPTV Services**. Gogo shall provision IPTV Services to the Retrofit A/C in the 2Ku Fleet as described in **Exhibit R** (the "**IPTV A/C**"), at pricing set forth in **Exhibit D**.

B. The following shall be added to Section 17 of the Original Agreement:

17.2.9 Gogo shall provide notice to American in the event of any (i) actual or alleged breach of the Gogo-American-Dish Agreement, or (ii) actual, or threat of, early termination of the Gogo-American-Dish Agreement, in each case (i) and (ii), by either Gogo or Dish. In the event of any occurrence of subpart (i) or (ii), Gogo shall work with American in good faith in an attempt to resolve the issues between Gogo and Dish leading to such occurrence (including by allowing American to cure any default). In the event that the breach cannot be cured, Gogo retains its right to terminate the Gogo-American-Dish Agreement as set forth therein. In no event will Gogo disrupt or suspend the IPTV Services due to an actual or alleged breach of the Gogo-American-Dish Agreement by Dish without first giving Dish and American a [***] to cure such breach, provided that the breach is curable within such period.

17.2.10 Gogo will use best efforts to maintain the Gogo-American-Dish Agreement.

C. The following is added as Section 21.1(g) of the Original Agreement:

(g) in addition to the indemnification obligations under the Gogo-American-Dish Agreement, a breach of Section 1(a) of the Gogo-American-Dish Agreement; provided that for purposes of this Section 21.1(g), Dish will not be considered a third party.

D. Section 2.3 of **Exhibit D** is deleted in its entirety and replaced with:

2.3 Fees for the IPTV Services during the IPTV Term are as follows (collectively, the "**IPTV Service Fees**"):

[***]

E. Item 9 of the table in Section 1.2 of **Exhibit I** is deleted in its entirety and replaced with:

[***]

F. The following shall be added to the end of the table in Section 1.2 of **Exhibit I**:

[***]

G. Section 5 of **Exhibit J-1** is deleted in its entirety and replaced with the following:

a. **[***]**

b. **[***]**

c. **[***]**

ii. i.

d. **[***]**

i.

e. **[***]**

f. **[***]**

g. **[***]**

H. A new Section 6 is added to **Exhibit K** as follows:

6. IPTV Services Dashboard

**General**. IPTV Services Dashboard: Gogo shall provide American a Dashboard that shall include analytics for the IPTV Services (the "**IPTV Services Dashboard**") substantially in the form set forth in Figure K-1.

6.1. At a minimum, the IPTV Services Dashboard shall include the following information updated at least once daily. The Parties shall discuss in good faith the addition of additional metrics to the IPTV Services Dashboard.

6.1.1. Number of IPTV Users and views on a per IPTV Channel and per flight basis.

6.1.2. The click through rate and IPTV take rate for the channels presented in the IPTV EPG, where "take rate" refers to the ratio, expressed as a percentage, of Users viewing a particular channel to the number of passengers on a particular flight".

6.1.3. Availability and media quality of the IPTV multicast stream as measured on each IPTV A/C, including Channel Availability, EPG Availability and Average IPTV Video Quality information.

6.1.4. The number of active IPTV A/C on which the IPTV Services are deployed.

6.2. Within [***] of the end of each calendar month, Gogo shall provide to American a report in Microsoft Excel format that includes (a) the Output IPTV Availability, and (b) Output eMOS information for the preceding calendar month. Gogo shall use its best efforts to make the Output IPTV Availability and Output eMOS available on a minute-by-minute basis and within the IPTV Services Dashboard.

6.3 Gogo will report on applicable metrics on a gate-to-gate basis provided that Gogo’s obligations pertaining to IPTV metrics and IPTV SLC are limited to IPTV Services above 10,000 feet for all IPTV A/C.

