
**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 September 30, 2018

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
(State or other jurisdiction of
Incorporation or Organization)

27-1650905
(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)

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
Non-accelerated filer

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 November 1, 2018, 87,458,431 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)

	September 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 102,664	\$ 196,356
Short-term investments	88,575	212,792
Total cash, cash equivalents and short-term investments	191,239	409,148
Accounts receivable, net of allowances of \$756 and \$587, respectively	146,172	117,896
Inventories	209,734	45,543
Prepaid expenses and other current assets	32,490	20,310
Total current assets	579,635	592,897
Non-current assets:		
Property and equipment, net	506,703	656,038
Goodwill and intangible assets, net	84,130	87,133
Other non-current assets	77,994	67,107
Total non-current assets	668,827	810,278
Total assets	\$ 1,248,462	\$ 1,403,175
Liabilities and Stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 31,911	\$ 27,130
Accrued liabilities	184,912	201,815
Deferred revenue	34,815	43,448
Deferred airborne lease incentives	25,877	42,096
Current portion of capital leases	1,233	1,789
Total current liabilities	278,748	316,278
Non-current liabilities:		
Long-term debt	1,018,011	1,000,868
Deferred airborne lease incentives	129,865	142,938
Other non-current liabilities	83,119	134,655
Total non-current liabilities	1,230,995	1,278,461
Total liabilities	1,509,743	1,594,739
Commitments and contingencies (Note 12)	—	—
Stockholders' deficit		
Common stock, par value \$0.0001 per share; 500,000,000 shares authorized at September 30, 2018 and December 31, 2017; 87,576,549 and 87,062,578 shares issued at September 30, 2018 and December 31, 2017, respectively; and 87,458,431 and 86,843,928 shares outstanding at September 30, 2018 and December 31, 2017, respectively	9	9
Additional paid-in-capital	911,341	898,729
Accumulated other comprehensive loss	(2,768)	(933)
Accumulated deficit	(1,169,863)	(1,089,369)
Total stockholders' deficit	(261,281)	(191,564)
Total liabilities and stockholders' deficit	\$ 1,248,462	\$ 1,403,175

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 September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenue:				
Service revenue	\$160,376	\$153,347	\$ 470,110	\$ 453,918
Equipment revenue	56,881	19,527	206,430	57,162
Total revenue	<u>217,257</u>	<u>172,874</u>	<u>676,540</u>	<u>511,080</u>
Operating expenses:				
Cost of service revenue (exclusive of items shown below)	69,476	67,854	218,073	201,794
Cost of equipment revenue (exclusive of items shown below)	53,960	15,326	170,603	41,623
Engineering, design and development	30,018	31,313	88,204	103,262
Sales and marketing	13,963	16,294	45,291	47,253
General and administrative	24,860	24,064	71,152	70,162
Depreciation and amortization	32,590	35,824	100,447	96,821
Total operating expenses	<u>224,867</u>	<u>190,675</u>	<u>693,770</u>	<u>560,915</u>
Operating loss	<u>(7,610)</u>	<u>(17,801)</u>	<u>(17,230)</u>	<u>(49,835)</u>
Other (income) expense:				
Interest income	(903)	(683)	(3,307)	(1,999)
Interest expense	30,743	27,585	91,938	81,754
Other (income) expense	72	228	(59)	322
Total other expense	<u>29,912</u>	<u>27,130</u>	<u>88,572</u>	<u>80,077</u>
Loss before income taxes	<u>(37,522)</u>	<u>(44,931)</u>	<u>(105,802)</u>	<u>(129,912)</u>
Income tax provision (benefit)	195	350	(3,459)	945
Net loss	<u>\$ (37,717)</u>	<u>\$ (45,281)</u>	<u>\$ (102,343)</u>	<u>\$ (130,857)</u>
Net loss attributable to common stock per share—basic and diluted	<u>\$ (0.47)</u>	<u>\$ (0.57)</u>	<u>\$ (1.28)</u>	<u>\$ (1.65)</u>
Weighted average number of shares—basic and diluted	<u>80,196</u>	<u>79,543</u>	<u>79,948</u>	<u>79,340</u>

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		For the Nine Months	
	Ended September 30,		Ended September 30,	
	2018	2017	2018	2017
Net loss	<u>\$ (37,717)</u>	<u>\$ (45,281)</u>	<u>\$ (102,343)</u>	<u>\$ (130,857)</u>
Currency translation adjustments	<u>378</u>	<u>655</u>	<u>(1,835)</u>	<u>1,145</u>
Comprehensive loss	<u><u>\$ (37,339)</u></u>	<u><u>\$ (44,626)</u></u>	<u><u>\$ (104,178)</u></u>	<u><u>\$ (129,712)</u></u>

See the Notes to Unaudited Condensed Consolidated Financial Statements

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

	For the Nine Months Ended September 30,	
	2018	2017
Operating activities:		
Net loss	\$(102,343)	\$(130,857)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	100,447	96,821
Loss on asset disposals, abandonments and write-downs	8,103	7,540
Gain on transition to airline-directed model	(21,551)	—
Deferred income taxes	(3,866)	737
Stock-based compensation expense	12,531	15,007
Amortization of deferred financing costs	3,143	2,718
Accretion and amortization of debt discount and premium	14,000	13,872
Changes in operating assets and liabilities:		
Accounts receivable	(28,501)	(38,130)
Inventories	(37,451)	1,645
Prepaid expenses and other current assets	(1,141)	4,928
Contract assets	(21,557)	—
Accounts payable	5,568	(1,246)
Accrued liabilities	13,211	21,399
Deferred airborne lease incentives	(4,040)	11,722
Deferred revenue	(2,216)	11,080
Accrued interest	(24,955)	(17,742)
Warranty reserves	5,888	84
Other non-current assets and liabilities	(7,166)	(3,787)
Net cash used in operating activities	<u>(91,896)</u>	<u>(4,209)</u>
Investing activities:		
Purchases of property and equipment	(107,096)	(190,479)
Acquisition of intangible assets—capitalized software	(17,316)	(23,759)
Purchases of short-term investments	(39,323)	(213,651)
Redemptions of short-term investments	163,540	363,632
Other, net	—	(3,000)
Net cash used in investing activities	<u>(195)</u>	<u>(67,257)</u>
Financing activities:		
Proceeds from the issuance of senior secured notes	—	181,843
Payment of issuance costs	—	(3,602)
Payments on capital leases	(1,626)	(2,340)
Stock-based compensation activity	81	(429)
Net cash provided by (used in) financing activities	<u>(1,545)</u>	<u>175,472</u>
Effect of exchange rate changes on cash	(530)	556
Increase (decrease) in cash, cash equivalents and restricted cash	(94,166)	104,562
Cash, cash equivalents and restricted cash at beginning of period	203,729	125,189
Cash, cash equivalents and restricted cash at end of period	<u>\$ 109,563</u>	<u>\$ 229,751</u>
Cash, cash equivalents and restricted cash at end of period	\$ 109,563	\$ 229,751
Less: current restricted cash	1,773	500
Less: non-current restricted cash	5,126	6,873
Cash and cash equivalents at end of period	<u>\$ 102,664</u>	<u>\$ 222,378</u>
Supplemental Cash Flow Information:		
Cash paid for interest	\$ 99,823	\$ 86,359
Cash paid for taxes	390	35
Noncash Investing and Financing Activities:		
Purchases of property and equipment in current liabilities	\$ 14,739	\$ 46,817
Purchases of property and equipment paid by commercial airlines	5,920	7,987
Purchases of property and equipment under capital leases	279	1,174
Acquisition of intangible assets in current liabilities	959	1,100
Acquisition of intangible assets in non-current liabilities	1,375	—
Asset retirement obligation incurred and adjustments	778	778

See the Notes to Unaudited Condensed Consolidated Financial Statements

Gogo Inc. and Subsidiaries
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 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, 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, 2017 as filed with the Securities and Exchange Commission (“SEC”) on February 22, 2018 (the “2017 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 nine month periods ended September 30, 2018 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2018.

We have one class of common stock outstanding as of September 30, 2018 and December 31, 2017.

Reclassifications - To conform with the current year presentation, certain amounts in our unaudited condensed consolidated statement of cash flows for the nine month period ended September 30, 2017 have been reclassified. Specifically, accrued airline revenue share of \$1,169 thousand and current deferred rent of \$207 thousand have been combined with accrued liabilities and non-current deferred rent of \$543 thousand has been combined with other non-current assets and liabilities. Additionally, warranty reserves are now separately stated in its own line, which was included within accrued liabilities previously.

Transition to airline-directed model - The accounting treatment for one of our airline agreements transitioned from our turnkey model to our airline-directed model in January 2018 due to specific provisions elected by the airline that resulted in the transfer of control of the previously installed connectivity equipment. Upon transition to the airline-directed model, the net book value of all previously delivered equipment classified within property and equipment was reclassified to cost of equipment revenue. Additionally, the unamortized proceeds previously received for equipment and classified within current and non-current deferred airborne lease incentives were eliminated and included as part of estimated contract value, which was then allocated amongst the various performance obligations under the agreement. The value allocated to previously delivered equipment was immediately recognized as equipment revenue in our unaudited condensed consolidated financial statements; refer to Note 3, “Revenue Recognition,” for additional disclosures relating to the allocation of consideration among identified performance obligations. For amounts recognized in equipment revenue that were in excess of the amounts billed, we recorded current and non-current contract assets included within prepaid expenses and other current assets and other non-current assets, respectively; refer to Note 3, “Revenue Recognition,” for additional details. In connection with the transition of this airline agreement to the airline-directed model, we also established warranty reserves related to previously sold equipment that are still under a warranty period, which is included within accrued liabilities. See Note 8, “Warranties,” for additional information. This transition from the turnkey model to the airline-directed model occurred on January 4, 2018 and the total financial statement effect on our unaudited condensed consolidated balance sheet and unaudited condensed consolidated statement of operations was as follows (*in thousands*):

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

	Increase (decrease)
Unaudited condensed consolidated balance sheet	
Prepaid expense and other current assets	\$ 6,603
Property and equipment, net	(32,716)
Other non-current assets	18,783
Accrued liabilities	2,000
Current deferred airborne lease incentive	(13,592)
Non-current deferred airborne lease incentive	(17,289)
Unaudited condensed consolidated statement of operations	
Equipment revenue	45,396
Cost of equipment revenue	23,845

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.

2. Recent Accounting Pronouncements

Revenue recognition related new pronouncements:

On January 1, 2018, we adopted Accounting Standards Codification Topic 606, *Revenue From Contracts With Customers* (“ASC 606”) using the modified retrospective method. As a result, we recognized the cumulative effect of initially applying ASC 606 as an adjustment to the opening balance of retained earnings as of January 1, 2018. Our historical financial statements have not been restated and continue to be reported under the revenue accounting standard in effect for those periods.

Prior to the adoption of ASC 606, equipment revenue (and related cost) under some of our CA-NA and CA-ROW segment contracts was deferred and recognized over the life of the contract as the equipment and connectivity services did not meet the requirements to be treated as separate units of accounting. Under ASC 606, these same equipment transactions qualify as standalone performance obligations and, therefore, equipment revenue (and related cost) is recognized upon acceptance by our airline customers. Adoption of the new standard did not materially affect the amount or timing of equipment revenue recognized from our BA segment. Our service revenue across all segments continues to be recognized as the services are provided to customers.

In conjunction with the adoption of ASC 606, we also adopted Accounting Standard Codification Subtopic 340-40, *Other Assets and Deferred Costs – Contracts with Customers* (“ASC 340-40”), which requires the capitalization of costs incurred to obtain or fulfill a contract with a customer. Prior to the adoption of ASC 340-40, we expensed all fulfillment and other costs associated with airline-directed contracts, which were comprised predominantly of costs incurred to obtain supplemental type certificates (“STCs”); these costs are now required to be capitalized and amortized to expense over the life of the contract (and are included within engineering, design and development in our unaudited condensed consolidated financial statements). Costs associated with our tumkey contracts are not eligible for capitalization under ASC 340-40 and will continue to be expensed as incurred.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

The cumulative effect of the adoption of ASC 606 and ASC 340-40 to our unaudited condensed consolidated balance sheet as of January 1, 2018 was as follows (*in thousands*):

	Balance at December 31, 2017	Impact of ASC 606	Balances with Adoption of ASC 606
Assets			
Inventories	\$ 45,543	\$ 974	\$ 46,517
Prepaid expenses and other current assets	20,310	603	20,913
Property and equipment, net	656,038	(5,282)	650,756
Other non-current assets	67,107	(30,006)	37,101
Liabilities			
Current deferred revenue	43,448	(7,182)	36,266
Other non-current liabilities	134,655	(48,378)	86,277
Equity			
Accumulated deficit	(1,089,369)	21,849	(1,067,520)

See Note 3, “Revenue Recognition,” for additional information.

On January 1, 2018, we adopted ASU 2016-04, *Recognition of Breakage for Certain Prepaid Stored-Value Products* (“ASU 2016-04”), which amends the guidance on extinguishing financial liabilities for certain prepaid stored-value products by requiring that entities that sell prepaid stored-value products recognize breakage proportionally as the prepaid stored-value product is being redeemed rather than immediately upon sale of the product. Adoption of this standard did not have a material impact on our consolidated financial statements.

All other new pronouncements:

In March 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-02, *Leases* (“ASU 2016-02”), which introduces a lessee model that records most leases on the balance sheet. ASU 2016-02 also aligns certain underlying principles of the new lessor model with those in ASC 606, the FASB’s new revenue recognition standard. Furthermore, ASU 2016-02 eliminates the required use of bright-line tests used in current GAAP for determining lease classification. It also requires lessors to provide additional transparency into their exposure to the changes in value of their residual assets and how they manage that exposure. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018, including interim periods within those annual reporting periods. ASU 2016-02 required entities to adopt the new leases standard using a modified retrospective method and initially apply the related guidance at the beginning of the earliest period presented in the financial statements. During July 2018, the FASB issued ASU 2018-11, which allows for an additional and optional transition method under which an entity would record a cumulative-effect adjustment at the beginning of the period of adoption (“cumulative-effect method”). We will adopt this guidance as of January 1, 2019 using the cumulative-effect method. We have begun implementing a new lease accounting information system and continue to evaluate the impact of the adoption of this guidance on our consolidated financial statements. We anticipate an increase in our assets and liabilities due to the recognition of the required right-of-use asset and corresponding lease obligations for leases that are currently classified as operating leases. The primary impact of ASU 2016-02 relates to our tower leases and base stations, and our leases of facilities and equipment. See Note 11, “Leases,” for further information on our lease arrangements.

On January 1, 2018, we adopted ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which amends ASC 230, *Statement of Cash Flows*, the FASB’s standard for reporting cash flows in general-purpose financial statements. The amendment addresses the diversity in practice related to the classification of certain cash receipts and payments including debt prepayment or debt extinguishment costs. We adopted this guidance using the full retrospective method, which did not have a material impact on our consolidated financial statements as we have historically reported debt prepayment and debt extinguishment costs in a manner consistent with ASU 2016-15.

On January 1, 2018, we adopted ASU 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory* (“ASU 2016-16”), which removes the prohibition in ASC 740, *Income Taxes*, against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. This is intended to reduce the complexity of GAAP and diversity in practice related to the tax consequences of certain types of intra-entity asset transfers, particularly those involving intellectual property. Adoption of this standard did not have a material impact on our consolidated financial statements.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

On January 1, 2018, we adopted ASU 2016-18, *Restricted Cash – A Consensus of the FASB Emerging Issues Task Force*, (“ASU 2016-18”), which amends ASC 230, *Statement of Cash Flows*, to clarify guidance on the classification and presentation of restricted cash in the statement of cash flows using the full retrospective method. Adoption of this standard did not have a material impact on our consolidated financial statements. See our unaudited condensed consolidated statements of cash flows for the reconciliation of cash presented in the statements of cash flows to the cash presented on the balance sheet.

On January 1, 2018, we adopted ASU 2017-09, *Scope of Modification Accounting* (“ASU 2017-09”), which amends the scope of modification accounting for share-based payment arrangements. The ASU provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting under ASC 718, *Compensation – Stock Compensation*. Specifically, an entity would not apply modification accounting if the fair value, vesting conditions, and classification of the awards are the same immediately before and after the modification. Adoption of this standard did not have a material impact on our consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* (“ASU 2018-02”), which permits entities to reclassify tax effects stranded in accumulated other comprehensive income as a result of tax reform to retained earnings. Companies that elect to reclassify these amounts must reclassify stranded tax effects for all items accounted for in accumulated other comprehensive income. ASU 2018-02 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. We are currently assessing the impact of ASU 2018-02 on our consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting* (“ASU 2018-07”), which expands the scope of ASC 718, *Compensation – Stock Compensation*, to include share-based payment transactions for acquiring goods or services from nonemployees. ASU 2018-07 is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted. We are currently assessing the impact of ASU 2018-07 on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement* (“ASU 2018-13”), which changes the disclosure requirements for fair value measurements by removing, adding and modifying certain disclosures. ASU 2018-13 is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted. We are currently assessing the impact of ASU 2018-13 on our disclosures.

3. Revenue Recognition

Our revenue is primarily earned from providing connectivity and entertainment services and through sales of equipment. Additionally, to a lesser extent, we earn revenue from providing ancillary services, including installation and Connected Aircraft Services (“CAS”).

We determine revenue recognition through the following steps:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue as we satisfy the performance obligations

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 11, “Leases,” for additional information on the turnkey model.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

CA-NA and CA-ROW Service Revenue:

CA-NA and CA-ROW revenue consists of service revenue primarily derived from connectivity services, and, to a lesser extent, from entertainment services and CAS. Connectivity is provided to our customers using both our ATG and satellite technologies.

Airline-directed connectivity revenue:

As noted above, under the airline-directed model, the airline is our customer and we earn service revenue as connectivity services are consumed directly by the airline or indirectly by passengers.

Turnkey connectivity revenue (passenger connectivity):

Under the turnkey model, passenger connectivity revenue is generated by services paid for by passengers, airlines and third parties.

Passenger paid revenue represents point-of-sale sessions (which may be flight-based, time-based, multiple individual session packages (“multi-pack”) and subscriptions). Flight-based, time-based and multi-pack revenue is recognized when the sessions are used. Subscription revenue is recognized evenly throughout the subscription period, regardless of the number of times the customer uses the network.

Third party and airline paid revenue is generated by sales of connectivity services to airlines or third parties in sponsorship, wholesale, enterprise and roaming arrangements. Sponsorship revenue is recognized over the sponsorship term. Revenue from wholesale, enterprise and roaming arrangements is recognized as sessions are used by the passenger.

Entertainment revenue:

Entertainment revenue consists of entertainment services we provide to the airline for use by its passengers. Revenue is recognized as the services are provided to the airline.

CAS:

CAS includes, among other things, real-time credit card transaction processing, electronic flight bags and real-time weather information. Revenue is recognized as the service is provided.

BA Service Revenue:

BA service revenue primarily consists of monthly subscription and usage fees paid by aircraft owners and operators for telecommunication, data, and in-flight entertainment services. Revenue is recognized as the services are provided to the customer.

Equipment Revenue:

Equipment revenue primarily consists of the sale of ATG and satellite connectivity equipment and the sale of entertainment equipment. CA-NA and CA-ROW recognize equipment revenue upon acceptance by our airline customers. BA recognizes equipment revenue when the equipment is shipped to OEMs and dealers.

Equipment revenue also includes revenue generated by the installation of the connectivity or entertainment equipment on commercial aircraft, which is recognized when the installation is complete.

Contract price and allocation considerations:

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 such 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.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

A significant change in one or more of these estimates could affect our estimated contract value, and we regularly review and update our estimates and recognize adjustments under the cumulative catch-up method. Any adjustment under this method is recorded as a cumulative adjustment in the period identified and revenue for future periods is recognized using the new adjusted estimate.

As of September 30, 2018, the aggregate amount of the transaction price in our contracts allocated to the remaining unsatisfied performance obligations is approximately \$1,096 million, most of which relates to our commercial aviation contracts. Approximately \$218 million represents future equipment revenue that is expected to be recognized within the next one to three years. The remaining \$878 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 5-10 years). We have excluded from this amount: 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 September 30, 2018			
	CA-NA	CA-ROW	BA	Total
Service revenue				
Connectivity	\$ 85,930	\$ 17,168	\$48,926	\$152,024
Entertainment, CAS and other	7,513	478	361	8,352
Total service revenue	<u>\$ 93,443</u>	<u>\$ 17,646</u>	<u>\$49,287</u>	<u>\$160,376</u>
Equipment revenue				
ATG	\$ 2,518	\$ —	\$20,158	\$ 22,676
Satellite	12,509	17,551	4,022	34,082
Other	—	—	123	123
Total equipment revenue	<u>\$ 15,027</u>	<u>\$ 17,551</u>	<u>\$24,303</u>	<u>\$ 56,881</u>
Customer type				
Airline passenger and aircraft owner/operator	\$ 53,873	\$ 6,086	\$49,287	\$109,246
Airline, OEM and aftermarket dealer	39,336	27,146	24,303	90,785
Third party	15,261	1,965	—	17,226
Total revenue	<u>\$108,470</u>	<u>\$ 35,197</u>	<u>\$73,590</u>	<u>\$217,257</u>

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

	For the Nine Months Ended September 30, 2018			
	CA-NA	CA-ROW	BA	Total
Service revenue				
Connectivity	\$256,803	\$ 45,365	\$144,149	\$446,317
Entertainment, CAS and other	21,169	1,711	913	23,793
Total service revenue	<u>\$277,972</u>	<u>\$ 47,076</u>	<u>\$145,062</u>	<u>\$470,110</u>
Equipment revenue				
ATG (1)	\$ 49,534	\$ —	\$ 56,076	\$105,610
Satellite (1)	44,435	40,935	12,741	98,111
Other	—	—	2,709	2,709
Total equipment revenue	<u>\$ 93,969</u>	<u>\$ 40,935</u>	<u>\$ 71,526</u>	<u>\$206,430</u>
Customer type				
Airline passenger and aircraft owner/operator	\$161,515	\$ 15,912	\$145,062	\$322,489
Airline, OEM and aftermarket dealer (2)	165,903	66,151	71,526	303,580
Third party	44,523	5,948	—	50,471
Total revenue	<u>\$371,941</u>	<u>\$ 88,011</u>	<u>\$216,588</u>	<u>\$676,540</u>

- 1) ATG and satellite equipment revenue for the CA-NA segment includes the \$45.4 million related to the accounting impact of the transition of one of our airline partners to the airline-directed model. Approximately \$43.4 million was included in ATG equipment revenue and approximately \$2.0 million was included in satellite equipment revenue.
- 2) Airline, OEM and aftermarket dealer revenue includes all equipment revenue for our three segments, including the \$45.4 million accounting impact of the transition of one of our airline partners to the airline-directed model.

Contract balances

Our current and non-current deferred revenue balances totaled \$58.9 million and \$61.1 million as of September 30, 2018 and January 1, 2018, respectively. Deferred revenue includes, among other things, equipment, multi-packs, subscriptions and sponsorships activities.

Our current and non-current contract asset balances totaled \$51.8 million and \$5.1 million as of September 30, 2018 and January 1, 2018, respectively. Contract assets represents the aggregate amount of revenue recognized in excess of billings for our airline-directed contracts.

Our STC balances were \$16.7 million and \$7.6 million as of September 30, 2018 and January 1, 2018, respectively. We recognized \$0.3 million and \$0.7 million, respectively, of deferred STC costs as part of our engineering, design and development costs in our unaudited condensed consolidated statement of operations during the three and nine month periods ended September 30, 2018. As noted above, STC costs for our airline-directed contracts are capitalized and expensed on a straight-line basis over the life of the contract.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

Impact of adoption of ASC 606

The following table presents the post adoption impact of ASC 606 on our unaudited condensed consolidated balance sheet and the statement of operations (*in thousands*):

	<u>As of September 30, 2018</u>		
	<u>As Reported</u>	<u>Impact of ASC 606</u>	<u>Balances Without Adoption of ASC 606</u>
Assets			
Prepaid expenses and other current assets	\$ 32,490	\$ (11,835)	\$ 20,655
Other non-current assets	77,994	66,218	144,212
Liabilities			
Current deferred revenue	34,815	27,899	62,714
Other non-current liabilities	83,119	64,803	147,922
Equity			
Accumulated deficit	(1,169,863)	(24,165)	(1,194,028)
For the Three Months Ended September 30, 2018			
	<u>As Reported</u>	<u>Impact of ASC 606</u>	<u>Balances Without Adoption of ASC 606</u>
Revenue:			
Service revenue	\$ 160,376	\$ 3,071	\$ 163,447
Equipment revenue	56,881	(18,545)	38,336
Operating expenses:			
Cost of equipment revenue	53,960	(12,478)	41,482
Engineering, design and development	30,018	394	30,412
Net loss	(37,717)	(3,390)	(41,107)
For the Nine Months Ended September 30, 2018			
	<u>As Reported</u>	<u>Impact of ASC 606</u>	<u>Balances Without Adoption of ASC 606</u>
Revenue:			
Service revenue	\$ 470,110	\$ 11,574	\$ 481,684
Equipment revenue	206,430	(100,564)	105,866
Operating expenses:			
Cost of equipment revenue	170,603	(76,772)	93,831
Engineering, design and development	88,204	1,936	90,140
Net loss	(102,343)	(14,154)	(116,497)

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

4. 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 9, “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. Accordingly, the calculation of weighted average shares outstanding as of September 30, 2018 and 2017 excludes approximately 7.2 million shares that will be repurchased as a result of the Forward Transactions.

As a result of the net loss for the three and nine month periods ended September 30, 2018 and 2017, 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 nine month periods ended September 30, 2018 and 2017; 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 2018 and 2017 as undistributed losses are not allocated to these shares (*in thousands, except per share amounts*):

	<u>For the Three Months</u> <u>Ended September 30,</u>		<u>For the Nine Months</u> <u>Ended September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Net loss	\$(37,717)	\$(45,281)	\$(102,343)	\$(130,857)
Less: Participation rights of the Forward Transactions	—	—	—	—
Undistributed losses	\$(37,717)	\$(45,281)	\$(102,343)	\$(130,857)
Weighted-average common shares outstanding-basic and diluted	<u>80,196</u>	<u>79,543</u>	<u>79,948</u>	<u>79,340</u>
Net loss attributable to common stock per share-basic and diluted	<u>\$ (0.47)</u>	<u>\$ (0.57)</u>	<u>\$ (1.28)</u>	<u>\$ (1.65)</u>

5. Inventories

Inventories consist primarily of telecommunications systems and parts, and are recorded at the lower of cost (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 September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	<u>September 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
Work-in-process component parts	\$ 30,080	\$ 35,009
Finished goods (1)	179,654	10,534
Total inventory	<u>\$ 209,734</u>	<u>\$ 45,543</u>

- (1) The increase in our inventories is primarily due to the allocation of a portion of our uninstalled airborne equipment (*i.e.*, shipsets designated for installation under an airline-directed contract) within our CA-NA and CA-ROW segments from property and equipment, net, to inventories. Historically, all uninstalled airborne equipment for the CA-NA and CA-ROW segments was classified as property and equipment, net, as the majority of our installations were performed under our turnkey model agreements. See Note 11, “Leases” for additional information on the turnkey model treatment. As our uninstalled airborne equipment is increasingly being deployed under airline-directed model agreements, we now allocate our uninstalled airborne equipment between property and equipment, net, and inventories, based on our forecasts of estimated future installations by contract type.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

6. Composition of Certain Balance Sheet Accounts

Prepaid expenses and other current assets as of September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	September 30, 2018	December 31, 2017
Contract assets (1)	\$ 9,919	\$ —
Prepaid satellite services	6,241	3,360
Restricted cash	1,773	500
Other	14,557	16,450
Total prepaid expenses and other current assets	\$ 32,490	\$ 20,310

- (1) Changes between September 30, 2018 and December 31, 2017 are due to the adoption of ASC 606 and additional activity during the nine month period ended September 30, 2018. See Note 2, “Recent Accounting Pronouncements,” for additional information.

Property and equipment as of September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	September 30, 2018	December 31, 2017
Office equipment, furniture, fixtures and other	\$ 50,903	\$ 46,445
Leasehold improvements	44,593	42,522
Airborne equipment (1) (2)	617,795	765,652
Network equipment	201,957	199,304
	915,248	1,053,923
Accumulated depreciation (1)	(408,545)	(397,885)
Property and equipment, net	\$ 506,703	\$ 656,038

- (1) Changes between September 30, 2018 and December 31, 2017 relate to the accounting impact of the transition of one of our airline partner agreements to the airline-directed model (see Note 1, “Basis of Presentation,” for additional information) and the adoption of ASC 606 (see Note 2, “Recent Accounting Pronouncements,” for additional information).
- (2) Changes between September 30, 2018 and December 31, 2017 also relate to the allocation of uninstalled airborne equipment to inventory (see Note 5, “Inventories,” for additional information).

Other non-current assets as of September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	September 30, 2018	December 31, 2017
Contract assets (1)	\$ 41,901	\$ —
Deferred STC costs (1)	16,723	—
Deferred cost of equipment revenue (1)	—	40,986
Restricted cash	5,126	6,873
Other	14,244	19,248
Total other non-current assets	\$ 77,994	\$ 67,107

- (1) Changes between September 30, 2018 and December 31, 2017 are primarily due to the adoption of ASC 606 and additional activity during the nine month period ended September 30, 2018. See Note 2, “Recent Accounting Pronouncements,” for additional information.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

Accrued liabilities as of September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	September 30, 2018	December 31, 2017
Employee compensation and benefits	\$ 18,295	\$ 25,621
Airborne equipment and installation costs	22,002	44,059
Airline related accrued liabilities	30,568	13,566
Accrued interest	22,694	47,649
Accrued revenue share	14,354	17,339
Accrued satellite network costs	17,061	12,667
Warranty reserve	10,302	2,424
Other	49,636	38,490
Total accrued liabilities	\$ 184,912	\$ 201,815

Other non-current liabilities as of September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	September 30, 2018	December 31, 2017
Deferred revenue (1)	\$ 24,047	\$ 73,192
Deferred rent	36,562	37,354
Asset retirement obligations	9,505	9,668
Deferred tax liabilities	2,117	5,983
Other	10,888	8,458
Total other non-current liabilities	\$ 83,119	\$ 134,655

(1) Changes between September 30, 2018 and December 31, 2017 are primarily due to the adoption of ASC 606. See Note 2, “Recent Accounting Pronouncements,” for additional information.

7. 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, but 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 2017 indicated no impairment.

As of both September 30, 2018 and December 31, 2017, our goodwill balance, all of which related to our BA segment, was \$0.6 million.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

Our intangible assets, other than goodwill, as of September 30, 2018 and December 31, 2017 were as follows (*in thousands, except for weighted average remaining useful life*):

	Weighted Average Remaining Useful Life (in years)	As of September 30, 2018			As of December 31, 2017		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized intangible assets:							
Software	2.2	\$159,512	\$ (111,430)	\$48,082	\$145,063	\$ (93,523)	\$51,540
Service customer relationship	1.6	8,081	(6,550)	1,531	8,081	(5,788)	2,293
Other intangible assets	5.1	3,000	(1,386)	1,614	1,500	(1,103)	397
OEM and dealer relationships		<u>6,724</u>	<u>(6,724)</u>	<u>—</u>	<u>6,724</u>	<u>(6,724)</u>	<u>—</u>
Total amortized intangible assets		177,317	(126,090)	51,227	161,368	(107,138)	54,230
Unamortized intangible assets:							
FCC Licenses		<u>32,283</u>	<u>—</u>	<u>32,283</u>	<u>32,283</u>	<u>—</u>	<u>32,283</u>
Total intangible assets		<u>\$209,600</u>	<u>\$ (126,090)</u>	<u>\$83,510</u>	<u>\$193,651</u>	<u>\$ (107,138)</u>	<u>\$86,513</u>

Amortization expense was \$6.1 million and \$20.8 million, respectively, for the three and nine month periods ended September 30, 2018 and \$4.9 million and \$16.5 million, respectively, for the three and nine month periods ended September 30, 2017.

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
2018 (period from October 1 to December 31)	\$ 6,524
2019	\$ 20,550
2020	\$ 12,829
2021	\$ 7,130
2022	\$ 2,441
Thereafter	\$ 1,753

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

8. Warranties

We provide warranties on parts and labor related to our products. Our warranty terms range from two to five 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 \$10.3 million and \$2.4 million, respectively, as of September 30, 2018 and December 31, 2017. Changes between September 30, 2018 and December 31, 2017 relate to the accounting impact of the transition of one of our airline agreements to the airline-directed model, additional activity under airline-directed models and costs associated with remediation of quality issues associated with our 2Ku technology. See Note 1, "Basis of Presentation" for additional information.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

9. Long-Term Debt and Other Liabilities

Long-term debt as of September 30, 2018 and December 31, 2017 was as follows (*in thousands*):

	September 30, 2018	December 31, 2017
Senior Secured Notes	\$ 703,411	\$ 705,520
Convertible Notes	327,653	311,544
Total debt	1,031,064	1,017,064
Less deferred financing costs	(13,053)	(16,196)
Total long-term debt	<u>\$ 1,018,011</u>	<u>\$ 1,000,868</u>

Senior Secured Notes – On June 14, 2016 (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) (the “Co-Issuer” and, together with GIH, the “Issuers”), issued \$525 million aggregate principal amount of 12.500% senior secured notes due 2022 (the “Original Senior Secured Notes”) under an Indenture, dated as of June 14, 2016 (the “Original Indenture”), among the Issuers, us, as guarantor, certain subsidiaries of GIH, as guarantors (the “Subsidiary Guarantors” and, together with us, the “Guarantors”), and U.S. Bank National Association, as trustee (in such capacity, the “Trustee”) and as collateral agent (in such capacity, the “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 20, 2017, the Issuers, the Guarantors and the Trustee entered into the first supplemental indenture (the “Supplemental Indenture” and, together with the Original Indenture, the “Indenture”) to modify certain covenants, as discussed below. 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”). The September 2017 Additional Notes were issued at a price equal to 113% of their face value resulting in gross proceeds of \$113.0 million. Additionally, we received approximately \$2.9 million for interest that accrued from July 1, 2017 through September 24, 2017, which was paid in our January 2018 interest payment. We refer to the Original Senior Secured Notes, the January 2017 Additional Notes and the September 2017 Additional Notes collectively as the “Senior Secured Notes.”

As noted above, on September 20, 2017, the Issuers, the Guarantors and the Trustee entered into the Supplemental Indenture to (i) increase the amount of additional secured indebtedness under Credit Facilities (as defined in the Indenture) that may be incurred by the Issuer and its Restricted Subsidiaries (as defined in the Indenture) under the Indenture by \$100 million (from \$75 million to \$175 million in aggregate principal amount), (ii) permit the Issuer and its Restricted Subsidiaries to incur additional secured indebtedness in connection with vendor financing arrangements not to exceed \$50 million in aggregate principal amount at any time outstanding and (iii) permit the Issuer and its Restricted Subsidiaries to make additional dividends or distributions to Gogo in an aggregate amount of up to \$15 million during any twelve-month period to pay interest on any indebtedness or preferred stock with a maturity later than July 1, 2022. The Supplemental Indenture became effective immediately upon execution, following our receipt of consents from holders of a majority of the outstanding principal amount of the Existing Notes (excluding Existing Notes held by the Issuers or any affiliates of the Issuers) to the Supplemental Indenture and amendments to the collateral agency agreement governing the Senior Secured Notes (the “Consent Solicitation”). In connection with the Consent Solicitation, GIH paid \$1.4 million in fees (“Consent Fees”) to holders of Existing Notes who validly tendered (and did not revoke) their consents prior to the expiration of the Consent Solicitation.

As of September 30, 2018 and December 31, 2017, the outstanding principal amount of the Senior Secured Notes was \$690.0 million and \$690.0 million, respectively, the unamortized debt premium and Consent Fees were \$13.4 million and \$15.5 million, respectively, and the net carrying amount was \$703.4 million and \$705.5 million, respectively.

Interest on the Senior Secured Notes accrues at the rate of 12.500% per annum and is payable semi-annually in arrears on January 1 and July 1, interest payments commenced on January 1, 2017 (other than the January 2017 Additional Notes, for which interest payments commenced on July 1, 2017, and the September 2017 Additional Notes, for which interest payments commenced on January 1, 2018). The Senior Secured Notes mature on July 1, 2022. The January 2017 Additional Notes and September 2017 Additional Notes have the same terms as the Original Senior Secured Notes, except with respect to the issue date and issue price, and are treated as a single series for all purposes under the Indenture and the security documents that govern the Senior Secured Notes.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

We paid approximately \$11.4 million, \$2.0 million and \$2.5 million, respectively, of aggregate origination fees and financing costs related to the issuance of the Original Senior Secured Notes, the January 2017 Additional Notes and the September 2017 Additional Notes, which have been accounted for as deferred financing costs. Additionally, as noted above, we paid approximately \$1.4 million of Consent Fees, which partially offset the net carrying value of the Senior Secured Notes. The deferred financing costs on our unaudited condensed consolidated balance sheet are being amortized over the contractual term of the Senior Secured Notes using the effective interest method. Total amortization expense was \$0.7 million and \$2.0 million, respectively, for the three and nine month periods ended September 30, 2018, and \$0.5 million and \$1.6 million, respectively, for the prior year periods. As of September 30, 2018 and December 31, 2017, the balance of unamortized deferred financing costs related to the Senior Secured Notes was \$10.7 million and \$12.6 million, respectively, and is included as a reduction to long-term debt in our unaudited condensed consolidated balance sheet. See Note 10, "Interest Costs," for additional information.

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

- effectively senior to all of the Issuers' existing and future senior unsecured indebtedness and the Issuers' indebtedness secured on a junior priority basis by the same collateral securing the Senior Secured Notes, if any, in each case to the extent of the value of the collateral securing the Senior Secured Notes;
- effectively senior in right of payment to all of the Issuers' future indebtedness that is subordinated in right of payment to the Senior Secured Notes;
- 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 Senior Secured Notes and (ii) indebtedness secured on a junior priority basis by the same collateral securing the Senior Secured Notes, if any, in each case to the extent of any insufficiency in the collateral securing the Senior Secured Notes;
- structurally senior to all of our existing and future indebtedness, including our Convertible Notes (as defined below); and
- structurally subordinated to all of the indebtedness and other liabilities of any non-Guarantors (other than the Issuers).

The Senior Secured Notes are guaranteed, on a senior secured basis, by us and all of GIH's existing and future domestic restricted subsidiaries (other than the Co-Issuer), subject to certain exceptions. The Issuers' obligations under the Senior Secured Notes are not guaranteed by Gogo International Holdings LLC, a subsidiary of ours that holds no material assets other than equity interests in our foreign subsidiaries. Each guarantee is a senior secured obligation of such Guarantor and is:

- effectively senior to all of such Guarantor's existing and future senior unsecured indebtedness and such Guarantor's indebtedness secured on a junior priority basis by the same collateral, if any, securing the guarantee of such Guarantor, in each case to the extent of the value of the collateral securing such guarantee;
- effectively senior in right of payment to all of such Guarantor's future indebtedness that is subordinated in right of payment to such Guarantor's guarantee;
- effectively equal in right of payment with all of such Guarantor's existing and future (i) unsecured indebtedness that is not subordinated in right of payment to such Guarantor's guarantee, and (ii) indebtedness secured on a junior priority basis by the same collateral, if any, securing the guarantee of such Guarantor, in each case to the extent of any insufficiency in the collateral securing such guarantee; and
- structurally subordinated to all indebtedness and other liabilities of any non-Guarantor subsidiary of such Guarantor (excluding, in the case of our guarantee, the Issuers).

The Senior Secured Notes and the related guarantees are secured by first-priority liens, subject to permitted liens, on substantially all of the Issuers' and the Guarantors' assets, except for certain excluded assets, including pledged equity interests of the Issuers and all of our existing and future domestic restricted subsidiaries guaranteeing the Senior Secured Notes.

The security interests in certain collateral may be released without the consent of holders of the Senior Secured Notes, if such collateral is disposed of in a transaction that complies with the Indenture and related security agreements. In addition, under certain circumstances, we and the Guarantors have the right to transfer certain intellectual property assets that on the Issue Date constitute collateral securing the Senior Secured Notes or the guarantees to a restricted subsidiary organized under the laws of Switzerland, resulting in the release of such collateral without consent of the holders of the Senior Secured Notes.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

On or after July 1, 2019, the Issuers may, at their option, at any time or from time to time, redeem any of the Senior Secured Notes in whole or in part. The 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 July 1 of the following years:

<u>Year</u>	<u>Redemption Price</u>
2019	106.250%
2020	103.125%
2021 and thereafter	100.000%

In addition, at any time prior to July 1, 2019, the Issuers may redeem up to 35% of the aggregate principal amount of the Senior Secured Notes with the proceeds of certain equity offerings at a redemption price of 112.500% of the principal amount redeemed, plus accrued and unpaid interest, if any, to (but not including) the date of redemption; provided, however, that Senior Secured Notes representing at least 65% of the principal amount of the Senior Secured Notes remain outstanding immediately after each such redemption.

The Issuers may redeem the Senior Secured Notes, in whole or in part, at any time prior to July 1, 2019, at a redemption price equal to 100% of the principal amount of the Senior Secured Notes redeemed plus the make-whole premium set forth in the Indenture as of, and accrued and unpaid interest, if any, to (but not including) the applicable redemption date.

The Indenture contains covenants that, among other things, limit the ability of the Issuers and the 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 our 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, including us. Most of these covenants will cease to apply if, and for as long as, the 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 prior to July 1, 2022, GIH is required to make an offer to repurchase for cash all of the 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 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 Senior Secured Notes issued under the Indenture to be due and payable immediately. As of September 30, 2018, no event of default had occurred.

Convertible Notes – On March 3, 2015, we issued \$340.0 million aggregate principal amount of 3.75% Convertible Senior Notes due 2020 (the "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 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 Convertible Notes. The Convertible Notes mature on March 1, 2020, 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 Convertible Notes semi-annually in arrears on March 1 and September 1 of each year. Interest payments began on September 1, 2015.

The \$361.9 million of proceeds received from the issuance of the 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 Convertible Notes. If we or the note holders elect not to settle the debt through conversion, we must settle the Convertible Notes at face value. Therefore, the liability component will be accreted up to the face value of the Convertible Notes, which will result in additional non-cash interest expense

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being recognized in the unaudited condensed consolidated statements of operations through the Convertible Notes maturity date (see Note 10, “Interest Costs” for additional information). The effective interest rate on the Convertible Notes, including accretion of the notes to par and debt issuance cost amortization, was approximately 11.5%. The equity component will not be remeasured as long as it continues to meet the conditions for equity classification.

As of September 30, 2018 and December 31, 2017, the outstanding principal on the Convertible Notes was \$361.9 million, the unamortized debt discount was \$34.3 million and \$50.4 million, respectively, and the net carrying amount of the liability component was \$327.7 million and \$311.5 million, respectively.

We incurred approximately \$10.4 million of issuance costs related to the issuance of the Convertible Notes of which \$7.5 million and \$2.9 million were recorded as deferred financing costs and additional paid-in capital, respectively, in proportion to the allocation of the proceeds of the Convertible Notes. The \$7.5 million recorded as deferred financing costs on our consolidated balance sheet is being amortized over the term of the Convertible Notes using the effective interest method. Total amortization expense of the deferred financing costs was \$0.4 million and \$1.2 million, respectively, for the three and nine month periods ended September 30, 2018, and \$0.4 million and \$1.1 million, respectively, for the prior year periods. Amortization expense is included in interest expense in the unaudited condensed consolidated statements of operations. As of September 30, 2018 and December 31, 2017, the balance of unamortized deferred financing costs related to the Convertible Notes was \$2.4 million and \$3.6 million, respectively, and is included as a reduction to long-term debt in our unaudited condensed consolidated balance sheets. See Note 10, “Interest Costs” for additional information.

The Convertible Notes had an initial conversion rate of 41.9274 common shares per \$1,000 principal amount of Convertible Notes, which is equivalent to an initial conversion price of approximately \$23.85 per share of our common stock. Upon conversion, we currently expect to deliver cash up to the principal amount of the 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 Convertible Notes, at their option, in multiples of \$1,000 principal amount at any time prior to December 1, 2019, but only in the following circumstances:

- during any fiscal quarter beginning after the fiscal quarter ended June 30, 2015, 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 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 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 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 December 1, 2019 occurred during the three and nine month periods ended September 30, 2018 or the year ended December 31, 2017. Regardless of whether any of the foregoing circumstances occurs, a holder may convert its Convertible Notes, in multiples of \$1,000 principal amount, at any time on or after December 1, 2019 until maturity.

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

In connection with the issuance of the 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 Convertible Notes, subject to the ability of each Forward Counterparty to elect to settle all or a portion of its Forward Transactions early. As a result of the Forward Transactions, total shareholders’ equity within our unaudited condensed consolidated balance sheet was reduced by approximately \$140 million. Approximately 7.2 million shares of common stock that will be effectively repurchased through the Forward Transactions are treated as retired shares for basic and diluted EPS purposes although they remain legally outstanding.

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Restricted Cash - Our restricted cash balances were \$6.9 million and \$7.4 million, respectively, as of September 30, 2018 and December 31, 2017 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.

10. 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 nine month periods ended September 30, 2018 and 2017 (*in thousands*):

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Interest costs charged to expense	\$24,887	\$21,936	\$74,795	\$65,164
Amortization of deferred financing costs	1,060	919	3,143	2,718
Accretion of debt discount on Convertible Notes	5,517	4,945	16,109	14,438
Amortization of debt premium on Senior Secured Notes	(721)	(215)	(2,109)	(566)
Interest expense	<u>30,743</u>	<u>27,585</u>	<u>91,938</u>	<u>81,754</u>
Interest costs capitalized to property and equipment	7	9	22	15
Interest costs capitalized to software	<u>101</u>	<u>193</u>	<u>208</u>	<u>804</u>
Total interest costs	<u>\$30,851</u>	<u>\$27,787</u>	<u>\$92,168</u>	<u>\$82,573</u>

11. Leases

Arrangements with Commercial Airlines — Pursuant to contractual agreements with our airline partners, we place our equipment on commercial aircraft operated by the airlines for the purpose of delivering our service to passengers on the aircraft. There are currently two types of commercial airline arrangements: turnkey and airline-directed. See Note 3, “Revenue Recognition,” for additional information on airline-directed arrangements.

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 the turnkey 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 6, “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 \$8.1 million and \$23.2 million, respectively, for the three and nine month periods ended September 30, 2018 and \$10.1 million and \$28.1 million, respectively, for the prior year periods as a reduction to our cost of service revenue in our unaudited condensed consolidated statements of operations. As of September 30, 2018, deferred airborne lease incentives of \$25.9 million and \$129.9 million, respectively, are included in current and non-current liabilities in our unaudited condensed consolidated balance sheet. As of December 31, 2017, deferred airborne lease incentives of \$42.1 million and \$142.9 million, respectively, are included in current and non-current liabilities in our unaudited condensed consolidated balance sheet. The decrease in our deferred airborne lease incentives and the amortization of the deferred airborne lease incentives relate to the accounting impact of the transition of one of our airline agreements to the airline-directed model. See Note 1, “Basis of Presentation,” for additional information.

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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. Such rental expenses totaled a net charge of \$5.5 million and \$18.6 million, respectively, for the three and nine month periods ended September 30, 2018 and \$7.7 million and \$26.9 million, respectively, for the prior year periods. The decrease in rental expense was due to the transition of one of our airline agreements to the airline-directed model. See Note 1, "Basis of Presentation," for additional information.

Leases and Cell Site Contracts — We have lease agreements relating to certain facilities and equipment, which are considered operating leases. Rent expense for such operating leases was \$3.3 million and \$9.4 million, respectively, for the three and nine month periods ended September 30, 2018 and \$3.0 million and \$9.0 million, respectively, for the prior year periods. Additionally, we have operating leases for tower space and base stations ("cell site leases"), some of which provide for minimum annual payments. Our cell site leases generally provide for an initial noncancelable term with various renewal options. Total cell site rental expense was \$2.6 million and \$7.9 million, respectively, during the three and nine month periods ended September 30, 2018 and \$2.3 million and \$7.0 million, respectively, for the prior year periods.

Annual future minimum obligations for operating leases for each of the next five years and thereafter, other than the arrangements we have with our commercial airline partners, as of September 30, 2018, are as follows (*in thousands*):

Years ending December 31,	Operating Leases
2018 (period from October 1 to December 31)	\$ 5,760
2019	\$ 21,641
2020	\$ 19,680
2021	\$ 19,567
2022	\$ 18,272
Thereafter	\$ 92,599

Equipment Leases – We lease certain computer and network equipment under capital leases, for which interest has been imputed with annual interest rates in an approximate range of 8% to 14%. As of September 30, 2018 and December 31, 2017 the computer equipment leases were classified as part of office equipment, furniture, and fixtures and other in our unaudited condensed consolidated balance sheet at a gross cost of \$5.3 million and \$5.0 million, respectively. As of September 30, 2018 and December 31, 2017, the network equipment leases were classified as part of network equipment in our unaudited condensed consolidated balance sheet at a gross cost of \$7.5 million and \$7.5 million, respectively.