I. **<u>Exhibit R</u>** is deleted in its entirety and replaced with **<u>Exhibit R</u>** attached to this Amendment.

2. **<u>Entire Agreement/Amendment</u>**. This Amendment constitutes the full and complete understanding of the Parties, as of the Amendment and Restatement Effective Date, with respect to the subject matter of this Amendment and supersedes all prior agreements, including, subject to the next sentence, the Prior IPTV Amendment, and understandings between the Parties with respect to the subject matter. This Amendment will control from the Amendment and Restatement Effective Date on a prospective basis only and the Prior IPTV Amendment will control with respect to obligations therein for the period from the Prior IPTV Amendment Effective Date to the Amendment and Restatement Effective Date. This Amendment may be modified only by written agreement signed by an authorized representative of each Party.

3. **<u>Effectiveness of Agreement/Definitions</u>**. Except as specifically amended by this Amendment, the Original Agreement remains in full force and effect. All capitalized terms used but not defined herein shall have the respective meanings applied to them in the Original Agreement.

4. **Counterparts**. This Amendment may be executed in counterparts, each of which shall constitute an original but all of which together shall constitute one and the same instrument, and if so executed in counterparts will be enforceable and effective upon the exchange of executed counterparts or the exchange of facsimile transmissions of executed counterparts. Each Party agrees that any electronic signatures of the Parties, in any form or format, included in this Amendment are intended to authenticate this writing and to have the same force and effect as manual signatures. For the purposes of this provision, 'electronic signature' means any electronic sound, symbol or process attached to or logically associated with a record and executed and adopted by a Party with the intent to sign such record, including e-mail signatures and processes developed by electronic signature services (e.g., DocuSign).

*[Signatures appear on the next page]*

**IN WITNESS WHEREOF**, the parties have executed and delivered this Amendment as of the Execution Date.

GOGO LLC

By: /s/ Ben Murphy

Name: Ben Murphy

Title: V.P., Accounts

Date: 5/29/2020

AMERICAN AIRLINES, INC.

By: /s/ Kevin Brickner

Name: Kevin Brickner

Title: SVP – Tech Ops

Date: 4/28/2020

**Figure K-1**
**IPTV Dashboard**

**[***]**

**[***]**

**[***]**

American Airlines Confidential and Proprietary

## Exhibit R:

## IPTV Services

This **Exhibit R** is intended to set forth the Parties' respective rights and obligations with respect to IPTV Services. For the avoidance of doubt, except where the context of the Original Agreement otherwise requires, the equipment, software and services described herein shall constitute Equipment, Software and IPTV Services, respectively, as such terms are defined in the Original Agreement.

**1. Provision of IPTV Services.**

1.1 Subject to Section 3 below, Gogo shall make the IPTV Services available to User's PEDs on all Retrofit A/C equipped with the 2Ku Solution. The Parties acknowledge that the IPTV Services will not be available for any IPTV A/C operating in Unauthorized Airspace. For any A/C to be added as a Retrofit A/C after the Execution Date, the Parties shall negotiate in good faith to add the IPTV Services to such A/C.

1.2 In consideration of the fees set forth in Section 2.3 of **Exhibit D**, as between the Parties, Gogo is responsible for the acquisition or development, installation and maintenance of all Gogo provided hardware and software specifically required for the provision of the IPTV Services, and monitoring equipment (*e.g.*, a Tektronix box). As between the Parties, Gogo shall house all SmartBox(es) within its facilities and shall be responsible for assisting with the maintenance and upkeep of the SmartBox(es), including notifying American and Dish of issues related to the SmartBox(es) of which it has become aware.

1.3 As between the Parties, American is responsible for obtaining the rights to provide audiovisual content to Users in connection with the IPTV Services. As of the Amendment and Restatement Effective Date, American has been granted the rights to receive, distribute, transmit, exhibit and display the television channels listed below on IPTV A/C ("**IPTV Channels**"). As of the Amendment and Restatement Effective Date, the IPTV Channels are as follows:

1.3.1 IPTV Channels:

1. USA
2. Disney Channel
3. TNT
4. Bravo
5. WNBC
6. WNYW
7. CNBC
8. Telemundo (National)
9. ESPN
10. CNN
11. NFL Network
12. WCBS

1.4 American may provision the IPTV Services to its passengers for [***]. American's sole payment obligations to Gogo for IPTV Services are set forth in **Exhibit D**, **Exhibit R**, related SOWs (if any) and amendments to any of the foregoing, regardless of any fee American may charge its passengers for the IPTV Services.

**2. IPTV Services Term and Termination.**

2.1 The term during which Gogo shall provide the IPTV Services (the "**IPTV Term**") began on the Prior IPTV Amendment Effective Date and will continue until [***] for IPTV A/C, unless earlier terminated in accordance with the provisions of Section 18 of the Original Agreement or this Section 2 of **Exhibit R**.

2.2 American may terminate the IPTV Services at any time for any reason or no reason whatsoever on written notice to Gogo, to be effective no earlier than [***] following the delivery of such written notice to Gogo.

2.3 Upon any termination of the IPTV Services under this Section 2 of **Exhibit R**, the Parties will use commercially reasonable efforts and work together in good faith to develop a reasonable plan for the wind-down of the IPTV Services. For the avoidance of doubt, any termination of the IPTV Services under this Section 2 of **Exhibit R** will have no impact on any obligations either Party may have with respect to other portions of the Gogo Services.

**3. Geofencing.**

3.1 As between the Parties, Gogo is responsible for ensuring that the IPTV Channels are not received, distributed, exhibited or displayed on any IPTV A/C located outside of the continental United States airspace for IPTV A/C departing from or arriving at destinations outside the continental United States (including the District of Columbia) or in airspace that precludes the transmission or receipt of IPTV Services due to applicable laws or regulations (the "**Unauthorized Airspace**"). The operation of the IPTV Services in order to receive, distribute, exhibit or display the IPTV Channels on IPTV A/C while such IPTV A/C is within the Unauthorized Airspace ("**Unauthorized Exhibition**") is not authorized under this Amendment or the Original Agreement. Notwithstanding the foregoing, for the purposes of this section, the reception, distribution, exhibition and/or display of the IPTV Channels on flights flying city-pair routes between destinations within the continental United States (including the District of Columbia) shall be deemed within United States airspace unless such IPTV A/C enters Unauthorized Airspace during the applicable flight.

**4. IPTV EPG Implementation.**

4.1 Gogo shall ensure that the Portal includes an IPTV EPG that is substantially similar to the user interface illustrated in Figure R-1. The IPTV EPG shall include American Marks at American's sole discretion. Gogo shall ensure that the IPTV EPG includes a Dish mark at all times, and the size, placement and display of such Dish mark shall remain consistent with the size, placement and display of such mark on the IPTV EPG as of the Amendment and Restatement Effective Date unless and until a change to size, placement or display of the Dish mark is requested by American in its reasonable discretion and agreed in a MCP executed by the Parties, provided that American represents and warrants it maintains the right to modify the Dish mark as requested. Figure R-1 provides an example of an acceptable use of a Dish mark. As between the Parties, Gogo shall be responsible for the development and implementation of the IPTV EPG as set forth in this Section 4.

4.2 Upon execution of a related MCP, Gogo shall include proximate to any link or icon included within the Portal where a User can directly access the IPTV EPG, text substantially similar to "Live TV by DISH" provided that the specific design, size, placement and display of such text will be in American's reasonable discretion, provided that American represents and warrants it maintains the right to incorporate the subject text as proposed in the MCP.