Annual future minimum obligations under capital leases for each of the next five years and thereafter, as of September 30, 2018, are as follows (*in thousands*):

Years ending December 31,	Capital Leases
2018 (period from October 1 to December 31)	\$ 385
2019	1,053
2020	222
Thereafter	—
Total minimum lease payments	1,660
Less: Amount representing interest	(93)
Present value of net minimum lease payments	<u>\$1,567</u>

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The \$1.6 million present value of net minimum lease payments as of September 30, 2018 has a current portion of \$1.2 million included in the current portion of long-term debt and capital leases and a non-current portion of \$0.4 million included in other non-current liabilities.

12. Commitments and Contingencies

Contractual Commitments - We have agreements with vendors to provide us with transponder and teleport satellite services. These agreements vary in length and amount and as of September 30, 2018 commit us to purchase transponder and teleport satellite services totaling approximately \$21.5 million in 2018 (October 1 through December 31), \$85.7 million in 2019, \$82.7 million in 2020, \$70.2 million in 2021, \$62.8 million in 2022 and \$216.5 million thereafter.

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.

A contract with one of our airline customers required us to provide the airline customer with a cash rebate of \$1.8 million in June 2018, which has not yet been paid.

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 if we are 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 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. We are required under our contracts with these airlines to indemnify them for defense costs and any liabilities resulting from the suit. Given the very early stage of this litigation, we are unable to assess the merits of the claim, and the outcome of this matter is inherently uncertain.

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 Executive Officer, Chief Financial Officer, and President, Commercial Aviation as defendants purportedly on behalf of all purchasers of our securities from February 27, 2017 through May 7, 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. We believe that the claims are without merit and intend to defend them 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.

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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.* 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. We believe that the claims are without merit and intend to defend them vigorously. 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.

13. 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 Senior Secured Notes and the Convertible Notes, which are reflected on the unaudited condensed 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 Senior Secured Notes and Convertible Notes by calculating the upfront cash payment a market participant would require to assume these obligations. The upfront cash payment used in the calculations of fair value on our September 30, 2018 unaudited condensed consolidated balance sheet, excluding any issuance costs, is the amount that a market participant would be willing to lend at September 30, 2018 to an entity with a credit rating similar to ours and achieve sufficient cash inflows to cover the scheduled cash outflows under the Senior Secured Notes and the Convertible Notes. The calculated fair value of our Convertible Notes is correlated to our stock price and as a result significant changes to our stock price could have a significant impact on the calculated fair value of our Convertible Notes.

The fair value and carrying value of long-term debt as of September 30, 2018 and December 31, 2017 were as follows (*in thousands*):

	September 30, 2018		December 31, 2017	
	Fair Value (1)	Carrying Value	Fair Value (1)	Carrying Value
Senior Secured Notes	\$ 758,000	\$703,411(2)	\$ 782,000	\$705,520(2)
Convertible Notes	342,000	327,653(3)	330,000	311,544(3)

- (1) Fair value amounts are rounded to the nearest million.
- (2) Carrying value of the Senior Secured Notes includes unamortized debt premium and Consent Fees of \$13.4 million and \$15.5 million, respectively, as of September 30, 2018 and December 31, 2017. See Note 9, “Long-Term Debt and Other Liabilities,” for further information.
- (3) Carrying value of the Convertible Notes excludes unamortized debt discount of \$34.3 million and \$50.4 million, respectively, as of September 30, 2018 and December 31, 2017. See Note 9, “Long-Term Debt and Other Liabilities,” for further information.

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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 nine month periods ended September 30, 2018 and 2017.

14. Income Tax

The effective income tax rates for the three and nine month periods ended September 30, 2018 were (0.5%) and 3.3%, respectively, as compared with (0.8%) and (0.7%), respectively, for the prior year periods. An income tax benefit was recorded for the nine month period ended September 30, 2018 resulting from a reduction in our valuation allowance of approximately \$4.0 million due to the application of provisions of H.R. 1, commonly known as the Tax Cuts and Jobs Act, to our evaluation of our deferred tax assets. For the three and nine month periods ended September 30, 2017, our income tax expense was not significant primarily due to the recording of a 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 September 30, 2018, we are no longer subject to U.S. federal, state, local or foreign examinations by tax authorities for years before 2014.

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 nine month periods ended September 30, 2018 and 2017. As of September 30, 2018 and December 31, 2017, 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.

15. 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 2017 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 nine month periods ended September 30, 2018 and 2017, 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% and 10% of our unaudited condensed consolidated assets as of September 30, 2018 and December 31, 2017, 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 segment profit (loss), which is calculated internally as net income (loss) attributable to common stock before interest expense, interest income, income taxes, depreciation and amortization, certain non-cash items (including amortization of deferred airborne lease incentives, stock-based compensation expense, amortization of STC costs and the accounting impact of the transition to the airline-directed model) and other income (expense). 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, segment profit (loss) is included herein in conformity with ASC 280-10, *Segment Reporting*. Management believes that segment profit (loss) provides useful information for analyzing and evaluating the underlying operating results of each segment. However, 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 segment profit (loss) may not be comparable to other similarly titled measures computed by other companies.

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

	For the Three Months Ended September 30, 2018			
	CA-NA	CA-ROW	BA	Total
Service revenue	\$ 93,443	\$ 17,646	\$ 49,287	\$160,376
Equipment revenue	15,027	17,551	24,303	56,881
Total revenue	\$108,470	\$ 35,197	\$ 73,590	\$217,257
Segment profit (loss)	\$ 8,699	\$(22,747)	\$ 35,178	\$ 21,130

	For the Three Months Ended September 30, 2017			
	CA-NA	CA-ROW	BA	Total
Service revenue	\$ 94,436	\$ 15,687	\$ 43,224	\$153,347
Equipment revenue	1,291	953	17,283	19,527
Total revenue	\$ 95,727	\$ 16,640	\$ 60,507	\$172,874
Segment profit (loss)	\$ 15,966	\$(24,110)	\$ 21,329	\$ 13,185

	For the Nine Months Ended September 30, 2018			
	CA-NA	CA-ROW	BA	Total
Service revenue	\$277,972	\$ 47,076	\$145,062	\$470,110
Equipment revenue (1)	93,969	40,935	71,526	206,430
Total revenue	\$371,941	\$ 88,011	\$216,588	\$676,540
Segment profit (loss)	\$ 17,396	\$(69,826)	\$104,180	\$ 51,750

	For the Nine Months Ended September 30, 2017			
	CA-NA	CA-ROW	BA	Total
Service revenue	\$290,260	\$ 38,243	\$125,415	\$453,918
Equipment revenue	5,234	2,756	49,172	57,162
Total revenue	\$295,494	\$ 40,999	\$174,587	\$511,080
Segment profit (loss)	\$ 43,316	\$(82,068)	\$ 72,646	\$ 33,894

(1) CA-NA equipment revenue for the nine month period ended September 30, 2018 includes the accounting impact of the transition of one of our airline partners to the airline-directed model. See Note 1, "Basis of Presentation" for additional information.

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

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
CA-NA segment profit	\$ 8,699	\$ 15,966	\$ 17,396	\$ 43,316
CA-ROW segment loss	(22,747)	(24,110)	(69,826)	(82,068)
BA segment profit	35,178	21,329	104,180	72,646
Total segment profit	21,130	13,185	51,750	33,894
Interest income	903	683	3,307	1,999
Interest expense	(30,743)	(27,585)	(91,938)	(81,754)
Depreciation and amortization	(32,590)	(35,824)	(100,447)	(96,821)

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Transition to airline-directed model	—	—	21,551	—
Amortization of deferred airborne lease incentives <i>(1)</i>	8,074	10,121	23,166	28,099
Amortization of STC costs	(292)	—	(719)	—
Stock-based compensation expense	(3,932)	(5,283)	(12,531)	(15,007)
Other income (expense)	(72)	(228)	59	(322)
Loss before income taxes	<u>\$(37,522)</u>	<u>\$(44,931)</u>	<u>\$(105,802)</u>	<u>\$(129,912)</u>

(1) Amortization of deferred airborne lease incentive relates to our CA-NA and CA-ROW segments. See Note 11, “Leases,” for further information.

Major Customers and Airline Partnerships — Under the turnkey model, we refer to the airline as a “partner”, and under the airline-directed model, we refer to the airline as a “customer.”

During the three and nine month periods ended September 30, 2018, American Airlines accounted for approximately 18% and 25% of consolidated revenue, respectively, while no other customer accounted for more than 10% of consolidated revenue during the prior year periods. Revenue earned from American Airlines for the nine month period ended September 30, 2018 included \$45.4 million of equipment revenue recognized due to the airline’s transition to the airline-directed model in January 2018. See Note 1, “Basis of Presentation,” for additional information. Revenue earned from passengers on aircraft operated by American Airlines, which was under the turnkey model during the three and nine month periods ended September 30, 2017, accounted for approximately 21% and 22% of consolidated revenue, respectively.

Revenue earned from passengers on aircraft operated by Delta Air Lines, which is under the turnkey model, accounted for approximately 25% and 23% of consolidated revenue, respectively, for the three and nine month periods ended September 30, 2018 and 26% during both prior year periods.

American Airlines and one other customer each accounted for more than 10% of consolidated accounts receivable as of September 30, 2018, and approximately 21% on a combined basis. One customer accounted for approximately 15% of consolidated accounts receivable as of December 31, 2017. Delta Air Lines, one of our airline partners, accounted for approximately 11% and 21%, respectively, of consolidated accounts receivable as of September 30, 2018 and December 31, 2017.

16. Employee Retirement and Postretirement Benefits

Stock-Based Compensation — As of September 30, 2018, we had three stock-based employee compensation plans (“Stock Plans”). See Note 11, “Stock-Based Compensation,” in our 2017 10-K for further information regarding these plans. Most of our equity grants are awarded on an annual basis.

For the nine month period ended September 30, 2018, options to purchase 2,450,330 shares of common stock (of which 660,242 are options that contain a market condition, in addition to the time-based vesting requirements) were granted, options to purchase 2,500 shares of common stock were exercised, options to purchase 776,246 (of which 333,451 options contain a market condition) shares of common stock were forfeited, and options to purchase 1,078,948 shares of common stock expired.

For the nine month period ended September 30, 2018, 2,530,236 Restricted Stock Units (“RSUs”) (of which 216,183 are RSUs that contain a market condition, in addition to the time-based vesting requirements) were granted, 463,803 RSUs vested and 450,053 RSUs (of which 108,701 contained a market condition) were forfeited.

For the nine month period ended September 30, 2018, 93,266 restricted shares vested. These shares are deemed issued as of the date of grant, but not outstanding until they vest.

For the nine month period ended September 30, 2018, 104,511 Deferred Stock Units were granted and vested.

For the nine month period ended September 30, 2018, 231,761 shares of common stock were issued under the employee stock purchase plan.

Gogo Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements – (Continued)

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 September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Cost of service revenue	\$ 303	\$ 542	\$ 1,184	\$ 1,332
Cost of equipment revenue	33	49	146	136
Engineering, design and development	812	897	2,505	2,801
Sales and marketing	901	1,305	3,209	3,473
General and administrative	<u>1,883</u>	<u>2,490</u>	<u>5,487</u>	<u>7,265</u>
Total stock-based compensation expense	<u>\$ 3,932</u>	<u>\$ 5,283</u>	<u>\$12,531</u>	<u>\$15,007</u>

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 \$1.2 million and \$3.8 million, respectively, during the three and nine month periods ended September 30, 2018, and \$1.2 million and \$4.0 million, respectively, for the prior year periods.

17. Research and Development Costs

Expenditures for research and development are charged to expense as incurred and totaled \$19.2 million and \$56.3 million, respectively, during the three and nine month periods ended September 30, 2018, and \$18.6 million and \$57.9 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 business outlook, 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,” “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 loss of, or failure to realize benefits from, agreements with our airline partners or customers or any failure to renew any existing agreements upon expiration or termination;
- the failure to maintain airline and passenger satisfaction with our equipment or our service;
- any inability to timely and efficiently deploy our 2Ku service or develop and deploy the technology to which our ATG network evolves or other components of our technology roadmap for any reason, including technological issues and related remediation efforts, changes in regulations or regulatory delays or failures 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 network capacity demands;
- 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;
- 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;
- 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 line-fit availability;
- our ability to successfully develop and monetize new products and services such as Gogo Vision and Gogo TV, 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;

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- 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;
 - 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;
 - changes as a result of U.S. federal tax reform;
 - costs associated with defending pending 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 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;
 - 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, including the recent U.S. and U.K. bans on the use of certain personal devices such as laptops and tablets on certain aircraft flying certain routes;
 - 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;
 - 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;

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- 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 our new enterprise resource planning system, our new integrated business plan and other improvements to systems, operations, strategy and procedures needed to support our growth; and
 - other risks and factors listed under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities Exchange Commission (“SEC”) on February 22, 2017 (the “2017 10-K”), and in Item 1A of our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018, as filed with the SEC on May 4, 2018 and August 8, 2018, respectively.

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 2017 10-K and Item 1A in our Quarterly Reports on Forms 10-Q for the quarters ended March 31, 2018, June 30, 2018, and in "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, Passenger Entertainment, our in-flight entertainment service, and satellite-based voice and data services through our strategic alliances with satellite companies.

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:

- 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 and 2Ku technologies, the technology to which our ATG network evolves and other new technologies (including technological issues 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), the roll-out of our satellite services, the potential licensing or use of additional spectrum, and the implementation of improvements to our network and operations as technology changes and we experience increased network capacity constraints;

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- costs associated with, and our ability to execute, our international expansion, including modifications of our network to accommodate satellite technology, development and implementation of new satellite-based technologies, the availability of satellite capacity, costs of satellite capacity to which we may have to commit well in advance, and our ability to obtain and comply with foreign telecommunications, aviation and other licenses and approvals necessary for our international operations;
 - costs associated with managing a rapidly growing company;
 - costs associated with, and our ability to obtain, sufficient capacity for heavily-trafficked areas in the United States and internationally, the costs of which we may have to commit to well in advance;
 - 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 by one or more of our commercial airline partners or BA fractional ownership customers;
 - the economic environment and other trends that affect both business and leisure aviation travel;
 - 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;
 - our ability to engage suppliers of equipment components and network services on a timely basis and on commercially reasonable terms;
 - costs and possible delays that we could incur if our supplier, ZTE, fails to comply with the settlement agreement between ZTE and the U.S. government or if continued security or other concerns result in a prohibition of or limitations on our doing business with ZTE;
 - costs relating to the implementation of our ongoing integrated business planning process, including restructuring charges;
 - 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 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 September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Aircraft online (at period end)	2,712	2,817	2,712	2,817
Satellite	637	240	637	240
ATG	2,075	2,577	2,075	2,577
Total aircraft equivalents (average during the period)	2,809	2,859	2,866	2,816
Net annualized average monthly service revenue per aircraft equivalent (annualized ARPA) (in thousands)	\$ 114	\$ 108	\$ 110	\$ 112

Commercial Aviation Rest of World				
	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Aircraft online (at period end)	513	352	513	352
Total aircraft equivalents (average during the period)	445	295	391	250
Net annualized ARPA (in thousands)	\$ 148	\$ 205	\$ 151	\$ 197

- 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. The decline in CA-NA's aircraft online is due to the decommissioning of certain American Airlines aircraft during the three and nine month periods ended September 30, 2018.
- 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. The decline in CA-NA's aircraft equivalents is due to the decommissioning of certain American Airlines aircraft during the three and nine month periods ended September 30, 2018.
- 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 costs 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. Beginning with the three month period ended March 31, 2018, we changed the calculation of ARPA to be net of revenue share expense and other transactional expenses in order to better reflect the financial statement impact of revenues generated under both the turnkey model and airline-directed model. The amounts reported above for the three and nine month periods ended September 30, 2018 and 2017 reflect this change in methodology. ARPA for the CA-NA segment for the three and nine month periods ended September 30, 2017 was originally reported as \$133 thousand and \$139 thousand, respectively. ARPA for the CA-ROW segment for the three and nine month periods ended September 30, 2017 was originally reported as \$226 thousand and \$219 thousand, respectively.

Business Aviation

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Aircraft online (at period end)				
Satellite	5,137	5,474	5,137	5,474
ATG	5,019	4,567	5,019	4,567
Average monthly service revenue per aircraft online				
Satellite	\$ 246	\$ 235	\$ 241	\$ 232
ATG	3,008	2,874	3,024	2,848
Units Sold				
Satellite	98	116	315	303
ATG	296	210	827	596
Average equipment revenue per unit sold (in thousands)				
Satellite	\$ 41	\$ 38	\$ 40	\$ 42
ATG	68	58	66	55

- *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. In the three and nine month periods ended September 30, 2018, we recognized revenue on 16 and 31 AVANCE units, respectively, that were previously deferred.
- *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 2017 10-K.

Off-Balance Sheet Arrangements

We do not have any obligations that meet the definition of an off-balance sheet arrangement, other than operating leases, which have or are reasonably likely to have a material effect on our results of operations. See Note 11, "Leases" to our unaudited condensed consolidated financial statements for further information.

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.

Revenue Recognition:

We account for revenue in accordance with ASC 606 and 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 such 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.

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. Estimated revenue under these contracts anticipates increases in take rates over time consistent with our historical experience. Our estimated contract revenue may differ significantly from our initial estimates to the extent actual take rates differ from our historical experience.

As such, we regularly review and update our estimates 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 3, "Revenue Recognition," for additional information.

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.

Other than the addition of revenue recognition noted above, there have been no material changes to our critical accounting policies and estimates as compared to the critical accounting policies and estimates described in MD&A in our 2017 10-K.

Recent Accounting Pronouncements

See Note 2, "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 September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenue:				
Service revenue	\$160,376	\$153,347	\$ 470,110	\$ 453,918
Equipment revenue	56,881	19,527	206,430	57,162
Total revenue	217,257	172,874	676,540	511,080
Operating expenses:				
Cost of service revenue (exclusive of items shown below)	69,476	67,854	218,073	201,794
Cost of equipment revenue (exclusive of items shown below)	53,960	15,326	170,603	41,623
Engineering, design and development	30,018	31,313	88,204	103,262
Sales and marketing	13,963	16,294	45,291	47,253
General and administrative	24,860	24,064	71,152	70,162
Depreciation and amortization	32,590	35,824	100,447	96,821
Total operating expenses	224,867	190,675	693,770	560,915
Operating loss	(7,610)	(17,801)	(17,230)	(49,835)
Other (income) expense:				
Interest income	(903)	(683)	(3,307)	(1,999)
Interest expense	30,743	27,585	91,938	81,754
Other (income) expense	72	228	(59)	322
Total other expense	29,912	27,130	88,572	80,077
Loss before income taxes	(37,522)	(44,931)	(105,802)	(129,912)
Income tax provision (benefit)	195	350	(3,459)	945
Net loss	<u>\$ (37,717)</u>	<u>\$ (45,281)</u>	<u>\$ (102,343)</u>	<u>\$ (130,857)</u>

Three and Nine Months Ended September 30, 2018 and 2017

Revenue:

Revenue by segment and percent change for the three and nine month periods ended September 30, 2018 and 2017 were as follows (in thousands, except for percent change):

	For the Three Months Ended September 30,		% Change 2018 over 2017
	2018	2017	
Service Revenue:			
CA-NA	\$ 93,443	\$ 94,436	(1.1%)
BA	49,287	43,224	14.0%
CA-ROW	17,646	15,687	12.5%
Total Service Revenue	<u>\$160,376</u>	<u>\$153,347</u>	<u>4.6%</u>
Equipment Revenue:			
CA-NA	\$ 15,027	\$ 1,291	1,064.0%
BA	24,303	17,283	40.6%
CA-ROW	17,551	953	1,741.7%
Total Equipment Revenue	<u>\$ 56,881</u>	<u>\$ 19,527</u>	<u>191.3%</u>
Total Revenue:			
CA-NA	\$108,470	\$ 95,727	13.3%
BA	73,590	60,507	21.6%
CA-ROW	35,197	16,640	111.5%
Total Revenue	<u>\$217,257</u>	<u>\$172,874</u>	<u>25.7%</u>
	For the Nine Months Ended September 30,		% Change 2018 over 2017
	2018	2017	
Service Revenue:			
CA-NA	\$277,972	\$290,260	(4.2%)
BA	145,062	125,415	15.7%
CA-ROW	47,076	38,243	23.1%
Total Service Revenue	<u>\$470,110</u>	<u>\$453,918</u>	<u>3.6%</u>
Equipment Revenue:			
CA-NA	\$ 93,969	\$ 5,234	1,695.4%
BA	71,526	49,172	45.5%
CA-ROW	40,935	2,756	1,385.3%
Total Equipment Revenue	<u>\$206,430</u>	<u>\$ 57,162</u>	<u>261.1%</u>
Total Revenue:			
CA-NA	\$371,941	\$295,494	25.9%
BA	216,588	174,587	24.1%
CA-ROW	88,011	40,999	114.7%
Total Revenue	<u>\$676,540</u>	<u>\$511,080</u>	<u>32.4%</u>

Commercial Aviation North America:

CA-NA revenue increased to \$108.5 million and \$371.9 million, respectively, for the three and nine month periods ended September 30, 2018 as compared with \$95.7 million and \$295.5 million for the prior year periods, primarily due to an increase in equipment revenue offset in part by a decrease in service revenue.

Equipment revenue increased to \$15.0 million and \$94.0 million, respectively, for the three and nine month periods ended September 30, 2018 as compared with \$1.3 million and \$5.2 million, respectively, for the prior year periods due to the post adoption impact of ASC 606 for equipment shipments during the three and nine month period ended September 30, 2018, which is now fully recognized upon customer acceptance. Additionally, the transition to the airline-directed model by one airline in January 2018 increased revenue by approximately \$45.4 million for the nine month period ended September 30, 2018 compared with the prior year period; see Note 1, "Basis of Presentation" for additional information.

A summary of the components of CA-NA's service revenue for the three and nine month periods ended September 30, 2018 and 2017 is as follows (in thousands, except for percent change):

	For the Three Months Ended September 30,		% Change
	2018	2017	2018 over 2017
Connectivity revenue ⁽¹⁾	\$ 85,930	\$ 88,348	(2.7%)
Entertainment and CAS revenue	7,513	6,088	23.4%
Total service revenue	\$ 93,443	\$ 94,436	(1.1%)

	For the Nine Months Ended September 30,		% Change
	2018	2017	2018 over 2017
Connectivity revenue ⁽¹⁾	\$256,803	\$272,351	(5.7%)
Entertainment and CAS revenue	21,169	17,909	18.2%
Total service revenue	\$277,972	\$290,260	(4.2%)

(1) Includes non-session related revenue of \$1.6 million and \$5.5 million, respectively, for the three and nine month periods ended September 30, 2018, and \$1.0 million and \$5.6 million, respectively, for the prior year periods.

CA-NA service revenue decreased to \$93.4 million and \$278.0 million, respectively, for the three and nine month periods ended September 30, 2018 as compared with \$94.4 million and \$290.3 million, respectively, for the prior year periods due to a decrease in connectivity revenue offset in part by an increase in entertainment and CAS revenue.

CA-NA Connectivity revenue decreased to \$85.9 million and \$256.8 million, respectively, for the three and nine month periods ended September 30, 2018 as compared with \$88.3 million and \$272.4 million, respectively, for the prior year periods due to a decrease in passenger-paid revenue offset in part by an increase in airline-paid revenue, which was due primarily to the transition of one of our airline partners to the airline-directed model from the turnkey model and, to a lesser extent, an increase in third party-paid revenue. Under the turnkey model, we are required to pay each airline a percentage of the service revenue we generate from transactions with the airline's passengers. The revenue share expense is included within cost of service revenue. However, under the airline-directed model, we generate revenue directly from the airline and do not incur revenue share expense. Therefore, the decrease in service revenue under the airline-directed model is offset by a reduction to our revenue share expense within cost of service revenue. We refer to this internally as "differences in business terms." Service revenue also decreased due to the economic impact of the same airline partner's transition to the airline-directed model. Additionally, CA-NA Connectivity revenue decreased due to the decommissioning of certain American Airlines aircraft during the three and nine month periods ended September 30, 2018.

Net annualized ARPA increased to \$114 thousand for the three month period ended September 30, 2018, as compared with \$108 thousand for the prior year period, while net annualized ARPA decreased to \$110 thousand for the nine month period ended September 30, 2018, as compared with \$112 thousand for the prior year period. The connectivity take rate increased to 12.0% and 11.2%, respectively, for the three and nine month periods ended September 30, 2018, as compared with 7.5% and 7.8%, respectively, for the prior year periods, reflecting increased passenger adoption including the impact of third party-paid and airline-paid offerings. Average revenue per session decreased to \$6.50 and \$7.06, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$10.49 and \$10.83, respectively, for the prior year periods, due to shifts in product mix, third party-paid and airline-paid offerings, as well as the differences in business terms and the economic impact of one of our airline partner's transition to the airline-directed model, as discussed above.

The increase in Entertainment and CAS revenue to \$7.5 million and \$21.2 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$6.1 million and \$17.9 million, respectively, for the prior year periods was due to increased usage of Entertainment services under business-to-business arrangements with our airline partners.

We expect service revenue for CA-NA to decrease in the near-term primarily due to the decommissioning of certain American Airlines aircraft in 2018 and 2019.

As the recognition of CA-NA equipment revenue is a function of equipment installation schedules, equipment revenue will be driven by our ability to execute our existing airline partner contracts, as well as entering into new contracts.

Business Aviation:

BA revenue increased to \$73.6 million and \$216.6 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$60.5 million and \$174.6 million, respectively, for the prior year periods primarily due to increases in both service and equipment revenue.

BA service revenue increased to \$49.3 million and \$145.1 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$43.2 million and \$125.4 million, respectively, for the prior year periods primarily due to additional customers subscribing to our Gogo Biz (ATG) service. The number of ATG aircraft online increased 9.9% to 5,019 as of September 30, 2018, as compared with 4,567 as of September 30, 2017.

BA equipment revenue increased to \$24.3 million and \$71.5 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$17.3 million and \$49.2 million, respectively, for the prior year periods due primarily to an increase in ATG equipment revenue.

Under a sales program for AVANCE (formerly referred to as Gogo Biz 4G) equipment that started in 2016, we have a remaining deferred equipment revenue balance of approximately \$0.5 million as of September 30, 2018 related to a free upgrade program under which we shipped ATG and UCS equipment to customers who have a right to exchange that equipment for AVANCE equipment. During the three and nine month periods ended September 30, 2018, we shipped 16 and 31 AVANCE units, respectively, under this program and recognized \$1.1 million and \$4.4 million, respectively, of previously deferred equipment revenue.

Commercial Aviation Rest of World:

CA-ROW revenue increased to \$35.2 million and \$88.0 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$16.6 million and \$41.0 million, respectively, for the prior year periods, due to an increase in both service and equipment revenue.

CA-ROW service revenue increased to \$17.6 million and \$47.1 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$15.7 million and \$38.2 million, respectively, for the prior year periods, due to performance improvements on existing airline partners' aircraft and an increase in aircraft equivalents. Annualized net ARPA for the CA-ROW segment decreased to \$148 thousand and \$151 thousand, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$205 thousand and \$197 thousand, respectively, for the prior year periods due to new airline partners' aircraft coming online during the three and nine month periods ended September 30, 2018.

CA-ROW equipment revenue increased to \$17.6 million and \$40.9 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$1.0 million and \$2.8 million, respectively, for the prior year periods primarily due to the post adoption impact of ASC 606 for equipment shipments during the three and nine month periods ended September 30, 2018, which is now fully recognized upon customer acceptance.

As the recognition of CA-ROW equipment revenue is a function of equipment installation schedules, equipment revenue will be driven by our ability to execute our existing airline partner contracts, as well as entering into new contracts.

Cost of Service Revenue:

Cost of service revenue by segment and percent for the three and nine month periods ended September 30, 2018 and 2017 were as follows (in thousands, except for percent change):

	For the Three Months Ended September 30,		% Change 2018 over 2017
	2018	2017	
	CA-NA	\$ 39,664	\$ 37,738
BA	10,450	10,090	3.6%
CA-ROW	19,362	20,026	(3.3%)
Total	\$ 69,476	\$ 67,854	2.4%

	For the Nine Months Ended September 30,		% Change 2018 over 2017
	2018	2017	
	CA-NA	\$131,811	\$112,439
BA	31,650	29,476	7.4%
CA-ROW	54,612	59,879	(8.8%)
Total	\$218,073	\$201,794	8.1%

CA-NA cost of service revenue increased to \$39.7 million and \$131.8 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$37.7 million and \$112.4 million, respectively, for the prior year periods due to increases in satellite service fees, aircraft operations expenses and a decrease in the amortization of deferred airborne lease incentives offset in part by a decrease in revenue share expense. The changes in amortization of deferred airborne lease incentives and revenue share was due primarily to the transition of one of our airline agreements from the turnkey model to the airline-directed model. See Note 11, "Leases" to our consolidated financial statements for additional information regarding our deferred airborne lease incentives.

BA cost of service revenue increased to \$10.5 million and \$31.7 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$10.1 million and \$29.5 million, respectively, for the prior year periods. The increase was primarily due to increased ATG units online and, to a lesser extent, an increase in satellite service fees.

CA-ROW cost of service revenue decreased to \$19.4 million and \$54.6 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$20.0 million and \$59.9 million, respectively, for the prior year periods primarily due to a decrease in airline launch costs and network operations expenses.

We expect CA-NA cost of service revenue to increase mainly due to increased satellite service fees for additional aircraft operating on our satellite network and potential costs associated with remediation of quality issues associated with our 2Ku technology.

As we expand our CA-ROW business, we expect to incur additional cost of service revenue in CA-ROW, reflecting increased satellite usage, operations and network related expenses. However, over time, we expect to see increased utilization of our network as we install additional aircraft.

Cost of Equipment Revenue:

Cost of equipment revenue by segment and percent change for the three and nine month periods ended September 30, 2018 and 2017 were as follows (in thousands, except for percent change):

	For the Three Months Ended September 30,		% Change 2018 over 2017
	2018	2017	
CA-NA	\$ 18,722	\$ 1,065	1,657.9%
BA	14,720	13,414	9.7%
CA-ROW	20,518	847	2,322.4%
Total	\$ 53,960	\$15,326	252.1%

	For the Nine Months Ended September 30,		% Change 2018 over 2017
	2018	2017	
CA-NA	\$ 83,520	\$ 5,646	1,379.3%
BA	42,444	33,651	26.1%
CA-ROW	44,639	2,326	1,819.1%
Total	\$170,603	\$41,623	309.9%

Cost of equipment revenue increased to \$54.0 million and \$170.6 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$15.3 million and \$41.6 million, respectively, for the prior year periods.

The increase in CA-NA for the three and nine month periods ended September 30, 2018 as compared with the prior year periods was due to an increase in equipment revenue, an increase in warranty reserves due to additional activity under airline-directed models and costs associated with remediation of quality issues associated with our 2Ku technology. Additionally, the transition to the airline-directed model by one airline in January 2018 increased cost of equipment revenue by approximately \$26.1 million for the nine month period ended September 30, 2018 compared with the prior year period; see Note 1, "Basis of Presentation" for additional information.

The increase in BA was due to an increase in equipment revenue and changes in product mix.

The increase in CA-ROW was due to the increase in equipment revenue, an increase in warranty reserves due to additional activity under airline-directed models and costs associated with remediation of quality issues associated with our 2Ku technology.

We expect that our cost of equipment revenue will vary with changes in installations and equipment revenue and, for CA-NA and CA-ROW, potential costs associated with remediation of quality issues associated with our 2Ku technology.

Engineering, Design and Development Expenses:

Engineering, design and development expenses decreased 4.1% and 14.6% to \$30.0 million and \$88.2 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$31.3 million and \$103.3 million, respectively, for the prior year periods. The decrease for the three month period ended September 30, 2018 as compared with the prior year period was due to decreased expenses in CA-ROW and BA offset by an increase in CA-NA. The decrease for the nine month period ended September 30, 2018 as compared with the prior year period was due to a decrease in CA-NA and CA-ROW expenses while BA expenses remained relatively flat.

Engineering, design and development expenses for the CA-NA segment included the recognition of approximately \$2.3 million of expenses during the three and nine month periods ended September 30, 2018, related to the development of our next generation ATG solution, primarily due to the achievement of a major milestone, while we recognized approximately \$16.0 million of expenses during the nine month period ended September 30, 2017, related to the development of our next generation ATG solution, primarily due to the achievement of a major milestone.

We expect consolidated engineering, design and development expenses to decrease as a percentage of consolidated revenue over time.

Sales and Marketing Expenses:

Sales and marketing expenses decreased 14.3% and 4.2% to \$14.0 million and \$45.3 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$16.3 million and \$47.3 million, respectively, for the prior year periods. The decrease in sales and marketing for the three month period ended September 30, 2018 was due to a decrease across all three segments, while the decrease during the nine month period ended September 30, 2018 was due primarily to a decrease in CA-ROW and to a lesser extent a decrease in CA-NA, due to the shift from the turnkey model (business-to-customer) to the airline directed model (business-to-business) offset in part by an increase in BA. Consolidated sales and marketing expenses as a percentage of total consolidated revenue was 6.4% and 6.7%, respectively, for the three and nine month periods ended September 30, 2018, as compared with 9.4% and 9.2%, respectively, for the prior year periods.

We expect consolidated sales and marketing expenses to decrease as a percentage of consolidated revenue over time.

General and Administrative Expenses:

General and administrative expenses increased 3.3% and 1.4% to \$24.9 million and \$71.2 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$24.1 million and \$70.2 million for the prior year periods due primarily to an increase in CA-NA and to a lesser extent an increase in BA. Related to our new Integrated Business Plan, we recorded severance expense of approximately \$1.5 million within the CA-NA segment during the three and nine month periods ended September 30, 2018. Consolidated general and administrative expenses as a percentage of total consolidated revenue was 11.4% and 10.5% for the three and nine month periods ended September 30, 2018, as compared with 13.9% and 13.7%, respectively, for the prior year periods.

We expect general and administrative expenses to decrease as a percentage of consolidated revenue over time.

Segment Profit (Loss):

CA-NA's segment profit decreased 45.5% and 59.8% to \$8.7 million and \$17.4 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$16.0 million and \$43.3 million, respectively, for the prior year periods due to the changes as discussed above.

BA's segment profit increased 64.9% and 43.4% to \$35.2 million and \$104.2 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$21.3 million and \$72.6 million, respectively, for the prior year periods primarily due to the changes as discussed above.

CA-ROW's segment loss decreased 5.7% and 14.9% to \$22.7 million and \$69.8 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$24.1 million and \$82.1 million, respectively, for the prior year periods due to the changes as discussed above.

Depreciation and Amortization:

Depreciation and amortization expense decreased 9.0% to \$32.6 million for the three month period ended September 30, 2018, as compared with \$35.8 million, for the prior year period due to accelerated depreciation expense for certain upgrades and decommission programs that started in the second half of 2017 and were completed in early 2018 and the transition of one of our airline agreements from the turnkey model to the airline-directed model. Depreciation and amortization increased to 3.7% to \$100.4 million for the nine month period ended September 30, 2018, as compared with \$96.8 million for the prior year period due to accelerated depreciation expense for certain upgrades and decommission programs that started in the second half of 2017 and were completed in early 2018 and amortization of capitalized software which was partially offset by the transition of one of our airline agreements from the turnkey model to the airline-directed model.

We expect our depreciation and amortization expense to decrease in the future as a greater percentage of installs will be under the airline-directed model.

Other (Income) Expense:

Other (income) expense and percent change for the three and nine month periods ended September 30, 2018 and 2017 were as follows (in thousands, except for percent change):

	For the Three Months Ended September 30,		% Change 2018 over 2017
	2018	2017	2017
Interest income	\$ (903)	\$ (683)	32.2%
Interest expense	30,743	27,585	11.4%
Other (income) expense	72	228	(68.4%)
Total	<u>\$29,912</u>	<u>\$27,130</u>	<u>10.3%</u>

	For the Nine Months Ended September 30,		% Change 2018 over 2017
	2018	2017	2017
Interest income	\$ (3,307)	\$ (1,999)	65.4%
Interest expense	91,938	81,754	12.5%
Other (income) expense	(59)	322	na
Total	<u>\$88,572</u>	<u>\$80,077</u>	<u>10.6%</u>

Total other expense was \$29.9 million and \$88.6 million, respectively, for the three and nine month periods ended September 30, 2018, as compared with \$27.1 million and \$80.1 million, respectively, for the prior year periods. Interest expense increased during the three and nine month periods ended September 30, 2018 as compared with the prior year periods due to higher average debt levels outstanding during the current year as compared with the prior year period.

We expect our interest expense to increase due to higher average debt outstanding because of the issuances of the September 2017 Additional Notes and the associated amortization of deferred financing fees offset in part by the amortization of the debt premium. See Note 9, "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 nine month periods ended September 30, 2018 were (0.5%) and 3.3%, respectively, as compared with (0.8%) and (0.7%), respectively, for the prior year periods. An income tax benefit was recorded for the nine month period ended September 30, 2018 resulting from a reduction in our valuation allowance of approximately \$4.0 million due to the application of provisions of H.R. 1, commonly known as the Tax Cuts and Jobs Act, to our evaluation of our deferred tax assets. For the three and nine month periods ended September 30, 2017, our income tax expense was not significant primarily due to the recording of a 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 and Cash CAPEX as defined below. Management uses Adjusted EBITDA and Cash CAPEX 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 by other companies. Adjusted EBITDA and Cash CAPEX are not recognized measurements under accounting principles generally accepted in the United States, or GAAP, and when analyzing our performance with Adjusted EBITDA or liquidity with Cash CAPEX, as applicable, investors should (i) evaluate each adjustment in our reconciliation to net loss attributable to common stock, 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 Cash CAPEX in addition to, and not as an alternative to, consolidated capital expenditures when evaluating our liquidity.

Definition and Reconciliation of Non-GAAP Measures

EBITDA represents net income (loss) attributable to common stock before income taxes, interest income, interest expense, depreciation expense and amortization of other intangible assets.

Adjusted EBITDA represents EBITDA adjusted for (i) stock-based compensation expense, (ii) amortization of deferred airborne lease incentives, (iii) amortization of STC costs and (iv) the accounting impact of the transition to the airline-directed model. 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 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 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 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 segment profit and loss (see Note 15, "Business Segments and Major Customers," for a description of segment profit (loss) in our unaudited condensed consolidated financial statements). Management evaluates 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 decision or the form of connectivity agreements.

We believe it is useful for an understanding of our operating performance to exclude the accounting impact of the transition by one of our airline partners to the airline-directed model from Adjusted EBITDA because of the non-recurring nature of this activity.

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.

Cash CAPEX represents capital expenditures net of airborne equipment proceeds received from the airlines. We believe Cash CAPEX provides a more representative indication of our liquidity requirements with respect to capital expenditures, as under certain agreements with our airline partners we are reimbursed for all or a substantial portion of the cost of our airborne equipment, thereby reducing our cash capital requirements.

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

	<u>For the Three Months</u> <u>Ended September 30,</u>		<u>For the Nine Months</u> <u>Ended September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Adjusted EBITDA:				
Net loss attributable to common stock (GAAP)	\$(37,717)	\$(45,281)	\$(102,343)	\$(130,857)
Interest expense	30,743	27,585	91,938	81,754
Interest income	(903)	(683)	(3,307)	(1,999)
Income tax provision (benefit)	195	350	(3,459)	945
Depreciation and amortization	<u>32,590</u>	<u>35,824</u>	<u>100,447</u>	<u>96,821</u>
EBITDA	24,908	17,795	83,276	46,664
Stock-based compensation expense	3,932	5,283	12,531	15,007
Amortization of deferred airborne lease incentives	(8,074)	(10,121)	(23,166)	(28,099)
Amortization of STC costs	292	—	719	—
Transition to airline-directed model	—	—	(21,551)	—
Adjusted EBITDA	<u>\$ 21,058</u>	<u>\$ 12,957</u>	<u>\$ 51,809</u>	<u>\$ 33,572</u>
Cash CAPEX:				
Consolidated capital expenditures (GAAP) ⁽¹⁾	\$ (9,246)	\$(68,495)	\$(124,412)	\$(214,238)
Change in deferred airborne lease incentives ⁽²⁾	(918)	5,351	(3,629)	8,856
Amortization of deferred airborne lease incentives ⁽²⁾	<u>7,961</u>	<u>10,077</u>	<u>22,825</u>	<u>27,994</u>
Cash CAPEX	<u>\$ (2,203)</u>	<u>\$(53,067)</u>	<u>\$(105,216)</u>	<u>\$(177,388)</u>

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

(2) Excludes deferred airborne lease incentives and related amortization associated with STC costs for the three and nine month periods ended September 30, 2018 and 2017 as STC costs are expensed as incurred as part of Engineering, Design and Development.

Material limitations of Non-GAAP measures

Although EBITDA, Adjusted EBITDA and Cash CAPEX are measurements frequently used by investors and securities analysts in their evaluations of companies, EBITDA, Adjusted EBITDA and Cash CAPEX 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;
- Cash CAPEX does not reflect the full extent of capital investments we have made in our operations; 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 Nine Months Ended September 30,	
	2018	2017
Net cash used in operating activities	\$ (91,896)	\$ (4,209)
Net cash used in investing activities	(195)	(67,257)
Net cash provided by (used in) financing activities	(1,545)	175,472
Effect of foreign exchange rate changes on cash	(530)	556
Net increase (decrease) in cash, cash equivalents and restricted cash	(94,166)	104,562
Cash, cash equivalents and restricted cash at the beginning of period	203,729	125,189
Cash, cash equivalents and restricted cash at the end of period	<u>\$109,563</u>	<u>\$229,751</u>
Supplemental information:		
Cash, cash equivalents and restricted cash at the end of period	\$109,563	\$229,751
Less: current restricted cash	1,773	500
Less: non-current restricted cash	5,126	6,873
Cash and cash equivalents at the end of the period	<u>\$102,664</u>	<u>\$222,378</u>
Short-term investments	\$ 88,575	\$188,496

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.

Liquidity:

Although we can provide no assurances, we currently believe that cash, cash equivalents and short-term investments on hand as of September 30, 2018 will be sufficient to meet our working capital and capital expenditure requirements for at least the next twelve months, including costs associated with installing our airborne equipment on certain aircraft operated by our airline partners, continuing our international expansion and evolving our ATG network. Excluding the impact of our initial public offering in June 2013, the Amended and Restated Senior Term Facility, the Convertible Notes and the Senior Secured Notes, we have not generated positive cash flows on a consolidated basis, and our ability to do so will depend in large part on our ability to increase revenue in each of our three business segments. In addition, our ability to generate positive cash flows from operating activities and the timing of certain capital and other necessary expenditures are subject to numerous variables, such as costs related to international expansion and execution of our current technology roadmap, including 2Ku, evolution of our ATG network and other potential future technologies. We currently believe that cash on hand, comprised of cash, cash equivalents and short-term investments, and cash flows provided by operating activities and, if necessary, additional equity financings or the incurrence of additional debt, will be sufficient to meet our liquidity needs in the longer-term, including our continued international expansion and execution of our current technology roadmap. The Indenture governing our Senior Secured Notes contains covenants that limit the ability of GIH and its subsidiaries to incur additional indebtedness. Additionally, the Indenture governing the Senior Secured Notes limits the amount of cash GIH and its subsidiaries may distribute to us, including cash distributed to us to pay interest on the Convertible Notes, to pay any interest on indebtedness incurred, or pay dividends on preferred stock issued by us to refinance, replace, renew or refund the Convertible Notes. Further, market conditions and/or our financial performance may limit our access to additional sources of equity or debt financing. As a result, we may be unable to finance our business to the extent that our cash on hand (including short-term investments) and cash generated through operating activities prove insufficient and we are unable to raise additional financing through the issuance of our equity or through permitted incurrences of debt by us or by GIH and its subsidiaries.

For additional information on our Senior Secured Notes and Convertible Notes, please see Note 9, "Long-Term Debt and Other Liabilities" to our unaudited condensed consolidated financial statements.

Cash flows 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 Nine Months Ended September 30,	
	2018	2017
Net loss	\$(102,343)	\$(130,857)
Non-cash charges and credits	112,807	136,695
Changes in operating assets and liabilities	(102,360)	(10,047)
Net cash used in operating activities	<u>\$ (91,896)</u>	<u>\$ (4,209)</u>

For the nine month period ended September 30, 2018, cash used in operating activities was \$91.9 million as compared with \$4.2 million of cash used in operating activities in the prior year period. The principal contributors to the change in operating cash flows were:

- A \$92.3 million change in cash flows related to operating assets and liabilities resulting from:
 - A decrease in cash flows due to the following:
 - Changes in CA-NA's and CA-ROW's inventories as we now allocate a portion of our uninstalled airborne equipment to inventory and to a lesser extent an increase in BA's inventory. See Note 5, "Inventories," for additional information for CA-NA and CA-ROW;
 - Changes in CA-NA's and CA-ROW's contract assets due to activity under our airline-directed model during the nine month period ended September 30, 2018 (see Note 3, "Revenue Recognition" for additional information);
 - Changes in CA-NA's and CA-ROW's deferred airborne lease incentives due to more installations under the turnkey model in 2017 as compared with 2018, as airlines are transitioning to the airline-directed model and as new airlines are being signed under the airline-directed model;
 - Changes in CA-ROW's accounts receivable primarily due to the timing of collections;
 - Changes in BA and CA-ROW's accrued liabilities primarily due to the timing of collections;
 - Changes in CA-NA's and BA's deferred revenue as deferred revenue balances decreased in 2018 and increased in 2017; and
 - Changes in CA-NA's prepaid expenses as we recognized more development services in 2017 as compared with 2018;
 - Offset in part by an increase in cash flows due to the following:
 - Changes in CA-NA's and BA's accounts receivable due primarily to the timing of collections;
 - Changes in CA-NA's accrued liabilities due primarily to the timing of payments;
 - Changes in CA-NA's and CA-ROW's warranty reserves, due to more activity under our airline-directed model during the nine month period ended September 30, 2018 (see Note 8, "Warranties" for additional information); and
 - Changes in CA-NA and BA's accounts payable due to the timing of payments.
- Offset in part by a \$4.6 million change in net loss adjusted for non-cash charges and credits.

Cash flows 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 \$124.2 million and \$150.0 million, respectively, for the nine month periods ended September 30, 2018 and 2017.

Cash flows provided by (used in) Financing Activities:

Cash used in financing activities for the nine month period ended September 30, 2018 was \$1.5 million primarily due to capital lease payments.

Cash provided by financing activities for the nine month period ended September 30, 2017 was \$175.5 million primarily due to the issuance of the January 2017 Additional Notes and the September 2017 Additional Notes with gross proceeds of \$181.8 million, offset in part by the payment of debt issuance costs for the January 2017 Additional Notes and the September 2017 Additional Notes of \$3.6 million and capital lease payments of \$2.3 million.

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, 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 network and data centers and includes site acquisition, design, permitting, network equipment and construction costs. 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 nine month periods ended September 30, 2018 and 2017 were \$124.4 million and \$214.2 million, respectively. The decrease in capital expenditures was primarily due to a decrease in airborne equipment purchases as a portion of our equipment purchases are now allocated to inventory (see Note 5, "Inventories" for additional information) and to a lesser extent a decrease in capitalized software.

We expect our capital expenditures, net of deferred airborne lease incentives, to decrease in 2018 as compared with 2017 primarily due to decreased turnkey model related activities, under which airborne equipment purchases are treated as capital expenditures. The airborne equipment purchases for our airline-directed model activities are treated as inventory activities within operating cash flows. We expect total expenditures of airborne equipment (including both operating and investing activities) to be lower in 2018 as compared with 2017 primarily due to the utilization in 2018 of previously purchased airborne equipment.

Other

Contractual Commitments: We have agreements with vendors to provide us with transponder and teleport satellite services. These agreements vary in length and amount and as of September 30, 2018 commit us to purchase transponder and teleport satellite services totaling approximately \$21.5 million in 2018 (October 1 through December 31), \$85.7 million in 2019, \$82.7 million in 2020, \$70.2 million in 2021, \$62.8 million in 2022 and \$216.5 million thereafter.

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.

A contract with one of our airline customers required us to provide the airline customer with a cash rebate of \$1.8 million in June 2018, which has not yet been paid.

Leases and Cell Site Contracts: We have lease agreements relating to certain facilities and equipment, which are considered operating leases. Additionally, we have cell site leases, some of which provide for minimum annual payments. See Note 11, "Leases," to our unaudited condensed consolidated financial statements for additional information.

For the airline agreements where the equipment transactions are accounted for as operating leases of space, the revenue share paid to our airline partners represents operating lease payments. See Note 11, "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. Treasuries, U.S. Government Agency Securities, and Money Market Funds. Our cash and cash equivalents as of September 30, 2018 and December 31, 2017 primarily included amounts in bank checking accounts and Money Market Funds. We believe that a change in average interest rates would not materially affect our interest income and results of operations.

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 September 30, 2018 and December 31, 2017 included amounts in bank checking accounts and money market funds, and our short-term investments consist of U.S. Treasury bills. We believe we have minimal interest rate risk; a 10% change in the average interest rate on our portfolio would have reduced interest income for the three and nine month periods ended September 30, 2018 and 2017 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 September 30, 2018. 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 September 30, 2018.

(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. We are required under our contracts with these airlines to indemnify them for defense costs and any liabilities resulting from the suit. Given the very early stage of this litigation, we are unable to assess the merits of the claim, and the outcome of this matter is inherently uncertain.

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 Executive Officer, Chief Financial Officer, and President, Commercial Aviation as defendants purportedly on behalf of all purchasers of our securities from February 27, 2017 through May 7, 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. We believe that the claims are without merit and intend to defend them 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.* 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. We believe that the claims are without merit and intend to defend them vigorously. 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

Except as set forth in our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018, as filed with the SEC on May 4, 2018 and August 8, 2018, respectively, there have been no material changes to the risk factors previously disclosed in our 2017 10-K.