4.3 Subject to the execution of an MCP therefor, Gogo shall ensure that the IPTV EPG does not automatically direct any User to any IPTV Channel upon launch of the IPTV EPG or direct any User to any IPTV Channel other than the IPTV Channel selected by the User. The IPTV EPG may exhibit and display any and all IPTV content in a partial screen mode or obscure portions of such IPTV content to display: (a) a banner insertion constituting no more than the top 1/8 of the screen displaying only the American name and logo, the remaining flight time and weather conditions for the destination city; (b) messages required by the Federal Aviation Administration; (c) messages pertaining to and appearing during an American crew member's use of an IPTV A/C's intercom; (d) any other messages pertaining to the safety of the IPTV A/C, and (e) other content or information agreed by the Parties in writing (collectively, the "**Permitted Information**") and/or any User Initiated UI Search. At all other times, Gogo shall ensure that the exhibition and display of any and all IPTV Channels are in full screen mode. As used herein, the term "**User Initiated UI Search**" means a User's switching the display of IPTV content into partial screen mode in order to access the IPTV EPG or to exit the IPTV Services; provided that no other information or visual images may appear on the IPTV EPG while an IPTV Channel is being displayed in partial screen mode other than the Permitted Information, the names and logos of the channels, a Dish mark and the upcoming schedule of programming.

4.4 In the event that: (i) an IPTV A/C flight itinerary has a departure or an arrival destination outside the continental United States (e.g., a flight from Dallas, Texas to Cancun, Mexico), then Gogo shall ensure that the IPTV EPG, or any screen containing any IPTV Channel, displays a message substantially similar to “Live television no longer available due to the aircraft’s departure from United States airspace” while such IPTV A/C is within the Unauthorized Airspace; and (ii) the IPTV Service is experiencing technical difficulties affecting the display of any IPTV Channel, then Gogo shall ensure that the IPTV EPG, or any screen containing any IPTV Channel, displays a message as agreed to by the Parties in a MCP.

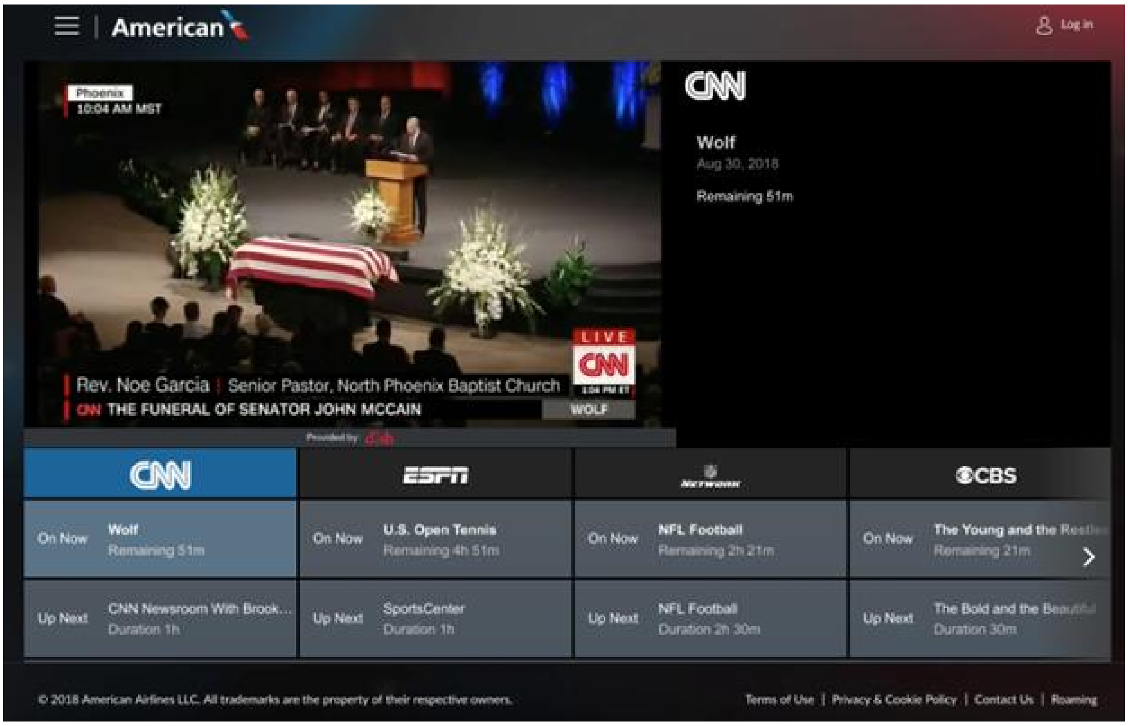
4.5 Notwithstanding anything to the contrary in the Original Agreement or this Amendment, [***], Gogo shall deploy any and all visual and link changes in the IPTV EPG and portions of the Portal related to the IPTV Services requested by American (including any changes to links, color schemes, graphics, icons, logos, text, and sizes and placements of any of the foregoing) subject to the execution of a MCP by the Parties, which may be a no cost MCP depending on the nature and scope of the work contemplated.