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

<u>Exhibit Number</u>	<u>Description of Exhibits</u>
10.1.47 †	Delta Amendment No. 6 dated June 22, 2018 to the 2Ku In-Flight Connectivity Services Agreement dated April 1, 2015, by and between Delta and Gogo LLC
10.1.48 †	Qualcomm Technologies, Inc. Master Software Agreement dated June 13, 2018, by and between Qualcomm Technologies, Inc. and Gogo LLC
10.1.49 †	Qualcomm Technologies, Inc. AMSS6695 Software Addendum to Master Software Agreement dated June 13, 2018, by and between Qualcomm Technologies, Inc. and Gogo LLC
10.1.50 †	Access Point Patent License Agreement dated July 6, 2018, by and between Qualcomm Incorporated and Gogo LLC
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	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

† Certain provisions of this exhibit have been omitted and separately filed with the Securities and Exchange Commission pursuant to a request for confidential treatment.

* 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.

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.

Date: November 6, 2018

Gogo Inc.

/s/ Oakleigh Thome

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

/s/ Barry Rowan

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

THE USE OF THE FOLLOWING NOTATION IN THIS EXHIBIT INDICATES THAT THE CONFIDENTIAL PORTION HAS BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION: [*]**

**Amendment # 6
To the
2Ku In-Flight Connectivity Services Agreement**

This Amendment #6 (“**Amendment**”) to the 2Ku In-Flight Connectivity Services Agreement is made as of June 22 2018 (“**Amendment Date**”), by and between Delta Air Lines, Inc. (“**Delta**”) and Gogo LLC (“**Gogo**”). Capitalized terms used herein that are not otherwise defined shall have the meanings given to such terms in the Original Agreement (as such term is defined below).

WHEREAS, Delta and Gogo are parties to the 2Ku In-Flight Connectivity Services Agreement dated as of April 1, 2015 (as amended, the “**Original Agreement**”), under which Gogo provides installation of certain equipment and provision of services related to Gogo’s 2Ku Connectivity Services;

WHEREAS, Delta and Gogo, desire to amend the Original Agreement to modify certain terms relating to shipset price and termination rights specifically for [***] Additional Fleet Type A/C that Delta seeks to have installed with Equipment and receive the Services by way of this amendment;

NOW, THEREFORE, in consideration of the foregoing premises and the covenants contained herein, Delta and Gogo agree to amend the Original Agreement as set forth below.

1. Pursuant to Section 2.3 of the Original Agreement, the [***] A/C listed below by tail number shall be added to the Agreement as Additional Fleet Type A/C. Solely as it relates to the [***] Additional Fleet Type A/C in the below table (the “[***] **Additional A/C**”), the terms set forth in this Amendment shall apply.

[***]

2. The parties acknowledge and agree that the shipsets for the [***] Additional A/C (the “[***] Shipsets”) may differ slightly from the Shipsets described in the Original Agreement [***]. The [***] Shipsets shall include, at a minimum, the components set forth in Attachment 1 to this Amendment. Notwithstanding the foregoing, the [***] Shipsets shall be subject to the other terms and conditions of the Original Agreement, including without limitation the ability to provide the 2Ku Connectivity Services in accordance with the applicable Service Levels. The price for each Shipset is [***].
3. Notwithstanding anything in the Original Agreement to the contrary, Delta shall have the right to discontinue the Services and remove any one or more of the [***] Additional A/C from coverage under the Original Agreement for convenience and without cause (an “**Additional A/C Removal**”) at any point [***]. “**EIS**” means such A/C’s entry into service with Services commercially available to passengers. Depending on the date of the Additional A/C Removal, Delta will pay Gogo an early removal fee, as Gogo’s sole and exclusive remedy, and Delta’s sole obligation, for the Additional A/C Removal, an amount equal to the following for each A/C from the [***] Additional A/C:
 - a. \$[***]; and
 - b. \$[***].

[***]. For clarity, Section 11.3 of the Original Agreement shall not apply to the [***] Additional A/C.

4. The terms of this Amendment are subject to the confidentiality obligations set forth in the Original Agreement.
5. [***].

THE USE OF THE FOLLOWING NOTATION IN THIS EXHIBIT INDICATES THAT THE CONFIDENTIAL PORTION HAS BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION: [*]**

MASTER SOFTWARE AGREEMENT

This Master Software Agreement (“**Agreement**”) is entered into as of June 13, 2018 (the “**Effective Date**”), by and between Qualcomm Technologies, Inc., a Delaware corporation (“**QTI**”) and GoGo LLC, a Delaware limited liability company (“**LICENSEE**”).

RECITALS

WHEREAS, LICENSEE desires to obtain a license from QTI for certain Software (as defined below) for its use in accordance with the terms and conditions of this Agreement; and

WHEREAS, in accordance with the terms and conditions of this Agreement, QTI is willing to license the Software (as defined below) to LICENSEE for use solely with the corresponding QTI ASIC (as defined below).

AGREEMENT

NOW, THEREFORE, the Parties, in consideration of the mutual promises set forth herein, agree as follows:

1. DEFINITIONS. The following capitalized terms shall have the meanings set forth below:

“**Affiliate**” means, with respect to a Party, any corporation or other legal entity that, at any time, directly or indirectly, Controls, is Controlled by, or is under common Control with such Party (but only as long as such Control exists). For the purpose of this definition, the term “**Control**” means (i) the beneficial ownership (whether direct or indirect) of more than fifty percent (50%) of the voting power of an entity or (ii) in the case of an entity that does not have outstanding voting shares or securities, the majority (i.e., more than fifty percent (50%)) of the equity interests in such entity is now or hereafter owned or controlled by another entity, either directly or indirectly.

“**Device Software**” means the software delivered by QTI under this Agreement (other than QAS), which in QTI’s sole discretion, may be in either source code and/or object code form, designed for use with one or more QTI ASICs, as set forth in a Software Addendum.

“**Incremental Fees**” means the incremental fees applicable to the QAS as set forth in Exhibit 8 to Appendix B (INCREMENTAL FEES FOR QAS UNITS) of this Agreement, and/or such other incremental fees for QAS as the Parties may agree to in writing; provided, however, [***].

“**License Agreement(s)**” means any agreement in effect between QUALCOMM Incorporated, a Delaware corporation (“**QUALCOMM**”) and LICENSEE that expressly grants during the term of this Agreement, without limitation, license rights to LICENSEE under all, or substantially all, of those patents that are essential to WWAN Standards with respect to WWAN Products of LICENSEE that implement or otherwise embody such WWAN Standards.

OTI Confidential/Proprietary

“**LICENSEE Products**” means collectively, WWAN Products and Non-WWAN Products Sold by LICENSEE; each, a “**LICENSEE Product**”.

“**Non-WWAN Product**” means a device that is not capable, under any circumstance (including, without limitation, by software or firmware modifications), of implementing wireless communications transmissions in accordance with any WWAN Standard.

“**Open Source License Terms**” means terms in any license for software that, as a condition of use, copying, modification or redistribution, require such software and/or derivative works thereof to be disclosed or distributed in source code form, to be licensed for the purpose of making derivative works, or to be distributed free of charge, including without limitation software distributed under the GPL (GNU General Public License) or LGPL (GNU Lesser General Public License).

“**Party**” means QTI or LICENSEE and “**Parties**” means QTI and LICENSEE.

“**QAS**” means QTI’s advanced software offerings set forth on Appendix B (QUALCOMM ADVANCED SOFTWARE) (as may be updated from time to time by QTI), and any documentation, updates and enhancements thereto that QTI may, in its sole discretion, deliver to LICENSEE.

“**QAS Unit**” means a LICENSEE Product that incorporates a QTI ASIC, the corresponding Device Software, and any of the QAS.

“**QTI ASIC**” means the ASIC purchased from QTI or any of its Affiliates and identified in the applicable Software Addendum solely for use with the corresponding Device Software in LICENSEE Products.

“**Software**” means collectively the Device Software and (if applicable) QAS.

“**Software Addendum**” means an addendum mutually agreed upon and executed by the Parties in a form substantially similar to that attached hereto as Appendix A (Software Addendum Template), which shall specifically reference this Agreement and which sets forth the Device Software platform(s) to be licensed under this Agreement, including but not limited to the software description, corresponding QTI ASIC, and Up-Front Fees. Each Software Addendum shall be deemed to incorporate the terms of this Agreement and become a part of this Agreement upon execution by both Parties.

“**Sold**”, “**Sale**”, or “**Sell**” as used herein shall have the meaning given to it in the applicable License Agreement, or in the absence of a License Agreement shall mean put into use, sold, leased or otherwise transferred.

“**WWAN Product**” means any device for which LICENSEE is licensed to make, have made, use and Sell under a License Agreement.

“**WWAN**” means wireless wide area network.

“**WWAN Standard**” means any mandatory or optional portion of any wireless wide area air interface standard, including, without limitation, GSM, CDMA, TD-SCDMA, Universal Mobile Telecommunications Standard (UMTS), Wideband Code Division Multiple Access (WCDMA), HSPA, HSDPA, HSUPA, HSPA+, WiMax, IEEE 802.16 (including 802.16e and 802.16m), WiBro, IEEE 802.20, UMB (formerly known as 1xEVDO Rev. C), Long Term Evolution (LTE), LTE-Advanced, LTE-Advanced Pro and any updates and revisions to any of the foregoing.

OTI Confidential/Proprietary

2. SOFTWARE.

2.1 Delivery of Software. QTI shall make commercially reasonable efforts to deliver the Software that is designed for use with the applicable QTI ASIC identified in a Software Addendum. QTI shall have the right, at its sole discretion, to reschedule any releases of the Software as required, change the number of phases and/or releases, and/or modify the functionality contained in each phase and/or release. For a specified period set forth in the applicable Software Addendum (the “**Standard Support Period**”), QTI shall [***]. LICENSEE may request QTI provide continued Software support after the Standard Support Period. QTI shall have the sole discretion to accept/reject any such request, and if QTI agrees to offer continued Software support to LICENSEE it shall be made available upon payment by LICENSEE of an additional support fee to QTI in an amount to be mutually agreed upon by the Parties. Some of the QAS may also be delivered separately from a Device Software release. In the event of such separate release, this Agreement supersedes all terms of any other “shrinkwrap” or “clickwrap” license included in a package, media, or electronic version of such QAS. The QAS shall be licensed under the terms of this Agreement, and such clickwrap or shrinkwrap terms shall not apply to the QAS licensed or provided under this Agreement even if LICENSEE has been deemed to accept such other shrinkwrap or clickwrap license.

2.2 Up-Front Fee for Device Software. LICENSEE shall pay to QTI by wire transfer to a bank account specified by QTI, [***] payment for the Device Software (the “**Up-Front Fee**”) as described in the applicable Software Addendum. [***].

2.3 QAS. The license for the QAS and additional obligations and restrictions relating thereto (including, but not limited to, payment of the Incremental Fees for such QAS) shall be as set forth herein and in Appendix B (QUALCOMM ADVANCED SOFTWARE). Notwithstanding anything to the contrary in Section 18 (Miscellaneous Provisions), Appendix B may be updated by QTI from time to time upon written notice to LICENSEE, which notice may be provided in electronic format via email.

2.4 Incremental Payment for QAS. [*].**

2.5 Records and Audits.

2.5.1 Records. LICENSEE shall keep accurate and complete books and records concerning any QAS Units which LICENSEE Sells. As applicable, such books and records shall include (i) the type of QAS Unit Sold, e.g., 3D Sound Unit, CMX Unit, etc., (ii) the date of the transaction involving the Sales of QAS Units, and (iii) the number Sold; categorized by LICENSEE Product model number and corresponding QTI ASIC. Within thirty (30) days after the end of each calendar quarter, LICENSEE shall (i) report to QTI (attn: QCTAdvancedSoftware@qti.qualcomm.com) the transactions and corresponding QAS Unit volumes Sold during said calendar quarter, categorized by subscriber unit model number and corresponding QTI ASIC and any other information as may be reasonably requested by QTI, or (ii) furnish QTI (attn: QCTAdvancedSoftware@qti.qualcomm.com) with a statement signed by an authorized representative of LICENSEE certifying that LICENSEE has not Sold any QAS Units containing the applicable software for said calendar quarter.

OTI Confidential/Proprietary

2.5.2 Audits. The audit rights under the License Agreement(s) shall be expanded to include QTI's right to verify LICENSEE's reporting of QAS Units Sold. In the absence of a License Agreement, QTI may conduct (itself or through its agent) an audit on reasonable notice of LICENSEE's applicable books and records to verify LICENSEE's reporting of the QAS Units, encompassing supporting documentation including, but not limited to, the books and records described in 2.5.1 above to verify LICENSEE's reporting of QAS Units Sold. The cost of such audit shall be borne by QTI, [***]. LICENSEE shall preserve and maintain all such books and records required for audit for a period of five (5) years after the calendar quarter for which the books and records apply.

3. RIGHT TO USE SOFTWARE; LIMITATIONS ON RIGHTS.

3.1 Right to Use Software for Commercial Purposes. LICENSEE may use the Device Software as identified on a Software Addendum as being subject to this Section 3.1 (including any QAS delivered therewith subject to the then-current Incremental Fee for such QAS) per the terms set forth in this Section 3.1. Subject to the terms and conditions of this Agreement, including the restrictions, conditions, limitations and exclusions set forth in this Section 3, Section 5 (Intellectual Property), Section 6 (Restrictions On and Representations Regarding Use), and Appendix B (QUALCOMM ADVANCED SOFTWARE) (and for LICENSEE's WWAN Products, the applicable License Agreement, including, without limitation, the required payment by LICENSEE on a timely basis of all royalties and other amounts due on such WWAN Products), LICENSEE shall have the right to (i) alter, modify (including creating derivative works), translate or adapt only that portion of the Software provided by QTI under this Agreement in source code form solely to develop, manufacture, upgrade and repair LICENSEE Products that incorporate an applicable QTI ASIC, (ii) use or copy the Software for archival purposes, and (iii) sublicense only the object code and executables of the Software solely when embedded as part of and within LICENSEE Products that incorporate an applicable QTI ASIC (and for LICENSEE's WWAN Products, Sold and distributed in accordance with and subject to the terms and conditions of the applicable License Agreement).

3.2 Right to Use Software for Design and Development Purposes.

3.2.1 Design and Development Use. LICENSEE may use the Device Software as identified in a Software Addendum as being subject to this Section 3.2 (including any QAS delivered therewith) for design and development purposes only. Subject to the terms and conditions of this Agreement, including the restrictions, conditions, limitations and exclusions set forth in this Section 3, Section 5 (Intellectual Property), Section 6 (Restrictions On and Representations Regarding Use), and Appendix B (QUALCOMM ADVANCED SOFTWARE) (and for LICENSEE's WWAN Products the applicable License Agreement, including, without limitation, the required payment by LICENSEE on a timely basis of all royalties and other amounts due on such WWAN Products), LICENSEE shall have the right to (i) alter, modify (including creating derivative works), translate or adapt only that portion of the Software provided by QTI under this Agreement in source code form solely to design and develop (but not manufacture, Sell or distribute) LICENSEE Products that incorporate an applicable QTI ASIC, and (ii) use or copy the Software for archival purposes. LICENSEE shall have no right to sublicense, transfer or otherwise disclose the Software that is subject to this Section 3.2.1 in any form except as provided in Section 3.3 (Limitations on Rights).

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3.2.2 Option to Obtain Commercial Use License. LICENSEE, at its option, may elect to obtain certain additional rights to use the Software in accordance with Section 3.1 (Right to Use Software for Commercial Purposes). To exercise such option LICENSEE must deliver written notice to QTI of its election to exercise such option and enter into an amendment to the applicable Software Addendum and pay the Up-Front Fee for the Device Software with respect to such use.

3.3 Limitations on Rights. Notwithstanding anything to the contrary in this Agreement, LICENSEE shall have no right to (i) sublicense, transfer or otherwise disclose the Software in source code form to any third party (other than to Affiliates or permitted subcontractors of LICENSEE in accordance with and subject to Section 10 (Restrictions on Disclosure and Use of Information) and Section 3.4 (Subcontractors), respectively), or (ii) reverse engineer, reverse assemble, reverse translate, decompile or reduce to source code form that portion of the Software provided in object code form and/or executable form. Except for the purposes expressly permitted in Sections 3.1 (Right to Use Software for Commercial Purposes) and 3.2 (Right to Use Software for Design and Development Purposes) above, LICENSEE shall not use the Software for any other purpose. QTI (or its licensors) shall retain title and all ownership rights in and to the Software, any modifications (including all derivative works) made thereto, and all copies thereof. LICENSEE shall not remove or alter any of the copyright or other notices contained in the Software, and shall include such notices in any end-user documentation. LICENSEE shall not use, modify, compile or distribute the Software in any manner that would cause the Software to become subject to any Open Source License Terms (the “**Open Source Restrictions**”), and LICENSEE shall restrict its Affiliates, permitted subcontractors (if any) and sublicensees from same. The rights granted by QTI in Section 3.1 (Right to Use Software for Commercial Purposes) and 3.2 (Right to Use Software for Design and Development Purposes) are expressly conditioned upon LICENSEE’s full compliance with the foregoing sentence. LICENSEE and its Affiliates shall not use any Software, QTI ASICs and/or information delivered by QTI to LICENSEE hereunder for the purpose of identifying or providing evidence to support any potential patent infringement claim against QTI, its Affiliates, or any of QTI’s or QTI’s Affiliates’ suppliers and/or direct or indirect customers, which provision shall survive termination of this Agreement.

3.4 Subcontractors. LICENSEE may provide the Software in object code or binary form (and associated documentation) to LICENSEE’s subcontractors to use solely for development and design of LICENSEE Products for LICENSEE; provided, however that prior to providing the Software or documentation to any subcontractor (i) LICENSEE provides written notice to QTI via email to gct.sublicense-approval-external@qti.qualcomm.com identifying the name and address of such subcontractor and the applicable Software (ii) such subcontractor has entered into an agreement with LICENSEE (a copy of which agreement will be provided by LICENSEE to QTI at its request) which agreement, at a minimum (a) limits the subcontractor’s rights to use the Software solely (1) in accordance with Section 3 (Right to Use Software; Limitations on Rights), (2) for the development and design of LICENSEE Products for LICENSEE, which designs for such LICENSEE Product are owned solely by LICENSEE, (3) permits QTI, as an intended third party beneficiary, to enforce the license and use restrictions as specified herein, and (4) contains the same conditions respecting use of Information contained in Section 10 (RESTRICTIONS ON DISCLOSURE AND USE OF INFORMATION). As to source code (and associated documentation), such disclosure is subject to QTI’s prior review and approval of LICENSEE’s email request to gct.sublicense-approval-external@qti.qualcomm.com, which email request shall identify the name and address of such subcontractor, applicable Software, and any additional information requested by QTI. LICENSEE acknowledges and agrees that in the event QTI provides written authorization to LICENSEE, prior to LICENSEE providing the Software or documentation to such permitted subcontractor, LICENSEE will comply with the obligations set forth in (ii) above.

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LICENSEE shall promptly cease using any subcontractor at QTI's request, and agrees that it would be reasonable for QTI to request that LICENSEE cease using any subcontractor if, among other reasons, such subcontractor was infringing or misappropriating any of QTI's or any of its Affiliates' intellectual property rights or if QTI reasonably believes that such subcontractor is unlikely to comply (or be able to comply) with the terms and conditions of this Agreement. Upon the earlier to occur of (x) expiration or termination of this Agreement or applicable Software Addendum, (y) such subcontractor is no longer providing services for LICENSEE, or (z) QTI's request that LICENSEE cease using such subcontractor, LICENSEE will ensure that the Software (and associated documentation) is returned to LICENSEE or destroyed. QTI and its Affiliates shall have no obligation to provide any direct support to any subcontractor. LICENSEE hereby agrees to indemnify QTI for all losses (including but not limited to lost license fees) suffered by QTI as a result of the misuse of such Software (and associated documentation) by any such subcontractor. LICENSEE shall assume full responsibility for the compliance of the terms and conditions of this Agreement by its subcontractors including seeking injunctive relief against such subcontractors as requested by QTI.

3.5 Software Access and Audit Rights. LICENSEE hereby agrees (i) to store and access the Software solely on LICENSEE's secure computers and servers and such Software (including the computers and servers on which they reside) shall be under password control protection at all times ("**Approved Machine(s)**"), accessible solely and exclusively on the Approved Machines by LICENSEE's and its Affiliates' employees and permitted subcontractors (if any) who are assigned to the design and development of LICENSEE Products that incorporate the applicable QTI ASIC ("**Approved Personnel**"), and (ii) any portion of the Software in source code form or derivatives thereof will not be moved to any other machines. LICENSEE also hereby agrees to (a) keep password logs showing access to the Software on the Approved Machines and ensure that no passwords or other authentication information is shared amongst LICENSEE's or its Affiliates' or permitted subcontractors' (if any) personnel (other than Approved Personnel) or with unauthorized individuals, (b) periodically review the list of Approved Personnel and ensure that any individual's access to the Software remains reasonably necessary for their design and development of LICENSEE Products that incorporate the applicable QTI ASIC, and in the event LICENSEE determines that an individual's access to the Software is, or should be, no longer necessary, it shall immediately remove such individual from the applicable server access list such that such individual is no longer able to access the Software, and (c) notify QTI immediately in the event of unauthorized access to the Software or if the security of the Software has been compromised. QTI shall have the right to audit LICENSEE and to inspect its facilities, network connectivity and practices to verify LICENSEE's compliance with the obligations herein.

4. WARRANTY DISCLAIMER. QTI MAKES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SOFTWARE OR ANY OTHER INFORMATION OR DOCUMENTATION PROVIDED UNDER THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR AGAINST INFRINGEMENT, OR ANY EXPRESS OR IMPLIED WARRANTY ARISING OUT OF TRADE USAGE OR OUT OF A COURSE OF DEALING OR COURSE OF PERFORMANCE. NOTHING CONTAINED IN THIS AGREEMENT SHALL BE CONSTRUED AS (I) A WARRANTY OR REPRESENTATION BY QTI AS TO THE VALIDITY OR SCOPE OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT OR (II) A WARRANTY OR REPRESENTATION BY QTI THAT ANY MANUFACTURE OR USE WILL BE FREE FROM INFRINGEMENT OF PATENTS, COPYRIGHTS OR OTHER INTELLECTUAL PROPERTY RIGHTS OF OTHERS, AND IT SHALL BE THE SOLE RESPONSIBILITY OF LICENSEE TO MAKE SUCH DETERMINATION AS IS NECESSARY WITH RESPECT TO THE ACQUISITION OF LICENSES UNDER PATENTS AND OTHER INTELLECTUAL PROPERTY OF THIRD PARTIES.

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5. INTELLECTUAL PROPERTY. QTI is not authorized to license any Software for use with or on any QTI ASICs under the patents of QUALCOMM or SnapTrack, Inc. Accordingly, neither the provision or license of Software by QTI nor any provision of this Agreement shall be construed as to grant to LICENSEE or its Affiliates either expressly, by implication or by way of estoppel, any license or any other right under such patents of QUALCOMM or SnapTrack, Inc. LICENSEE, on behalf of itself and its Affiliates, agrees not to contend in any context that, as a result of the provision or use of the Software and/or any QTI ASIC, either QTI or any of its Affiliates has any obligation to extend, or LICENSEE or any other party has obtained any right to, any license, whether express or implied, with respect to any patent of QUALCOMM or SnapTrack, Inc. for any purpose.

6. RESTRICTIONS ON AND REPRESENTATION REGARDING USE. LICENSEE hereby represents and warrants to QTI that (i) LICENSEE has the right and authority to bind its Affiliates with respect to the rights and obligations set forth in this Agreement, (ii) the Software will be used by LICENSEE, its Affiliates and permitted subcontractors (if any) solely in accordance with Section 3 (Right to Use Software; Limitations on Rights) and Appendix B (QUALCOMM ADVANCED SOFTWARE); any use of the Software by its Affiliates shall cease on the date such Affiliate ceases to be an Affiliate of LICENSEE, and (iii) LICENSEE shall not use the Software, alone or in combination with other software or components for use in any device or product capable of implementing any WWAN Standard without a separate license from QUALCOMM under all applicable patents. This Agreement shall not modify or abrogate LICENSEE's obligations under the License Agreement(s), including but not limited to LICENSEE's obligation to pay all royalties specified thereunder, and shall not expand or alter LICENSEE's rights thereunder.

7. TERM AND TERMINATION.

7.1 Term of The Agreement. This Agreement shall commence on the Effective Date and shall continue until terminated in accordance with this Section 7.

7.2 At Will Termination. LICENSEE shall have the right to terminate this Agreement for any reason by giving QTI written notice of termination. Such termination shall become effective thirty (30) days after the date of QTI's receipt of the notice of termination.

7.3 Termination of The Agreement or Software Addendum. In addition to LICENSEE's termination right set forth under Section 7.2 (At Will Termination) above, this Agreement or any Software Addendum may be terminated by either Party, by written notice to the other Party, following the occurrence of any material breach by such other Party of any provision of this Agreement, which material breach is (if capable of being cured) not cured within thirty (30) days after receipt of such notice. In addition, this Agreement or any Software Addendum may be terminated by QTI if LICENSEE is in default under any supply agreement between LICENSEE and QTI or any of its Affiliates under which LICENSEE purchases QTI ASICs and such default is not cured within the cure period specified therein. Further, if as to any Software licensed hereunder, (i) there is a breach of any of the Open Source Restrictions or (ii) any restrictions, conditions, limitations or exclusions that are set forth in Sections 3 (Right to Use Software; Limitations on Rights), 5 (Intellectual Property) or 6 (Restrictions On and Representations Regarding Use) of this Agreement are for any reason found to be invalid and/or

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unenforceable then: (a) as to any and all affected versions of Software (the “**Affected SW**”), the Software Addendum or Software Addenda under which such Affected SW is licensed shall terminate immediately without notice and the rights granted in Section 3.1 (Right to Use Software for Commercial Purposes) and 3.2 (Right to Use Software for Design and Development Purposes) shall be null, void and ineffective from the date of such termination with respect to such Affected SW; and (b) QTI shall have the right to terminate this Agreement immediately upon notice.

7.4 Bankruptcy, Dissolution or Liquidation. LICENSEE shall provide written notice (the “**Notice**”) to QTI immediately upon the occurrence of any of the following events (the “**Events**”): (i) insolvency, bankruptcy or liquidation or filing of any application therefor, or other commitment of an affirmative act of insolvency; (ii) attachment, execution or seizure of substantially all of the assets or filing of any application therefor; (iii) assignment or transfer of that portion of the business to which this Agreement pertains to a trustee for the benefit of creditors; (iv) disposition, by sale or assignment of all of its rights, of that portion of the business or the material assets to which this Agreement pertains; or (v) termination of its business or dissolution. Either Party shall also have the right to terminate this Agreement with immediate effect by giving written notice of termination to the other Party at any time upon occurrence of an Event.

7.5 Remedies on Termination. In the event of any termination of this Agreement or any Software Addendum, LICENSEE shall immediately (i) return or destroy (and upon QTI’s request certify to QTI in writing to same) the applicable Software and associated documentation, and any copies or updates thereof and (ii) cease using, or permitting to be used, the applicable Software and associated documentation, and any adaptation, modification, derivation or translation thereof. Any termination of this Agreement or termination or expiration of any Software Addendum under this Section 7 shall not prejudice the right to recover any sums due or accrued at the time of such termination or expiration ([***) and shall not prejudice any cause of action or claim accrued or to accrue on account of any breach or default. Excluding any termination by QTI under Section 7.3 (Termination of The Agreement or Software Addendum), no termination hereunder shall limit the rights of LICENSEE to Sell those LICENSEE Products in inventory or in process at the time of termination subject to LICENSEE’s continued compliance with this Agreement (and for LICENSEE’s WWAN Products, in accordance with the terms and conditions of the applicable License Agreement, including the payment of the royalty applicable to the Sale of such WWAN Products). In the event of termination by QTI under Section 7.3 (Termination of The Agreement or Software Addendum), (a) any existing sublicense to any purchaser of LICENSEE Products incorporating the Affected SW or any adaptation, modification, derivation or translation thereof shall also terminate, and (b) LICENSEE shall immediately cease Selling any LICENSEE Products in inventory or in process at the time of termination which incorporate any Affected SW.

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8. TAXES. All amounts due QTI shall be paid without deduction for any levies or charges of any nature which may be imposed. LICENSEE will be solely responsible for any and all applicable taxes, including but not limited to LICENSEE's income (but not QTI's income), sales and use taxes, value-added tax, service tax, excise tax, consumption tax, customs duties or similar charges or fees ("**Taxes**"). At the request of QTI, LICENSEE will provide documentation reasonably satisfactory to QTI evidencing payment of such Taxes by LICENSEE to the applicable taxing authority. In the event that QTI pays for any Taxes on behalf of LICENSEE (other than withholding of income taxes), then LICENSEE shall reimburse QTI therefor within thirty (30) days after the invoice date.

Notwithstanding the foregoing, if LICENSEE is required by applicable law to withhold income taxes from any payment due QTI, then the amount due to QTI in respect to such payment shall be reduced by the amount of such income tax withholding; then LICENSEE will deliver to QTI an income tax withholding certificate or similar documentation reasonably satisfactory to QTI evidencing payment of any such withholding. Upon receipt by QTI of the income tax withholding certificate, the portion of the invoice represented by the income tax withholding certificate will be deemed fully paid. If there is an applicable tax treaty, QTI agrees to provide LICENSEE the necessary documentation in order to have LICENSEE withhold at the beneficial treaty rate. LICENSEE agrees that upon receipt of the necessary documentation, LICENSEE will only withhold at the beneficial treaty rate. If LICENSEE fails to withhold income taxes from any payment due QTI where income tax withholding is required by applicable law, QTI shall have no obligation to reimburse LICENSEE for such unwithheld income taxes, unless LICENSEE requests reimbursement from QTI in writing within sixty (60) days after the applicable invoice date. LICENSEE shall be responsible for any penalty, additional tax, interest or other charge due if LICENSEE fails to meet its income tax withholding obligations.

9. LIMITATION OF LIABILITY.

9.1 IN NO EVENT SHALL QTI OR ITS LICENSORS BE LIABLE TO LICENSEE OR ANY OF ITS AFFILIATES FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO ANY LOST PROFITS, LOST SAVINGS, OR OTHER INCIDENTAL DAMAGES, ARISING OUT OF THE USE OR INABILITY TO USE, OR THE DELIVERY OR FAILURE TO DELIVER, ANY OF THE SOFTWARE, OR ANY BREACH OF ANY OBLIGATION UNDER THIS AGREEMENT, EVEN IF QTI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING LIMITATION OF LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT REGARDLESS OF WHETHER LICENSEE'S REMEDIES HEREUNDER ARE DETERMINED TO HAVE FAILED OF THEIR ESSENTIAL PURPOSE.

9.2 IN ADDITION TO SECTION 9.1, THE ENTIRE LIABILITY OF QTI AND ITS LICENSORS, AND THE SOLE AND EXCLUSIVE REMEDY OF LICENSEE AND ANY OF ITS AFFILIATES, FOR ANY CLAIM OR CAUSE OF ACTION ARISING HEREUNDER (WHETHER IN CONTRACT, TORT, OR OTHERWISE) SHALL NOT EXCEED THE UP-FRONT FEE PAID FOR THE SOFTWARE WHICH IS THE SUBJECT OF SUCH CLAIM OR CAUSE OF ACTION.

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10. RESTRICTIONS ON DISCLOSURE AND USE OF INFORMATION. All documentation and technical and business information and intellectual property in whatever form recorded that a Party does not wish to disclose without restriction (“**Information**”) shall remain the property of the furnishing Party and may be used by the receiving Party only as follows. Such Information (i) shall not be reproduced or copied, in whole or part, except for use as expressly authorized in this Agreement; (ii) shall, together with any full or partial copies thereof, be returned or destroyed (at the furnishing Party’s option) when no longer needed or upon any termination of this Agreement; and (iii) shall be disclosed only to employees and Affiliates of a Party, all with a need to know, solely for use as expressly authorized in this Agreement. Such Affiliates shall enter into a nondisclosure agreement with the receiving Party setting forth the obligations substantially equal to those herein prior to the disclosure of Information by receiving Party to such Affiliates. Moreover, such Information shall be used by the receiving Party only for the purposes contemplated under this Agreement or in the exercise of its rights it may receive expressly under the provisions of this Agreement. Unless the furnishing Party consents in this Agreement or otherwise in writing, such Information shall be held in strict confidence by the receiving Party. LICENSEE shall remain directly liable to QTI for misuse of the Information, including but not limited to any Software, by any of its Affiliates. The receiving Party may disclose Information to other persons, upon the furnishing Party’s prior written authorization, but solely to perform acts which this clause expressly authorizes the receiving Party to perform itself and further provided such other person agrees in writing (a copy of which writing will be provided to the furnishing Party at its request) to the same conditions respecting use of Information contained in this clause and to any other reasonable conditions requested by the furnishing Party including but not limited to an indemnification by the receiving Party against any losses suffered by the furnishing Party as a result of the misuse of such Information by such other persons.

These restrictions on the use or disclosure of Information shall not apply to any Information: (a) which can be proven to be or have been independently developed by the receiving Party or lawfully received free of restriction from another source having the right to so furnish such Information; or (b) after it has become generally known to the public from a source having the right to disclose such Information; or (c) which at the time of disclosure to the receiving Party was known to such Party free of restriction and clearly evidenced by documentation in such Party’s possession; or (d) which the disclosing Party agrees in writing is free of such restrictions.

11. SCOPE OF INFORMATION. Information is subject to Section 10 (Restrictions on Disclosure and Use of Information) whether delivered orally or in tangible form and without regard to whether it has been identified or marked as confidential or otherwise subject to Section 10 (Restrictions on Disclosure and Use of Information). Each Party agrees to use its best efforts to mark or otherwise identify as confidential and/or proprietary all Information they desire to be subject to the terms of these provisions before furnishing it to the other Party. And, upon request, a Party shall promptly identify whether specified information must be held by the requesting Party subject to Section 10 (Restrictions on Disclosure and Use of Information). Information which is delivered orally may be summarized in writing by the disclosing Party and delivered to the receiving Party within forty-five (45) days after disclosure thereof.

12. ASSIGNMENT. LICENSEE shall not assign this Agreement or any right or interest under this Agreement, nor delegate any obligation to be performed under this Agreement without QTI’s prior written consent. For purposes of this Section 12, an “assignment” by LICENSEE under this Section shall be deemed to include, without limitation, any merger, consolidation, sale of all or substantially all of its assets, or any substantial change in the management or control of LICENSEE. Any attempted assignment in contravention of this Section 12 shall be void.

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13. APPLICABLE LAW. This Agreement is made and entered into in the State of California and shall be governed by and construed and enforced in accordance with the laws of the State of California, excluding the U.N. Convention on International Sale of Goods, without regard to conflict of laws principles. Any dispute, claim or controversy arising out of or relating to this Agreement, or the breach or validity hereof, including, without limitation, any improper use, copying or misappropriation of the Software, knowhow and related documentation or materials provided by QTI to LICENSEE shall be subject to the dispute resolution terms set forth in this Section regardless of any conflicting terms in any other agreements between the Parties. Therefore, any dispute, claim or controversy arising out of or relating to this Agreement, or the breach or validity hereof, shall be adjudicated only by a court of competent jurisdiction in the county of San Diego, State of California, and each Party hereby consents to the personal jurisdiction of such courts for that purpose. In the event of any proceeding to enforce the provisions of this Agreement, the prevailing Party (as determined by the court) shall be entitled to reasonable attorneys' fees as fixed by the court. LICENSEE, on behalf of itself and its Affiliates, acknowledges and agrees that (i) no Affiliate is a third party beneficiary of this Agreement, (ii) no Affiliate shall have any standing to initiate any claim or cause of action under this Agreement, and (iii) any and all claims against QTI which may arise under this Agreement shall be brought solely and exclusively by LICENSEE.

14. LATE CHARGE. Each Party may charge the other a late charge, with respect to any amounts that the other owes hereunder and fails to pay on or before the due date, [***].

15. EXPORT COMPLIANCE ASSURANCE. LICENSEE acknowledges that all hardware, software, source code and technology (collectively, "Products") obtained from QTI are subject to the US government export control and economic sanctions laws. LICENSEE assures that it, and its Affiliates will not directly or indirectly export, re-export, transfer or release (collectively, "Export") any Products or direct product thereof to any destination, person, entity or end use prohibited or restricted under US laws without prior US government authorization to the extent required by applicable regulation. The US government maintains embargoes and sanctions against certain countries, currently Cuba, Iran, North Korea, Sudan (N), Syria, and the Crimea region of Ukraine, but any amendments to the countries under a US embargo or sanction shall apply. LICENSEE acknowledges that other countries may have trade laws pertaining to import, use, Export or distribution of Products, and that compliance with the same is the responsibility of the LICENSEE. LICENSEE shall not Export Products listed in Supplement 2 to part 744 of the EAR for military end-uses, or to military end-users, as defined in part 744.21 at the following link:
http://www.bis.doc.gov/index.php/forms-documents/doc_download/578-part-744-control-policy-end-user-and-end-use-based.

16. NOTICES. All notices, requests, demands, consents, agreements and other communications required or permitted to be given under this Agreement shall be in writing and shall be sent to the Party to whom notice is to be given, by facsimile, and confirmed by first class mail, postage prepaid, or sent electronically and confirmed, properly addressed as follows (in which case such notice shall be deemed to have been duly given on the day the notice is first received by the Party). Notwithstanding the foregoing, the Parties acknowledge and agree that the notice address provided below may be updated upon written notice to the other Party, which notice shall expressly reference this Agreement and may be provided in electronic format via email.

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QTI: Qualcomm Technologies, Inc.
5775 Morehouse Drive
San Diego, California 92121 U.S.A.
Facsimile: [***]
Attn.: Secretary

LICENSEE: GoGo LLC
111 N. Canal Street
Suite 1500
Chicago, IL 60606
Email: [***]
Attn.: Mike Begler

17. PUBLICATION OF AGREEMENT. Except as may otherwise be required by law, LICENSEE shall keep this Agreement and its provisions confidential and shall not disclose the foregoing, without first obtaining the written consent of QTI, which consent shall not be unreasonably withheld. The confidentiality obligations hereunder do not apply to the existence of this Agreement or to the fact that QTI and LICENSEE have executed this Agreement, but do apply to all of the other terms and conditions of this Agreement. Any press release or other announcement by either Party concerning the entering into of this Agreement shall be subject to the prior written approval of the other Party at such other Party's sole discretion.

18. MISCELLANEOUS PROVISIONS. All amounts referenced in this Agreement and/or required to be paid hereunder shall be stated in, and shall be paid in, U.S. Dollars. This Agreement, together with all appendices and exhibits attached hereto, which are incorporated herein by this reference, and all Software Addenda, constitutes the entire agreement between the Parties and supersedes all prior negotiations, representations and agreements between the parties with respect to the subject matter hereof. If there is a conflict between the terms and conditions of this Agreement and a Software Addendum, the terms and conditions of such Software Addendum shall govern with respect to this Agreement. No addition or modification of this Agreement shall be effective unless made in writing and signed by the respective representatives of QTI and LICENSEE. The restrictions, limitations, exclusions and conditions set forth in this Agreement shall apply even if QTI or any of its Affiliates becomes aware of or fails to act in a manner to address any violation or failure to comply therewith. LICENSEE hereby acknowledges and agrees that the restrictions, limitations, conditions and exclusions imposed in this Agreement on the rights granted in this Agreement are not a derogation of the benefits of such rights. LICENSEE further acknowledges that, in the absence of such restrictions, limitations, conditions and exclusions, QTI would not have entered into this Agreement with LICENSEE. Subject to Section 7.3 (Termination of The Agreement or Software Addendum), if any of the provisions of this Agreement are determined to be invalid, illegal, or otherwise unenforceable, the remaining provisions shall remain in full force and effect. Each Party will, at its own expense, comply with all applicable governmental laws, statutes, ordinances, administrative orders, rules or regulations relating to its duties, obligations and performance under this Agreement. This Agreement may be executed in identical counterparts, each of which shall be deemed to be an original and, which taken together, shall be deemed to constitute the Agreement when a duly authorized representative of each Party has signed a counterpart. Each Party agrees that the delivery of this Agreement by facsimile or in electronic format via email shall have the same force and effect as delivery of original signatures and that each Party may use facsimile, electronic format signatures, and photocopies of signatures as evidence of the execution and delivery of this Agreement by each Party to

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the same extent that an original signature could be used. The Parties' rights and obligations which by their sense and context are intended to survive any termination or expiration of this Agreement shall so survive, including but not limited to Sections 2.5 (RECORDS AND AUDITS), 4 (WARRANTY DISCLAIMER), 5 (INTELLECTUAL PROPERTY), 6 (RESTRICTIONS ON AND REPRESENTATION REGARDING USE), 9 (LIMITATION OF LIABILITY), 10 (RESTRICTIONS ON DISCLOSURE AND USE OF INFORMATION), 11 (SCOPE OF INFORMATION), 13 (APPLICABLE LAW), 15 (EXPORT COMPLIANCE ASSURANCE), 17 (PUBLICATION OF AGREEMENT), and 18 (MISCELLANEOUS PROVISIONS) hereof.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date first set forth above.

Qualcomm Technologies, Inc.

By: /s/ Christopher Collato
Print Name: Christopher Collato
Title: Staff Financial Analyst

GoGo LLC

By: /s/ Michael A. Begler
Print Name: Michael A. Begler
Title: SVP, Production Operations

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APPENDIX A

Software Addendum Template

[] SOFTWARE ADDENDUM TO MASTER SOFTWARE AGREEMENT

Pursuant to and subject to the terms and conditions of the Master Software Agreement entered into between GoGo LLC (“LICENSEE”) and Qualcomm Technologies, Inc. (“QTI”) dated , 2018 (the “Master Software Agreement”), the Parties hereby enter into this [] Software Addendum to Master Software Agreement (the “[] Addendum”) as of , (the “Addendum Effective Date”).

For purposes of this [] Addendum only, the following capitalized terms shall have the meanings set forth below. Capitalized terms not otherwise defined in this [] Addendum shall have the meanings set forth in the Master Software Agreement.

“Device Software” means the software designed for use with the QTI ASIC, as described more fully in Exhibit 1 (SW) to this [] Addendum.

“QTI ASIC” means QTI’s [] ASIC.

“Standard Support Period” means a period beginning on the Addendum Effective Date and ending () months after the date of the final version release of the Device Software, as designated by QTI.

1. Device Software and QTI ASIC.

- 1.1 Subject to the terms and conditions of the Master Software Agreement, LICENSEE hereby agrees to license the Device Software from QTI.
- 1.2 Subject to the terms and conditions of the Master Software Agreement, LICENSEE may only use the Device Software in LICENSEE Products that incorporate the QTI ASIC in accordance with Section 3.1 (Right to Use Software for Commercial Purposes).
- 1.3 [For design and development licenses] Subject to the terms and conditions of the Master Software Agreement, LICENSEE may only use the Device Software in LICENSEE Products that incorporate the QTI ASIC in accordance with Section 3.2 (Right to Use Software for Design and Development Purposes).

2. Up-Front Fee and Payment Terms.

- 2.1 The Up-Front Fee for the Device Software shall be U.S.\$[].
- 2.2 [Insert applicable payment terms]

3. Miscellaneous. If there is a conflict between the terms and conditions of the Master Software Agreement and this [] Addendum, the terms and conditions of this [] Addendum shall govern with respect to the subject matter hereunder.

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The Parties agree that upon execution of this [] Addendum by both Parties, this [] Addendum shall become a part of the Master Software Agreement. This [] Addendum shall commence on the Addendum Effective Date and shall, unless earlier terminated in accordance with Section 7.3 (Termination of The Agreement or Software Addendum) of the Master Software Agreement, continue until any termination of the Master Software Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this [] Addendum to be executed as of the Addendum Effective Date first set forth above.

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APPENDIX B

QUALCOMM ADVANCED SOFTWARE

The QAS listed in any of the packages set forth below may, in QTI's sole discretion, be delivered to LICENSEE in either source code, object code and/or executable form. For purposes of clarification only, the Device Software may include any of the QAS from any of the packages noted below.

<u>Title</u>	<u>Description</u>
Brew Mobile Platform	Shall have the meaning given to it in Exhibit 1 to this Appendix B and LICENSEE's use of Brew Mobile Platform shall be subject to the rights and restrictions as set forth therein.
Camera Security SW	Means QTI's software that improves the security of image transmission between a standard RGB or IR camera and the Trusted Execution Environment for protected eye-based authentication or other uses. <u>LICENSEE's use of the Camera Security SW requires a Cryptographic Activation Certificate (as defined in Exhibit 5 to this Appendix B), use of which shall be subject to the restrictions set forth therein.</u>
CMX SW	Means QTI's Compact Media Extensions software. The CMX SW enables designated QTI ASICs to control the display of textual and/or graphical and/or animation and/or audio output while simultaneously synthesizing music and/or other sounds in a time sequenced manner.
eMBMS Client SW	Means the eMBMS (evolved Multimedia Broadcast Multicast Service) device service layer client software (including the PCAP tool and built-in Raptor 10 and Raptor Q decoders). QTI may, at its sole discretion, include additional features in eMBMS Client SW. Use of the additional features may be subject to an additional Incremental Fee.
Hardware Token SW	Means QTI's software that provides authenticated hardware-level device information such as unique device ID, boot and debug configuration, trusted location, device health state, etc. <u>LICENSEE's use of the Hardware Token SW requires a Cryptographic Activation Certificate (as defined in Exhibit 5 to this Appendix B), use of which shall be subject to the restrictions set forth therein.</u>
IMS Pro SW	Means QTI's IP (Internet Protocol) Multimedia Subsystem Pro software. The IMS Pro SW is designed generally in accordance with the applicable 3GPP and 3GPP2 standard protocols and operator specific custom extensions and modifications. The IMS Pro SW consists of the IMS core framework and associated packages (" IMS Packages "). The IMS Packages include, but are not limited to, the (i) " Basic IMS Package ", which package includes basic IMS Pro framework including SMS over 3G or

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LTE networks, (ii) “**VoLTE/VT Package**”, which package includes VoLTE, VT over LTE, VoWiFi, Video over WiFi, interworking and transfer of Voice and Video sessions between WiFi and LTE, SR-VCC, DR-VCC, Emergency Call, Basic Presence, media handling including RTP/RTCP for packetization, de-jitter buffer management for 3GPP and 3GPP2 codecs and voice/video lip synchronization, and (iii) “**RCS Package**”, which package includes Presence, IM, Multi-Chat, Image/Video Share, and File Transfer. QTI shall have the right, at its sole discretion, to modify the functionality contained in the IMS Pro SW, including but not limited to the inclusion of additional IMS Packages, which additional IMS Packages may be subject to an additional Incremental Fee.

ISDB-T Full Segment Extension SW

Means QTI’s Integrated Services Digital Broadcasting Terrestrial software (ISDB-T) designed to enable streaming and playback of protected video content using the ISDB-T standard of software conditional access system (CAS) ported to certain QTI ASICs. Independent of LICENSEE’s use of the ISDB-T Full Segment Extension SW, LICENSEE shall be solely responsible for obtaining a license from the RMP Administration Center for Terrestrial Broadcasting Content (TRMP) to enable access to ISDB-T broadcast services on ISDB-T Units.

IZat Navigation SW

Shall have the meaning given to it in Exhibit 3 to Appendix B and LICENSEE’s use of IZat Navigation SW shall be subject to the rights and restrictions as set forth therein.

Malware Protection SW

Means QTI’s software that attempts to provide real-time detection of “zero-day” (previously unknown) malware threats to mobile security and personal privacy. Uses machine learning-based malware detection, hardware-based security, and system-wide optimization to deliver improved efficiency and performance. LICENSEE’s use of the Malware Protection SW requires a Cryptographic Activation Certificate (as defined in Exhibit 5 to this Appendix B), use of which shall be subject to the restrictions set forth therein.

Media Transfer Protocol SW

Means QTI’s implementation of Microsoft’s Media Transfer Protocol specification that has been ported to certain of QTI’s versions of the QTI ASIC and designed to interface with the Windows Media DRM 10 SW or PlayReady SW.

Multimedia Video or MMV

Means QTI’s Multimedia Video (MMV) solution which, in QTI’s sole discretion, may be in either source code and/or object code form, as more fully described in Exhibit 4 to this Appendix B.

PlayReady SW

Means QTI’s PlayReady for Portable Devices software. PlayReady SW is designed to enable playback of content protected with PlayReady on a mobile device, which may include

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but not be limited to an implementation of Microsoft's PlayReady content access and protection technology for Portable Devices Porting Kit that has been ported to certain QTI ASICs. LICENSEE's use of PlayReady SW shall be subject to the restrictions and representations set forth set forth in item 1 of Exhibit 7 to this Appendix B.