**5.** **Technical Requirements**.

5.1 [***]

**Figure R-1:**

**IPTV EPG Illustration**



**STOCK OPTION AGREEMENT**

STOCK OPTION AGREEMENT (the "Agreement"), dated as of the Grant Date set forth in the Notice of Grant (as defined below), between Gogo Inc., a Delaware corporation (the "Company"), and the Eligible Director whose name appears in the Notice of Grant (the "Participant"), pursuant to the Amended and Restated Gogo Inc. 2016 Omnibus Incentive Plan, as in effect and as amended from time to time (the "Plan"). Capitalized terms that are not defined herein shall have the meanings given to such terms in the Plan.

1. Confirmation of Grant, Option Price.

(a) Confirmation of Grant. The Company hereby evidences and confirms the grant to the Participant of options to purchase the number of shares of Stock (the "Options") set forth in the Amended and Restated Gogo Inc. 2016 Omnibus Incentive Plan Stock Option Grant Notice delivered by the Company to the Participant (the "Notice of Grant"). The Options are not intended to be incentive stock options under the U.S. Internal Revenue Code of 1986, as amended. This Agreement is entered into pursuant to, and the terms of the Options are subject to, the terms and conditions of the Plan, which is incorporated by reference herein. If there is any inconsistency between this Agreement and the terms of the Plan, the terms of the Plan shall govern. The Options shall be considered a Service Award under the Plan.

(b) Exercise Price. The Options shall have the Exercise Price set forth in the Notice of Grant.

2. Vesting, Exercisability and Exercise.

(a) Vesting. The Options shall vest and become exercisable on the vesting date set forth in the Notice of Grant, subject to the continuous Service of the Participant until such vesting date.

(b) Exercise; Condition to Exercise. Once vested and exercisable in accordance with the provisions of this Agreement, the Options may be exercised at any time and from time to time prior to the date such Options terminate pursuant to Section 3. The Participant may exercise all or a portion of the Options by giving notice to the Company or a brokerage firm designated or approved by the Company, in form and substance satisfactory to the Company, which will state the Participant's election to exercise the Options and the number of shares of Stock for which the Participant is exercising Options. The notice must be accompanied by full payment of the exercise price for the number of shares of Stock the Participant is purchasing. The Participant may make this payment in any combination of the following: (i) by cash; (ii) by check acceptable to the Company; (iii) by tendering (either actually or by attestation) shares of Stock the Participant has owned for at least six months (if such holding period is necessary to avoid a charge to the Company's earnings); (iv) to the extent permitted by law, by instructing a broker to deliver to the Company the total payment required in accordance with procedures established by the Company; or (v) by any other method permitted by the Committee.

(c) Cashless Exercise. In lieu of tendering the exercise price to the Company in accordance with Section 2(b), the Participant may elect to perform a "Cashless Exercise" of the Options, in whole or in part, by surrendering the Options to the Company, marked "Cashless Exercise" and designating the number of shares of Stock desired by the Participant out of the total for which Options are exercisable. The Participant shall thereupon be entitled to receive the number of shares of Stock having a Fair Market Value equal to (i) the then Fair Market Value per share of Stock multiplied by the number of the shares of Stock into which the Options designated by the Participant would have been exercisable pursuant to Section 2(b) upon payment of the exercise price by the Participant, less (ii) the exercise price the Participant would have been required to pay under Section 2(b) in respect of such an exercise.

3. Termination of Options

(a) Normal Expiration Date. Unless earlier terminated pursuant to Section 3(b), the Options shall terminate on the tenth anniversary of the Grant Date (the "Normal Expiration Date"), if not exercised prior to such date.

(b) Termination of Service.

(i) Death, Disability or Retirement. If the Participant's Service on the Board terminates due to death, Disability or Retirement (as defined below), any Options that are vested as of such Termination of Service may be exercised by the Participant or the Participant's executor, administrator, legal representative, guardian or similar person until and including the earlier to occur of (x) the date which is five years after the date of the Participant's death or the effective date of the Participant's Termination of Service due to Disability or Retirement, as the case may be, and (y) the Normal Expiration Date; provided, however, that in the case of any voluntary Retirement by the Participant that occurs prior to April 29, 2021 (it being understood and agreed that no retirement by the Participant at the request of the Board or following a decision by the Board not to re-nominate the Participant to the Board shall be considered voluntary for this purpose) "five years" in clause (x) above shall be replaced with "one year". Any Options that are not vested as of the Participant's Termination of Service shall be terminated immediately upon such Termination of Service. For purposes of the foregoing, the term "Retirement" shall mean the Participant's voluntary or involuntary Termination of Service, other than by reason of death, Disability or removal for Cause, occurring on or after the date on which either (A) the Participant reaches the age of 65 or (B) the Participant's age plus years of Service on the Company's Board equal seventy-five (75).

(ii) Removal for Cause. If the Participant's Service on the Board is terminated by the Board for Cause, all Options, whether vested or unvested, shall terminate immediately upon such Termination of Service.

(iii) Other Reasons. If the Participant's Service on the Board is terminated due to circumstances other than as set forth in Sections 3(b)(i) or (ii), such as resignation, any Options that are vested as of the effective date of the Participant's Termination of Service may thereafter be exercised by the Participant until and including the earliest to occur of (x) the date which is 90 days after the effective date of the Participant's Termination of Service and (y) the Normal Expiration Date. All Options that are unvested as of the Participant's Termination of Service shall immediately terminate upon such Termination of Service.

(iv) Death Following Termination. If the Participant dies during the period set forth in Section 3(b)(i) or (iii), the vested Options may thereafter be exercised by the Participant's executor, administrator, legal representative, guardian or similar person until and including the earlier to occur of (x) the date which is one year after the date of death (or, if later, five years after the date of the Participant's Disability or Retirement, as applicable) and (y) the Normal Expiration Date.

(c) Change in Control. In the event of a Change in Control, the Options shall continue and shall have such treatment as set forth in the Plan.

4. Securities Law Compliance. Notwithstanding any other provision of this Agreement, the Participant may not sell the shares of Stock acquired upon exercise of the Options unless such shares are registered under the Securities Act of 1933, as amended (the "Securities Act"), or, if such shares are not then so registered, such sale would be exempt from the registration requirements of the Securities Act. The sale of such shares must also comply with other applicable laws and regulations governing the shares and Participant may not sell the shares of Stock if the Company determines that such sale would not be in material compliance with such laws and regulations.

5. Participant's Rights with Respect to the Options.

(a) Restrictions on Transferability. The Options granted hereby are not assignable or transferable, in whole or in part, and may not, directly or indirectly, be offered, transferred, sold, pledged, hedged, assigned, alienated, hypothecated or otherwise disposed of or encumbered (including without limitation by gift, operation of law or otherwise) other than by will or by the laws of descent and distribution to the estate of the Participant upon the Participant's death; provided that the deceased Participant's beneficiary or representative of the Participant's estate shall acknowledge and agree in writing, in a form reasonably acceptable to the Company, to be bound by the provisions of this Agreement and the Plan as if such beneficiary or the estate were the Participant.