Qualcomm 3D Face Recognition SW	Means QTI's software designed to enroll, recognize and authenticate the face of a user on Snapdragon chipsets for Android phones.
Qualcomm Adaptive Rate First Person View (FPV) SW	Means QTI's software to optimize video bit-rate based on wireless link quality to maintain low latency.
Qualcomm Audio Suite Package	Means QTI's Audio Context Detection Package SW, Qualcomm 3D Audio Suite, Qualcomm Voice Communication Suite and Qualcomm Voice UI Suite software package offerings, each as set forth on Exhibit 2 to Appendix B.
Qualcomm Deep Camera Software Suite	Means QTI's camera software offering which consists of the following features: <ul style="list-style-type: none">• Qualcomm AI Single-Camera Bokeh Software: Single camera bokeh effect for preview and snapshot• Qualcomm AI Zoom Software: Resolution enhancement
Qualcomm Depth From Stereo SW or DFS SW	Means QTI's software designed to determine depth or range using two cameras at a fixed, known distance from each other.
Qualcomm Digital Gimbal SW	Means QTI's image stabilization software for digital gimbal optimized on GPU, including fish-eye lens de-warping.
Qualcomm Electronic Speed Control (ESC) SW	Means QTI's software and reference schematics for motor speed controller software with propeller obstruction detection.
Qualcomm Iris Authentication SW	Means QTI's software designed to enroll, recognize and authenticate the irises of a user on Snapdragon chipsets for Android phones.
Qualcomm Location Multi Hertz GNSS SW	Means QTI's embedded Global Navigation Satellite System (GNSS) solution, tuned for drone flight, which includes multi hertz operation with low latency.
Qualcomm Multi-Camera and Video Image Stitching SW	Means QTI's imaging software to process feeds from multiple cameras simultaneously and perform the stitching in real-time for snapshot and video capturing using multiple camera sensors for 180 and 360 degree view.
Qualcomm Navigator Flight Control (AFC) SW	Means QTI's altitude motor flight control software running on QTI's Hexagon™ DSP.

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Qualcomm Optical Flow Detection SW	Means QTI's optimized image-based motion estimation software for robotics running on DSP, GPU or ARM.
Qualcomm Optical Image Stabilization SW	Means QTI's software that uses the gyroscope to detect hand jitter during long camera exposure times and optically corrects it, resulting in less blurriness in the image for a single lens camera or a dual lens camera.
Qualcomm Sonar Assisted Visual Inertial Odometry (SA-VIO) SW	Means QTI's localization software to improve flight performance and path planning by using a combination of computer vision, sensors, and sonar to create odometry.
Qualcomm Video Editing Software Suite	Means QTI's video editing software offering which consists of the following features: <ul style="list-style-type: none"> • Qualcomm Cinemagraph Software: Real-time cinemagraph creation • Qualcomm Slow-mo Replay Software: Super slow-motion video playback
Qualcomm Visual Inertial Odometry SW or VIO SW	Means QTI's software that provides increased accuracy for dead-reckoning in an unknown environment, both in terms of 3D position and 3D orientation (aka 6DOF).
Qualcomm Visual Obstacle Avoidance SW	Means QTI's real time obstacle detection and avoidance software.
Snapdragon Enhanced HMD VR SW	Means QTI's software that unleashes the full potential of the Snapdragon VR SW for standalone Head Mounted Displays (HMD). In addition to optimizing performance and power efficiency, HMDs will also benefit from better immersion and more advanced player-world interactions with 6 Degrees of Freedom (6DoF) positional tracking support, resulting in superior VR experience on a device designed for VR only.
Snapdragon Smartphone VR SW	Means QTI's software designed to abstract the complexity of immersive virtual reality (VR) with access to optimized, advanced VR features, and help attain improved VR performance and power efficiency on Snapdragon chipsets for Android smartphones. The Snapdragon Smartphone VR Service SW is designed to provide access to multiple VR technologies required for optimal VR experience – DSP sensor fusion, fast motion to photon, stereoscopic rendering and power management.
Sunlight Visibility Improvement (SVI) SW	Means QTI's display image enhancement software that enables improved viewing of display content in bright ambient conditions.
WideVine Security Level 1 Extension SW	Means QTI's WideVine security level 1 extensions designed to enable playback of content protected using Google, Inc.'s ("Google") WideVine technology that has been ported to certain QTI ASICs. <u>Independent of LICENSEE's use of any QTI</u>

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WideVine security level extensions, LICENSEE shall be solely responsible to obtain an independent license from Google in order to enable content protection using Google's WideVine technology.

Windows Media

Means the software program known as Windows Media Player as more fully described in Exhibit 6 to this Appendix B, which QTI has ported for use with VIDEO DECODE component of MMV which in QTI's sole discretion, may be in object code, executable or source code form. The Windows Media Player is designed to playback and/or stream media files with the following extensions: wma, .wmv, .asf.

Windows Media DRM 10 SW

Means QTI's Windows Media DRM 10 for Portable Devices software which in QTI's sole discretion, may be in either source code and/or object code form. The Windows Media DRM 10 SW is designed to enable playback of content protected with Windows Media DRM 10 on a mobile device, which may include but not be limited to an implementation of Microsoft's Windows Media DRM 10 for Portable Devices Porting Kit that has been ported to certain of QTI's versions of the QTI ASIC. LICENSEE's use of the Windows Media DRM 10 SW shall be subject to the restrictions and representations set forth in item 2 of Exhibit 7 to this Appendix B.

Windows Software Support Package

Means QTI's Windows Software Support Package. QTI's Windows Software Support Package is designed to support running the Windows operating system (OS) natively on certain QTI ASICs, which may include but not be limited to (i) an implementation of the OEM Adaptation Layer (OAL), the layer of code that resides between the OS kernel and certain QTI ASICs that is used to interface the OS to certain QTI ASICs, (ii) an implementation of the Radio Interface Layer software, the layer of code that allows Windows to interface with certain QTI ASICs, (iii) a software boot downloader that provides a mechanism for download and programming of the software image on certain QTI ASICs, and (iv) a variety of peripheral software and multimedia drivers to support the OS and associated features for the QTI hardware reference design platform. LICENSEE's use of QTI's Windows Software Support Package shall be subject to the restrictions and representations set forth in item 3 of Exhibit 7 to this Appendix B.

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EXHIBIT 1 TO APPENDIX B
BREW MOBILE PLATFORM

LICENSEE's use of Brew Mobile Platform shall be subject to the Agreement and the additional restrictions set forth herein.

1. Definitions.

“**Brew Mobile Platform**” means the Brew Mobile Platform software as further described in item 2 below, which enables the features and functions of QTI's Brew Mobile Platform system in wireless devices and includes Brew Mobile Platform Extensions and Brew Mobile Platform Porting Implementation Layer. Brew Mobile Platform serves as each Brew Mobile Platform Application's execution environment.

“**Brew Mobile Platform Applications**” means software applications that make direct calls to Brew Mobile Platform or Brew Mobile Platform Extensions.

“**Brew Mobile Platform Applications Portfolio**” is the set of Brew Mobile Platform Applications provided with Brew Mobile Platform as further described in item 2 below, and which may consist of third-party sample applications, as listed in item 2, below.

“**Brew Mobile Platform Extensions**” means software that (i) makes direct calls to Brew Mobile Platform, (ii) is required for the operation of certain executable Brew Mobile Platform Applications, and (iii) has no user interface (e.g., Java Virtual Machines, visual basic run-time, image or other media player libraries).

“**Brew Mobile Platform Porting Implementation Layer**” means the software which integrates Brew Mobile Platform with the Software.

“**Brew Mobile Platform Unit**” means an QAS Unit that incorporates any of the Brew Mobile Platform.

2. Description.

BREW MOBILE PLATFORM:

Documentation:

- Brew Mobile Platform Documentation
- Brew Mobile Platform API Reference Guide
- Brew Mobile Platform Porting Validation Suite and Test Studio Documentation
- Release notes as required

Software:

- Brew Mobile Platform Libraries source code, object code, and/or binaries
- Reference source code and header files for Software Integration
- Brew Mobile Platform Porting Validation Suite and Test Studio in source code, object code, and/or binary
- Brew Mobile Platform proprietary user interface

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Brew Mobile Platform Applications Portfolio: The set of Brew Mobile Platform Applications provided with Brew Mobile Platform.

Documentation:

- Brew Mobile Platform Applications Portfolio Documentation
- Third-Party Applications Documentation
- Release notes as required

Software:

- Brew Mobile Platform Softkey Applications Suite in source and binary code
- Third-Party Applications in binary form

3. Use Requirements and Restrictions for Brew Mobile Platform.

In addition to the rights set forth in Section 3 (Right to Use Software; Limitations on Rights), LICENSEE shall have the right to (i) modify only that portion of Brew Mobile Platform provided in source code form solely to add features or functionality to the BREW Mobile Platform Porting Implementation Layer and/or Brew Mobile Platform Applications or to create new Brew Mobile Platform Extensions and only pursuant to and as described in the Brew Mobile Platform documentation (the “**Documentation**”), including without limitation activating the capability to download Brew Mobile Platform Applications and Brew Mobile Platform Extensions over the air and compile such source code and any modifications thereto into object code for integration into Brew Mobile Platform Units; provided, however, LICENSEE shall not (and shall not permit its subcontractors, sublicensees or distributors to) activate or use any capability of the Software to download applications or content through a content and/or application delivery system or service which QTI provides without first entering into a separate agreement with QTI related thereto; (ii) use that portion of Brew Mobile Platform provided in source code form for debugging purposes; and (iii) use and reproduce portions of the Documentation in end user documentation for Brew Mobile Platform Units and distribute such reproduced portions solely as part of the end user documentation for the Brew Mobile Platform Unit. Except as set forth under (i) above, LICENSEE agrees that it will not otherwise modify the source code of Brew Mobile Platform under any circumstances.

4. Brew Mobile Platform Logo.

LICENSEE agrees to include the Brew Mobile Platform logo (the “**BMP Logo**”) in any related end-user documentation. In addition, LICENSEE agrees to comply with the following requirements with respect to its use of the BMP Logo on Brew Mobile Platform Units developed and manufactured by or on behalf of LICENSEE as set forth on the Brew Mobile Platform extranet at www.brewmp.com/mfg/logo and updated from time to time by QTI.

Notwithstanding any provision of this Agreement to the contrary, the delivery of third party sample applications with Brew Mobile Platform does not convey a license nor imply any rights to use such third party sample applications in any finished product under any patents or other intellectual property rights of such third party. Such third party sample applications are provided solely for non-commercial trial use, evaluation and demonstration purposes. A separate and independent license for such use may be required and LICENSEE shall be solely responsible to verify whether such license is needed in conjunction with the use of such third party sample applications. QTI shall in no way be liable for LICENSEE’s use of third party sample applications. Should LICENSEE desire to utilize the iType® software and WorldType® Layout software provided with Brew Mobile Platform (i) separately from the Brew Mobile Platform, or (ii) with fonts provided by QTI in Brew Mobile Platform other than “QCSans”, “QCSans Bold”, LICENSEE will need to enter into a separate license agreement with Monotype Imaging, Inc. (URL: www.monotypeimaging.com/contact/form_di.aspx).

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EXHIBIT 2 TO APPENDIX B
QUALCOMM AUDIO SUITE PACKAGE

“Audio Context Detection Package SW” includes, but is not limited to the following feature:

[***]

Qualcomm 3D Audio Suite

“3D Audio Capture Package SW” includes, but is not limited to the following features:

[***]

“3D Audio Ambisonics Package SW” includes, but is not limited to the following features:

[***]

“3D Audio Rendering Package SW” includes, but is not limited to the following features:

[***]

Qualcomm Voice Communication Suite

“Essential Voice Communication Package SW” includes, but is not limited to the following features:

[***]

“Advanced Voice Communication Package SW” includes, but is not limited to the following features:

[***]

Qualcomm Voice UI Suite

“Voice UI Voice Activation Package SW” includes, but is not limited to the following features:

[***]

“Voice UI Speech Enhancement Package SW” includes, but is not limited to the following features:

[***]

“Voice UI Voice Security Package SW” includes, but is not limited to the following feature:

[***]

From time to time QTI may, at its sole discretion, include additional features in any Qualcomm Audio Suite Package Offering, use of which shall be subject to [***]. QTI will provide notice to LICENSEE if such additional features are subject to [***]. LICENSEE acknowledges and understands that LICENSEE’s use of any portion of any Qualcomm Audio Suite Package Offering will be subject to [***].

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EXHIBIT 3 TO APPENDIX B
IZat NAVIGATION SW

LICENSEE's use of IZat Navigation SW shall be subject to the Agreement and the additional rights and restrictions set forth herein.

1. Definitions.

“**IZat Client-Server Components**” means the software components that access the IZat service.

“**IZat Navigation SW**” means the software which enables location functionality within Qualcomm's chipset portfolio inclusive of “IZat Client-Server Components”, “IZat Premium APIs” and “IZat Premium SW”.

“**IZat Premium APIs**” means the defined interfaces that applications use to access the location features.

“**IZat Premium SW**” means the software that contains one or more of the following features:

- Sensor-Assisted Positioning – 2.0 +
 - Also referred to as “ISAGNAV 2.0 +” including any follow-on releases
 - Pedestrian Dead Reckoning 1.0 + including any follow-on releases

“**IZat Service**” means the position location data service hosted by Qualcomm Atheros, Inc.

2. Use Restrictions.

Notwithstanding the rights set forth in Section 3 (Right to Use Software; Limitations on Rights), LICENSEE agrees that any implementation of the IZat Premium SW in a LICENSEE Product shall also include the IZat Premium APIs. If LICENSEE elects to enable all or a portion of the IZat Navigation SW in a LICENSEE Product, LICENSEE shall be solely responsible to ensure its compliance with any and all applicable federal, state and local statutes, laws and regulations including, but not limited to, federal, state and local statutes, laws and regulations pertaining to privacy, data protection, and information security. LICENSEE agrees not to interfere with the IZat Service. LICENSEE acknowledges and understands that the IZat Service may not be available in all countries.

Except as provided in a separate express written agreement with QTI or its Affiliate as provided below, LICENSEE agrees that any use of the IZat Client-Server Components in a LICENSEE Product shall only be in a LICENSEE Product that uses an operating system supported by QTI or its Affiliate (as of the date of the Agreement, Android and Firefox are supported) (“**Supported OS**”). [***]. For LICENSEE Products using a Supported OS, [***], LICENSEE shall not intentionally activate the IZat Client-Server Components; only the end user should activate the IZat Client-Server Components. With respect to the Firefox based operating system, LICENSEE agrees to implement the IZat Framework which is delivered together with the Firefox operating system LICENSEE receives from Mozilla Corporation in accordance with the terms set forth herein.

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LICENSEE may modify the user interface of the IZat Framework solely for the purpose of conforming the look and feel of the IZat Framework to the look and feel of the user interface of the LICENSEE Product; provided, however, that under no circumstances shall LICENSEE: (i) change, remove, delete, obscure, render unreadable, add to, or modify the words of the text in the user interface of the IZat Framework (other than changes in font or color) or any functionality of the IZat Framework (including, but not limited to, changing any hypertext links or opt-in functionalities), or (ii) in any manner change the user interface of the IZat Framework such that it is not clear and conspicuous to the end user.

For LICENSEE Products that use an operating system not supported by QTI or its Affiliate, a separate express written agreement authorizing the use and implementation requirements of the IZat Client-Server Components will be necessary.

From time to time QTI may, at its sole discretion, include additional features in IZat Premium SW. Use of the additional features may be subject to an additional Incremental Fee. QTI will provide notice to LICENSEE if such additional features are subject to an additional Incremental Fee. LICENSEE acknowledges and understands that LICENSEE's use of any portion of IZat Premium SW will be subject to the Incremental Fees for IZat Premium Units set forth in Exhibit 8 to Appendix B.

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EXHIBIT 4 TO APPENDIX B
MULTIMEDIA VIDEO (MMV)

Multimedia Video (MMV) consists of the following functional components and their associated protocol stacks and reference user interface as outlined below. The extent to which such functions are supported may vary depending on the applicable Device Software and corresponding QTI ASIC.

AUDIO ONLY:

[***]

VIDEO DECODE:

Video Decoder support may include but is not limited to the following:

[***]

Audio Decoder and post-processing support may include but is not limited to the following:

[***]

File Format support may include but is not limited to the following:

[***]

Video Post-Processing support may include but is not limited to the following:

[***]

VIDEO ENCODE:

Video Encoder support may include but is not limited to the following:

[***]

Image Encoder support may include but is not limited to the following:

[***]

Audio Encoder support may include but is not limited to the following:

[***]

File Format support may include but is not limited to the following:

[***]

Video Pre-Processing support may include but is not limited to the following:

[***]

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VIDEO TELEPHONY:

Video Decoder/Encoder support may include but is not limited to the following:

[***]

Audio Decoder/Encoder Support may include but is not limited to the following:

[***]

Protocol Support may include but is not limited to the following:

[***]

LICENSEE acknowledges and understands that the functions provided by MMV are implemented in the QTI ASIC and/or QAS and LICENSEE's use of any portion of MMV will be subject to the Incremental Fees for MMV Units set forth in Exhibit 8 to Appendix B.

Notice.

With the delivery of MMV, LICENSEE has received (or may receive) from QTI certain audio and video coding technology. The Agreement does not convey a license nor imply any rights to use any patents or other intellectual property rights of any third party. VIA Licensing and MPEGLA have publicly represented having been appointed to administer implementation licenses on behalf of patent holders to audio and video coding technologies relating to MPEG-2, MPEG4, AAC, AVC/H.264, VC-1, MPEG-4 Visual and certain MPEG4 video profiles, respectively. Consequently, a separate and independent license from one or more relevant patent holders for such use may be required and LICENSEE shall be solely responsible to verify whether such license is needed in conjunction with the use of MMV. Further, Coding Technologies has represented that it holds patents and other intellectual property rights with regards to implementation of HE AAC audio decoding technology. Consequently, a separate and independent license from Coding Technologies may be required and LICENSEE shall be solely responsible to verify whether such license is needed in conjunction with the use of MMV.

The Software may include software of DTS Licensing Limited ("DTS") which is protected by copyright and other intellectual property rights of DTS. LICENSEE may not distribute or use the DTS software for commercial purposes without a separate license from DTS. DTS has not granted QTI any right under the intellectual property rights of DTS to sublicense or otherwise transfer to LICENSEE any right to use the DTS software for commercial distribution or use. LICENSEE shall be solely responsible to obtain such separate license from DTS. DTS shall be a third party beneficiary to this Agreement solely with respect to LICENSEE'S obligations and restrictions in this notice.

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EXHIBIT 5 TO APPENDIX B
CRYPTOGRAPHIC ACTIVATION CERTIFICATE

Definition:

“**Cryptographic Activation Certificate**” means a digital certificate issued by QTI that enables LICENSEE to use certain QAS SW features (as identified on Appendix B as requiring the use of a Cryptographic Activation Certificate) (the “**Certificate Dependent SW**”) as a party authorized by QTI to do so.

Additional Use Requirements and Restrictions for Cryptographic Activation Certificate

LICENSEE shall maintain the confidentiality and security of the Cryptographic Activation Certificate, by, including but not limited to, employing the following procedures for safeguarding the Cryptographic Activation Certificate:

- Maintain a secure location on LICENSEE’s premises or commercial hosting facility in which the Cryptographic Activation Certificate will be stored;
- Allow only Authorized Employees (as defined below) to access and provision the Cryptographic Activation Certificate. “**Authorized Employees**” means LICENSEE’s employees (a) who have an absolute need to access the Cryptographic Activation Certificate in order to carry out their specific job requirements in line with the permitted actions hereunder, and (b) who are bound in writing to protect the confidentiality of the Cryptographic Activation Certificate.
- LICENSEE shall notify QTI immediately, and shall follow up in writing, if LICENSEE suspects any actual or potential loss, disclosure, or other compromise of the Cryptographic Activation Certificate, or discovers any unauthorized use or misuse of the Cryptographic Activation Certificate. LICENSEE shall cooperate with QTI to its fullest capability to prevent any loss, disclosure, or further unauthorized use of the compromised Cryptographic Activation Certificate, or misuse of the Cryptographic Activation Certificate.

Data Collection & Privacy

- **Data Collection and Use.** The Certificate Dependent SW will collect the data elements listed below and (i) send such data elements to QTI in the United States for the purpose of: (a) QTI software development and improvement, (b) software debugging, (c) confirming compliance with this Agreement, (d) developing new products and services, (e) other internal business uses, and (f) generation of reports or analysis (containing aggregated data and/or not capable of identifying a natural person) that QTI may share with third parties or the public, and (ii) may make available such data elements to the LICENSEE so that LICENSEE may use such data for complementing their existing data collection operation and developing new products and services ((i) and (ii) collectively referred to herein as “**Data Collection**”).
- **Privacy and Data Protection Compliance.** LICENSEE is in control of the user interface of LICENSEE applications and therefore shall ensure that the use of the Certificate Dependent SW is compliant with applicable privacy, data protection, and information security laws, rules, regulations, orders and other legal requirements pertaining to the distribution and operation of the Certificate Dependent SW, including, but not limited to, with respect to providing any applicable

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notice to end users, obtaining any applicable consent from end users, and enabling end users to disable or turn-off Data Collection (if and where applicable). Notwithstanding the foregoing, LICENSEE shall, at a minimum present a notice to the end user (for example within LICENSEE's privacy policy) before any Data Collection occurs informing him/her of the Data Collection and that the Certificate Dependent SW sends the collected data to QTI (specifically identified by name) in the United States.

Collected Data

Device configuration:

- Device: CPU ABI/API, android version, OS build/version, kernel version, device model, device build, device board, device hardware, product name, product brand, product manufacturer
- Memory: total/free memory, total/free swap memory
- Connectivity: connection type, network MCC-MNC, SIM MCC-MNC (operator identifiers)
- Storage: total/free storage, encrypted flag
- Version: data packet version, Timestamp, GUID

Hardware attestation:

- A unique software ID that is used to identify an instance of Certificate Dependent SW on a device. The unique ID is a one-way cryptographic hash based on the serial number of the chipset.
- OEM ID, OEM PK hash
- Boot state, Debug state, Rollback-prevention state
- Chipset version
- QSEE version
- Timestamp
- Run-time integrity: true/false/unknown indication of Android integrity, timestamp for the check, cached/non-cached indication, debug information
- Telemetry App: package name, package version number, APK sha256, APK Certificate sha256

Cloud-side augmentation:

- Timestamp
- City level location (from IP, immediately discarded)

In addition, the following data will be collected when the Malware Protection Software is enabled with the Cryptographic Activation Certificate.

Malicious behavior information:

- Collection time interval
- Core version
- For each loaded behavior "model": model name, version, number of features, number of detections, Licensee name, Licensee app package name/version code/version name

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-
- For each “malicious” behavior detected: timestamp, confidence number, triggering behaviors, behavior vector, severity level, offending application: package name/version code/version name, APK sha256, APK size, APK installation source, APK “static prediction” score

Prevented APP installation information:

- Blocked application: package name, APK sha256, APK installation source, APK “static prediction” score
- Licensee name

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EXHIBIT 6 TO APPENDIX B
WINDOWS MEDIA

Windows Media is a software program delivered in executable form only that may contain the following capabilities:

Codecs:

[***]

Streaming Protocols:

[***]

Supported Windows Media File Formats:

[***]

Miscellaneous Features:

[***]

Notice: The Windows Media software includes technology owned by Microsoft Corporation and cannot be used or further distributed without a license from Microsoft Corporation or a Microsoft affiliate. LICENSEE shall be solely responsible to obtain an independent license from Microsoft Corporation with respect to any such use.

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EXHIBIT 7 TO APPENDIX B
MICROSOFT RESTRICTIONS AND REPRESENTATIONS

1. WINDOWS SOFTWARE SUPPORT PACKAGE RESTRICTIONS AND REPRESENTATIONS:

LICENSEE understands that portions of QTI's Windows Software Support Package include technology owned by Microsoft Corporation, and that Microsoft Corporation has imposed certain additional requirements and restrictions on the distribution and use of QTI's Windows Software Support Package which must be observed by LICENSEE. By LICENSEE's signature below, LICENSEE hereby certifies to QTI that (a) LICENSEE has accepted the applicable End User License Agreement from Microsoft Corporation pursuant to which Microsoft Corporation has granted LICENSEE the right to use the OS in wireless devices, and (b) LICENSEE will use QTI's Windows Software Support Package solely in connection with a QTI ASIC and the OS.

GoGo LLC

By: /s/ Michael A. Begler

Print Name: /s/ Michael A. Begler

Title: SVP, Production Operations

2. WINDOWS MEDIA DRM 10 FOR DEVICES RESTRICTIONS AND REPRESENTATIONS:

LICENSEE understands that the Windows Media DRM 10 SW contains technology subject to certain intellectual property rights of Microsoft Corporation. Use or distribution of this technology outside of the Windows Media DRM 10 SW is prohibited without the appropriate license(s) from Microsoft Corporation. By LICENSEE's signature below, LICENSEE hereby certifies to QTI that (a) LICENSEE has accepted either the Windows Media DRM 10 for Devices Development and Interim Product Distribution Agreement and/or the Windows Media DRM 10 for Devices Final Product Distribution Agreement from Microsoft Corporation pursuant to which Microsoft Corporation has granted LICENSEE the right to use software based on the Windows Media DRM 10 for Portable Devices Porting Kit in wireless devices, and (b) LICENSEE will use the Windows Media DRM 10 SW and Media Transfer Protocol SW solely in connection with a QTI ASIC.