(b) No Rights as Stockholder. The Participant shall not have any rights as a stockholder including any voting, dividend or other rights or privileges as a stockholder of the Company with respect to any Stock underlying the Options unless and until shares of Stock are issued to the Participant upon exercise thereof.

6. Adjustments. The number, class and Exercise Price of the shares of Stock covered by the Options shall be adjusted by the Committee to reflect any extraordinary dividend, stock dividend, stock split or share combination or any recapitalization, business combination, merger, consolidation, spin-off, exchange of shares, liquidation or dissolution of the Company or other similar transaction affecting the Stock in such manner as the Board determines in its sole discretion.

7. Miscellaneous.

(a) Binding Effect; Benefits. This Agreement shall be binding upon and inure to the benefit of the parties to this Agreement and their respective successors and assigns. Nothing in this Agreement, express or implied, is intended or shall be construed to give any person other than the parties to this Agreement or their respective successors or assigns any legal or equitable right, remedy or claim under or in respect of any agreement or any provision contained herein.

(b) No Right to Continued Service. Nothing in the Plan or this Agreement shall interfere with or limit in any way any right to terminate the Participant's Service on the Board.

(c) Interpretation. The Committee shall have full power and discretion to construe and interpret the Plan (and any rules and regulations issued thereunder) and this Award. Any determination or interpretation by the Committee under or pursuant to the Plan or this Award shall be final and binding and conclusive on all persons affected hereby.

(d) [RESERVED]

(e) Applicable Law. This Agreement shall be governed by and construed in accordance with the law of the State of Delaware regardless of the application of rules of conflict of law that would apply the laws of any other jurisdiction.

(f) Limitation on Rights; No Right to Future Grants; Extraordinary Item of Compensation. By entering into this Agreement and accepting the Options evidenced hereby, the Participant acknowledges: (i) that the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (ii) that the Award does not create any contractual or other right to receive future grants of Awards; (iii) that participation in the Plan is voluntary; and (iv) that the future value of the Stock is unknown and cannot be predicted with certainty.

(g) Participant Data Privacy. By entering into this Agreement and accepting the Options evidenced hereby, the Participant: (i) authorizes the Company, the Participant's employer, if different, and any agent of the Company administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its affiliates any information and data the Company requests in order to facilitate the grant of the Award and the administration of the Plan; (ii) waives any data privacy rights the Participant may have with respect to such information; and (iii) authorizes the Company and its agents to store and transmit such information in electronic form.

(h) Consent to Electronic Delivery. By entering into this Agreement and accepting the Options evidenced hereby, the Participant hereby consents to the delivery of information (including, without limitation, information required to be delivered to the Participant pursuant to applicable securities laws) regarding the Company and the Subsidiaries, the Plan, this Agreement and the Options via Company website, email or other electronic delivery.

(i) Headings and Captions. The headings and captions herein are provided for reference and convenience only, shall not be considered part of this Agreement, and shall not be employed in the construction of this Agreement.

(j) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

June 15, 2020

To the Non-Employee Members of the Board of Directors of Gogo Inc. (the “Board”):

Amendment to Non-Employee Director Options

On April 29, the Compensation Committee of the Board resolved that (1) the terms of all outstanding stock options currently held by non-employee directors be amended to include, and (2) until the Compensation Committee determines otherwise, the terms of all future stock options granted to non-employee directors contain, new provisions regarding the exercise of such stock options following death, disability or retirement.

This letter will serve as an amendment to the terms of the currently outstanding stock options issued by Gogo Inc. to you for your service as a non-employee member of the Board (your “Director Options”), as set forth in the Notice of Grant and Stock Option Agreements applicable to your Director Options (the “Award Agreements”) under the Amended and Restated Gogo Inc. 2016 Omnibus Incentive Plan and its predecessor omnibus equity plans (the “Plans”).

Notwithstanding anything to the contrary contained in the Award Agreements:

- Exercisability Following Death, Disability or Retirement. Following your death, Disability (as defined in the applicable Award Agreement, including by reference to a Plan) or Retirement (as defined below), each of your vested Director Options shall remain exercisable by you or your executor, administrator, legal representative, guardian or similar person until and including the earlier to occur of (i) the date which is five years after the date of your death or the effective date of your termination of service on the Board due to Disability or Retirement, as the case may be, and (ii) the originally scheduled expiration date of the Director Option; provided, however, that such extended exercisability shall not apply in the case of any voluntary Retirement by you that occurs prior to April 29, 2021 (it being understood and agreed that no Retirement by you at the request of the Board or following a decision by the Board not to re-nominate you to the Board shall be considered voluntary for this purpose), in which case the terms of the applicable Award Agreement before giving effect to this amendment shall apply.

- Death Following Certain Terminations of Service. In addition, if you die following your Disability, Retirement or termination of service on the Board for any reason other than your termination for Cause (as defined in the applicable Award Agreement), each of your vested Director Options that then remain outstanding and exercisable may thereafter be exercised by your executor, administrator, legal representative, guardian or similar person until and including the earlier to occur of (x) the date which is one year after the date of your death (or, if later, five years after the date of your Disability or Retirement, as applicable) and (y) the originally scheduled expiration date of the Director Option.

- Definition of Retirement. For purposes of the foregoing, the term “Retirement” shall mean your voluntary or involuntary termination of service on the Board, other than by reason of death, Disability or removal for Cause (as defined in the applicable Award Agreement), occurring on or after the date on which either (x) you reach the age of 65 or (y) your age plus years of service on the Board equal seventy-five (75).

- Effective Date. This amendment is effective as of April 29, 2020.

/s/ Marguerite M. Elias
Marguerite M. Elias
Executive Vice President,
General Counsel and Secretary

**Exhibit 10.9.3**

**Temporary Director Compensation Policy Adjustment (adopted April 28, 2020)**

In light of the COVID-19 outbreak and its impact on the Company's business and financial condition, on April 28, 2020 the Board of Directors of the Company adopted resolutions reducing the total compensation of each director (including compensation paid with respect to services as a Board or Committee chair) by 30% for the second, third and fourth quarters of 2020. Each director may determine whether his or her reduction comes out of cash, options or deferred stock; provided, however, that any director to whom cash compensation is being paid in 2020 shall reduce the cash component of his or her compensation by at least 30%.

**Exhibit 31.1**

**Gogo Inc.**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**
**PURSUANT TO RULE 13a-14(a) OF THE EXCHANGE ACT, AS AMENDED,**
**AS ADOPTED PURSUANT TO**
**SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

**I, Oakleigh Thorne, certify that:**

1. I have reviewed this Quarterly Report on Form 10-Q of Gogo Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 10, 2020

/s/ Oakleigh Thorne
Oakleigh Thorne
President and Chief Executive Officer
(Principal Executive Officer)

**Exhibit 31.2**

**Gogo Inc.**

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) OF THE EXCHANGE ACT, AS AMENDED,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

**I, Barry Rowan, certify that:**

1. I have reviewed this Quarterly Report on Form 10-Q of Gogo Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 10, 2020

/s/ Barry Rowan

Barry Rowan
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

**Exhibit 32.1**

**Gogo Inc.**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, Oakleigh Thorne, President and Chief Executive Officer of Gogo Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 10, 2020

/s/ Oakleigh Thorne
Oakleigh Thorne
President and Chief Executive Officer
(Principal Executive Officer)

**Exhibit 32.2**

**Gogo Inc.**

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, Barry Rowan, Executive Vice President and Chief Financial Officer of Gogo Inc. (the “Company”), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 10, 2020

/s/ Barry Rowan

Barry Rowan
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)