GoGo LLC

By: /s/ Michael A. Begler

Print Name: /s/ Michael A. Begler

Title: SVP, Production Operations

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Unless LICENSEE certifies as set forth in this item 2 and the agreement referenced in (a) remains current with Microsoft Corporation, QTI is restricted from delivering any of the Windows Media DRM 10 SW to LICENSEE hereunder.

3. PLAYREADY FOR DEVICES RESTRICTIONS AND REPRESENTATIONS:

LICENSEE understands that the PlayReady SW contains technology subject to certain intellectual property rights of Microsoft Corporation. Use or distribution of this technology outside of the PlayReady SW is prohibited without the appropriate license(s) from Microsoft Corporation. By LICENSEE's signature below, LICENSEE hereby certifies to QTI that (a) LICENSEE has accepted either the PlayReady Devices Development and Intermediate Product Distribution Agreement and/or the PlayReady Device Final Product Distribution License Agreement from Microsoft Corporation pursuant to which Microsoft Corporation has granted LICENSEE the right to use software based on the PlayReady for Portable Devices Porting Kit in wireless devices, and (b) LICENSEE will use the PlayReady SW and Media Transfer Protocol SW solely in connection with a QTI ASIC.

GoGo LLC

By: /s/ Michael A. Begler

Print Name: /s/ Michael A. Begler

Title: SVP, Production Operations

Unless LICENSEE certifies as set forth in this item 3, the agreement(s) referenced in (a) remains current with Microsoft Corporation, and LICENSEE is included on Microsoft Corporation's list of approved PlayReady licensees, QTI is restricted from delivering any of the PlayReady SW to LICENSEE hereunder.

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**EXHIBIT 8 TO APPENDIX B
INCREMENTAL FEES FOR QAS UNITS**

Incremental Fees for QAS Units Incorporating Camera Security SW (“Camera Security Units”):

[**] [**]

Incremental Fees for QAS Units Incorporating CMX SW (“CMX Units”):

<u>CMX Units</u>	<u>Incremental CMX Fees</u>
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

Incremental Fees for QAS Units Incorporating any of the following QAS Features (“Drone Basic Units”):

Drone Basic Unit Features:

[**] [**]

Incremental Fee for QAS Units Incorporating eMBMS Client SW (“eMBMS Units”)*:

[**] [**]
*[**]

Incremental Fee for QAS Units Incorporating Essential Voice Communication Package SW (“Essential VC Package Units”)*:

[**] [**]
[**]

Incremental Fee for QAS Units Incorporating Hardware Token SW (“Token Units”):

[**] [**]

Incremental Fees for QAS Units Incorporating IMS Pro SW (“IMS Pro Units”):

[**] [**] [**]
[**] [**] [**]

Incremental Fee for QAS Units Incorporating ISDB-T Full Segment Extension SW (“ISDB-T Units”):

[**] [**]

Incremental Fees for QAS Units Incorporating IZat Premium SW (“IZat Premium Units”):

<u>IZat Premium Units</u>	<u>Incremental Fee per IZat Premium Unit for Sensor Assisted Positioning (“SAP”) component + Pedestrian Dead Reckoning</u>
[**]	[**]
[**]	[**]
[**]	[**]

INCREMENTAL FEES FOR QAS UNITS

(continued)

Incremental Fee for QAS Units Incorporating Malware Protection SW (“Malware Protection Units”):

[***] [***]

Incremental Fees for QAS Units Incorporating Multimedia Video (“MMV Units”):

[***] [***]
[***] [***]

Incremental Fee for QAS Units Incorporating PlayReady SW (“PlayReady Units”):

[***] [***]

Incremental Fee for QAS Units Incorporating Qualcomm 3D Face Recognition SW (“3D Face Recognition Units”):

[***] [***]

Incremental Fees for Optional Software Units Incorporating any Qualcomm Audio Suite Package Offering (excluding Essential VC Package Units) (“Audio Suite Package Units”):

Qualcomm Audio Suite Package Offerings*

[***]

Per Audio Suite Package Unit Incremental Fees:

[***] [***]
[***] [***]
[***] [***]
[***] [***]
[***] [***]
[***] [***]
[***] [***]
[***] [***]
* [***]

Incremental Fees for QAS Units Incorporating Qualcomm Deep Camera Software Suite (“Deep Camera Software Suite Units”):

Qualcomm Deep Camera Software Suite Features:

[***]

Per Deep Camera Software Suite Unit:

[***] [***]
[***] [***]

Incremental Fee for QAS Units Incorporating Qualcomm Digital Gimbal SW (“Digital Gimbal Units”):

[***] [***]

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INCREMENTAL FEES FOR QAS UNITS

(continued)

Incremental Fee for QAS Units Incorporating Qualcomm Iris Authentication SW (“Iris Authentication Units”):

[***] [***]

Incremental Fee for QAS Units Incorporating Qualcomm Location Multi Hertz GNSS SW (“GNSS Units”):

[***] [***]

Incremental Fees for QAS Units Incorporating Qualcomm Multi-Camera and Video Image Stitching SW (“Camera and Video Stitching Units”):

[***] [***]

Incremental Fee for QAS Units incorporating Qualcomm Optical Image Stabilization SW (“Optical Image Stabilization Units”)

[***] [***]
[***] [***]

Incremental Fees for QAS Units incorporating Qualcomm Video Editing Software Suite (“Video Editing Software Suite Units”):

Video Editing Software Suite Features:

[***]

[***] [***]
[***] [***]
[***] [***]

Incremental Fees for QAS Units Incorporating Snapdragon Enhanced HMD VR SW (“HMD VR SW Units”):

[***] [***]

Incremental Fees for QAS Units Incorporating Snapdragon Smartphone VR SW (“VR SW Units”):

[***] [***]
[***] [***]
[***] [***]

Incremental Fee for QAS Units Incorporating Sunlight Visibility Improvement SW (“SVI Units”):

[***] [***]

Incremental Fee for QAS Units Incorporating WideVine Security Level 1 Extension SW (“WideVine Units”):

[***] [***]

Incremental Fee for QAS Units Incorporating Windows Media DRM 10 SW (“WMDRM 10 Units”):

[***] [***]

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LEGAL NOTICES

The legal notices set forth herein may be updated from time to time at QTI's sole discretion upon written notice to LICENSEE, which notice may be provided in electronic format via email. Such updates shall not be deemed to be an addition or modification requiring written amendment per Section 18 (Miscellaneous Provisions).

The Software may include MPEG Layer-3 audio decoding technology. Notwithstanding any provision of this Agreement to the contrary, the delivery of the Software does not convey a license nor imply any rights to use MPEG Layer-3 audio decoding technology in any finished product under any patents or other intellectual property rights of a third party. A separate and independent license for such use may be required and LICENSEE shall be solely responsible to verify whether such license is needed in conjunction with the use of the MPEG Layer-3 Audio Decoder feature.

The Software may include G.729 and G.729 Annex A Codecs. This Agreement does not convey a license nor imply any rights to use such codecs under the intellectual property rights of any third party. Sipro Lab Telecom ("**Sipro**") has publicly represented having been appointed to administer implementation licenses for the G.729 and G.729 Annex A Codecs. Consequently, a separate and independent license from Sipro or others for such use may be required and LICENSEE shall be solely responsible to verify whether such license(s) is needed in conjunction with the use of the G.729 and G.729 Annex A Codecs.

The Software may include DivX, Inc. software. This Agreement does not convey a license nor imply any rights to use or distribute DivX, Inc. software under DivX, Inc.'s copyrights or other intellectual property rights, and such software cannot be incorporated into wireless end user products or further distributed without a separate license from DivX, Inc. LICENSEE shall be solely responsible to obtain an independent license from DivX, Inc. with respect to such use.

The Software may include an "On-Demand Positioning" feature. On-Demand Positioning ("**ODP**") is a feature included with the gpsOne engine and, when enabled, its purpose is to improve time-to-first fix and accuracy when an end-user issues an explicit position request (location session request).

The ODP feature will be disabled by default and we recommend LICENSEE provide a software configuration that notifies the user of the ODP feature and a settings preference that enables users to toggle the ODP feature ON/OFF. While the ODP feature may bring significant time-to-first-fix and accuracy benefits, there may be some impact on power consumption based on the frequency of positioning attempts if the ODP feature is enabled.

If LICENSEE elects to enable the ODP feature, LICENSEE shall be solely responsible to ensure its compliance with any and all applicable federal, state and local statutes, laws and regulations pertaining to privacy matters and information.

The Software may include the ON2 VP6 decoder and ON2 VP7 encoder and decoder software. The ON2 VP6 decoder and ON2 VP7 encoder and decoder software provided with the Software contains some proprietary work of ON2 Technologies, Inc. ("**ON2**") and is protected by copyright and other intellectual property rights. ON2 has not granted QTI any right under the intellectual property rights of ON2 to sublicense or otherwise transfer to LICENSEE any right to use the ON2 VP6 decoder and ON2 VP7 encoder and decoder software for commercial distribution or use. LICENSEE shall be solely responsible for obtaining a license from ON2 before any commercial distribution or use of the Software with the ON2 VP6 decoder and ON2 VP7 encoder and decoder software. ON2 shall be a third party beneficiary to this Agreement solely with respect to LICENSEE'S obligations and restrictions in this paragraph.

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The license of any Software to LICENSEE does not convey to LICENSEE any consents to use or distribute any Software, alone or in combination with other products, or any other rights under any patents of Nokia Corporation or any of its affiliates (collectively, “**Nokia**”) in such products.

The Software may include Sorenson video decoder software, which comprises proprietary work of Sorenson Media, Inc. (“**Sorenson**”) and is protected by copyright, trade secret and other intellectual property rights. Sorenson has not granted QTI any right under the intellectual property rights of Sorenson to sublicense or otherwise transfer to LICENSEE any right to use the Sorenson video decoder for commercial distribution or use. LICENSEE shall be solely responsible for obtaining such a license from Sorenson granting rights for commercial distribution or use before LICENSEE shall undertake any commercial distribution or use of the Software with the Sorenson video decoder. Sorenson shall be a third party beneficiary to this Agreement solely with respect to LICENSEE’S obligations and restrictions in this paragraph.

The Software may include a modified JPEG encoder that includes an Index Table which specifies the length of each data unit (8x8 block) in the image in terms of number of bits. Any and all usage of the Index Table in whole or in part requires a valid written license agreement between LICENSEE and Scalado AB. No right, title or interest in and to the Index Table is conveyed by QTI, and any use of the Index Table without a written license agreement from Scalado AB constitutes infringement of Scalado’s intellectual property rights.

The Software may include Dolby licensed technology that may be protected by copyright and other intellectual property rights of Dolby Laboratories, Inc. (“**Dolby Technology**”) LICENSEE can use the Dolby Technology provided with the Software solely for internal testing and evaluation purposes only. Supply of this Dolby Technology does not convey a license nor imply a right under any patent, or any other industrial or intellectual property right of Dolby Laboratories, to use this Dolby Technology in any finished end-user or ready-to-use final product. LICENSEE is hereby notified that a license for such use is required from Dolby Laboratories.

The Software may include proprietary work of SRS Labs, Inc. (“**SRS**”). The SRS licensed technology that may be provided with the delivery of the Software contains some proprietary work of SRS. No right or license to use the SRS licensed technology, other than for internal evaluation purposes, is provided by QTI. LICENSEE shall be solely responsible for obtaining a license from SRS before any commercial distribution or use of the SRS licensed technology.

The Software may include QTI’s Enhanced Location Service (“**QELS**” formerly referred to as “XTRA-T”). QELS may help improve location accuracy and time-to-first-fix, as well as improve battery conservation by: (i) collecting certain location data from the device, and (ii) downloading certain applicable data to the device regarding surrounding cell towers and other location data points. QELS is implemented in the Software through the use of an opt-in application (the “**QELS App**”) that the end user must click to allow. LICENSEE may elect to incorporate QELS in a LICENSEE Product solely in an unmodified form or remove the functionality in its entirety. To include QELS, LICENSEE shall:

- a) Not intentionally activate QELS. As stated above, only the end user should activate QELS;

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-
- b) Determine with the carrier where the QELS App icon would appear; and
 - c) Ensure the QELS App launches during first LBS session or upon launch of the QELS icon.

Note that QELS is currently only designed for the Android operating system. If any future release of QELS supports other operating systems, LICENSEE will be advised as to any additional or different implementation requirements.

The Software may include certain audio and video coding technology. The Agreement does not convey a license nor imply any rights to use any patents or other intellectual property rights of any third party. VIA Licensing and MPEGLA have publicly represented having been appointed to administer implementation licenses on behalf of patent holders to audio and video coding technologies relating to MPEG-2, MPEG4, AAC, AVC/H.264, VC-1, MPEG-4 Visual and certain MPEG4 video profiles, respectively. Consequently, a separate and independent license from one or more relevant patent holders for such use may be required and LICENSEE shall be solely responsible to verify whether such license is needed in conjunction with the use of MMV. Further, Coding Technologies has represented that it holds patents and other intellectual property rights with regards to implementation of HE AAC audio decoding technology. Consequently, a separate and independent license from Coding Technologies may be required and LICENSEE shall be solely responsible to verify whether such license is needed in conjunction with the use of MMV.

The Software may include Scalado imaging solutions software (“**Scalado Software**”). The Scalado Software is for internal testing and evaluation purposes only. No other license or right is being provided to LICENSEE. LICENSEE may not distribute or use the Scalado Software for commercial purposes without a separate license from Scalado AB or its designated affiliate that is applicable to the Scalado Software. LICENSEE shall be solely responsible to obtain such separate license from Scalado AB.

The Software may include software of DTS Licensing Limited (“**DTS**”) which is protected by copyright and other intellectual property rights of DTS. LICENSEE may not distribute or use the DTS software for commercial purposes without a separate license from DTS. DTS has not granted QTI any right under the intellectual property rights of DTS to sublicense or otherwise transfer to LICENSEE any right to use the DTS software for commercial distribution or use. LICENSEE shall be solely responsible to obtain such separate license from DTS. DTS shall be a third party beneficiary to this Agreement solely with respect to LICENSEE’S obligations and restrictions in this notice.

The use of unmanned aircraft systems, unmanned aerial vehicles, autonomous vehicles, and similar devices (collectively, “**Drones**”) may constitute a potentially dangerous activity and may result in significant harm to property, injury, or death. If LICENSEE elects to use any Software in connection with LICENSEE’S development or manufacture of Drones, 1) LICENSEE assumes all risks and liabilities that may result from such use and 2) LICENSEE shall be solely responsible to ensure its compliance with any and all applicable federal, state, and local statutes, laws, regulations, and guidelines, including, without limitation, Federal Aviation Administration (FAA) restrictions or warnings.

The provision or license of Software to LICENSEE does not convey any license or other right under any patents of QUALCOMM Incorporated or SnapTrack, Inc.

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Qualcomm® aptX™ audio is a product of Qualcomm Technologies International, Ltd. Use of aptX with the Device Software and associated QTI ASIC is subject to a separate license agreement with Qualcomm Technologies International, Ltd.

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THE USE OF THE FOLLOWING NOTATION IN THIS EXHIBIT INDICATES THAT THE CONFIDENTIAL PORTION HAS BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION: [*]**

AMSS6695 SOFTWARE ADDENDUM TO MASTER SOFTWARE AGREEMENT

Pursuant to and subject to the terms and conditions of the Master Software Agreement entered into between GoGo LLC (“**LICENSEE**”) and Qualcomm Technologies, Inc. (“**QTI**”) dated June 13, 2018 (the “**Master Software Agreement**”), the Parties hereby enter into this AMSS6695 Software Addendum to Master Software Agreement (the “**AMSS6695 Addendum**”) as of June 13, 2018 (the “**Addendum Effective Date**”).

For purposes of this AMSS6695 Addendum only, the following capitalized terms shall have the meanings set forth below. Capitalized terms not otherwise defined in this AMSS6695 Addendum shall have the meanings set forth in the Master Software Agreement.

“**CSA**” means that certain Components Supply Agreement dated May 31, 2018, by and between Qualcomm Technologies, Inc. (“**QTI**”) and LICENSEE.

“**Device Software**” means the AMSS6695 software designed for use with the QTI ASIC, as described more fully in Exhibit 1 (AMSS6695 SW) to this AMSS6695 Addendum.

“**QTI ASIC**” means [***].

“**Standard Support Period**” means the period beginning on the Addendum Effective Date and continuing for a period of the earlier of (i) the date on which the applicable Cases Cap (as defined in Exhibit 2 (Support Services and Fees)) has been reached, (ii) the date on which this AMSS6695 Addendum is terminated for any reason, (iii) twelve months (12) months following the Addendum Effective Date, or (iv) the date on which QTI elects to discontinue the Support Services hereunder as permitted under Section 2.8 of this AMSS6695 Addendum.

“**Support Fee**” means the fee associated with the provision of Support Services as set forth on Exhibit 2 (Support Services and Fees) to this AMSS6695 Addendum.

“**Support Services**” means those services as more particularly described in Exhibit 2 (Support Services and Fees) to this AMSS6695 Addendum, and subject to payment of a Support Fee.

1. Device Software and QTI ASIC.

- 1.1 Subject to the terms and conditions of the Master Software Agreement, LICENSEE hereby agrees to license the Device Software from QTI.
- 1.2 Subject to the terms and conditions of the Master Software Agreement, LICENSEE may only use the Device Software in LICENSEE Products that incorporate the QTI ASIC in accordance with Section 3.1 (Right to Use Software for Commercial Purposes).

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2. Support Services.

- 2.1 Subject to the terms and conditions of the Master Software Agreement and this AMSS6695 Addendum, and in addition to the provision of bug fixes and upgrades to the Software as set forth in Section 2.1 (Delivery of Software) of the Master Software Agreement during the Standard Support Period, QTI will use commercially reasonable efforts to perform Support Services during the Standard Support Period. All Support Services shall be provided at QTI's or its affiliates facilities unless otherwise specified by QTI.
- 2.2 Support Services shall be limited to the Device Software. LICENSEE may only request and use such Support Services in conjunction with LICENSEE's use of the Device Software in LICENSEE Products that incorporate the QTI ASIC.
- 2.3 QTI's obligation to provide Support Services shall be conditioned upon (i) LICENSEE placing the required purchase order(s) for the Support Services in the amount of the applicable Support Fee as provided below, and (ii) QTI's receipt from LICENSEE of the applicable Support Fee in full as provided below. Until such time that both conditions are met, QTI shall have no obligation to provide, and LICENSEE shall have no right to request or receive, any Support Services hereunder.
- 2.4 QTI IS PROVIDING THE SUPPORT SERVICES ON AN "AS IS" BASIS. TO THE MAXIMUM EXTENT PERMITTED BY LAW, QTI, ITS AFFILIATES, AND THEIR RESPECTIVE LICENSOR(S) AND SUPPLIER(S) EACH EXPRESSLY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT FOR THE SUPPORT SERVICES.
- 2.5 The limitations of liability provided for in Section 9 (LIMITATION OF LIABILITY) of the Master Software Agreement shall apply to the Support Services except that the references to "Software" and "Up-front Fee" in said provision shall be replaced with references to "Support Services" and "Support Fee", respectively, when referring to Support Services.
- 2.6 For the purpose of Section 5 (INTELLECTUAL PROPERTY) of the Master Software Agreement, the references to "Software" shall be deemed to include Support Services.
- 2.7 LICENSEE may request QTI provide support for services other than those set forth on Exhibit 2 (Support Services and Fees). QTI shall have the sole discretion to accept/reject any such request, and if QTI agrees to offer such support to LICENSEE it shall be made available subject to a separate agreement between the Parties and payment by LICENSEE of an additional Support Fee to QTI in an amount to be mutually agreed upon by the Parties.
- 2.8 In addition to QTI's termination rights provided elsewhere in this AMSS6695 Addendum and the Master Software Agreement, QTI shall also have the right at any time during the Standard Support Period to elect to discontinue, without penalty, the provision of Support

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Services to LICENSEE for any reason. In such instance, QTI shall notify LICENSEE of such election in writing (e-mail notification is acceptable) at which point (i) such discontinuation shall take effect upon the date of such notification and QTI shall have no further obligation to provide any Support Services from such date, and [***].

3. Fees and Payment Terms.

3.1 Up-Front Fee. [***].

3.2 Support Fee. Concurrently with the execution of this AMSS6695 Addendum, LICENSEE shall place a purchase order with QTI for the Support Fee associated with the Support Services LICENSEE has elected to receive. LICENSEE shall submit such purchase order for “AMSS6695 CE Services” to SWsupport_POs@qti.qualcomm.com. Upon receipt of the purchase order, QTI shall invoice LICENSEE for the Support Fee and such Support Fee is due and payable upon LICENSEE’s receipt of the invoice. Upon QTI’s receipt of the Support Fee, QTI shall provide the Support Services to LICENSEE. The Support Fee shall be [***] except as provided below in this Section 3 and as provided above in Section 2.8 of this AMSS6695 Addendum.

3.3 If LICENSEE does not place a purchase order and remit payment to QTI of the Support Fee as set forth herein, QTI shall have no obligation to provide, and LICENSEE shall have no right to receive, any Support Services other than QTI shall continue to provide bug fixes and upgrades to the Device Software in accordance with Section 2.1 (Delivery of Software) of the Master Software Agreement during the Standard Support Period.

3.4 [***].

[***].

4. Miscellaneous. If there is a conflict between the terms and conditions of the Master Software Agreement and this AMSS6695 Addendum, the terms and conditions of this AMSS6695 Addendum shall govern with respect to the subject matter hereunder.

The Parties agree that upon execution of this AMSS6695 Addendum by both Parties, this AMSS6695 Addendum shall become a part of the Master Software Agreement. This AMSS6695 Addendum shall commence on the Addendum Effective Date and shall, unless earlier terminated in accordance with Section 7.3 (Termination of The Agreement or Software Addendum) [check to make sure this section reference is correct of the Master Software Agreement, continue until any termination of the Master Software Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this AMSS6695 Addendum to be executed as of the Addendum Effective Date first set forth above.

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Qualcomm Technologies, Inc.

By: /s/ Christopher Collato
Print Name: Christopher Collato
Title: Staff Financial Analyst

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GoGo LLC

By: /s/ Michael A. Begler
Print Name: Michael A. Begler
Title: SVP, Production Operations

EXHIBIT 1
AMSS6695 SW

The AMSS6695 SW is scheduled to contain the following features and will be designed to operate generally in accordance with the following standards:

ASIC Hardware Compatibility

* [***]

CDMA Standards:

* [***]

WCDMA Standards

* [***]

GSM/GPRS/EGPRS Modem

* [***]

Other Modem Features

* [***]

LICENSEE acknowledges and understands that the AMSS6695 SW is not designed to operate in accordance with each and every provision of the foregoing standards. QTI has noted certain exceptions to the standards below. This list of exceptions is not intended to be an all-inclusive list and there may be additional exceptions that are not identified in this Exhibit.

THE FOLLOWING FEATURES ARE NOT SUPPORTED IN ANY RELEASE OF THE SOFTWARE:

IS-2000 Release 0 Exceptions:

* [***]

IS-707 Exceptions:

* [***]

IS-683 Exceptions:

(Note: the messages listed below are supported only in limited part)

[***]

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EXHIBIT 2
Support Services and Fees

QTI will have the right to determine, in its sole discretion, the method, details and means to perform the Support Services during the Standard Support Period and reserves the right to have such Support Services performed by one or more of QTI's affiliates or subcontractors. QTI shall provide bug fixes and upgrades to the Device Software in accordance with Section 2.1 (Delivery of Software) of the Master Software Agreement.

Support Services shall consist of the following:

Planning:

[***]

Design:

[***]

Technical Support:

[***]

Support Fees:

Support Services	Fee [***]	No. of Cases (the "Case Cap") [***]
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THE USE OF THE FOLLOWING NOTATION IN THIS EXHIBIT INDICATES THAT THE CONFIDENTIAL PORTION HAS BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT AND THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION: [*]**

ACCESS POINT PATENT LICENSE AGREEMENT

This Access Point Patent License Agreement (the “**Agreement**”) is entered into effective as of July 6, 2018 (the “**Effective Date**”) between Qualcomm Incorporated, a Delaware Corporation (“**Qualcomm**”), and Gogo LLC, a Delaware corporation (“**Licensee**”), with respect to the following facts:

AGREEMENT:

For the consideration herein, the sufficiency of which is acknowledged by each Party, the Parties agree as follows:

1. CONSTRUCTION AND DEFINITIONS.

Section headings used in this Agreement are inserted for the purpose of convenience only and are not intended to affect the meaning or interpretation of any provision in this Agreement. Unless expressly stated otherwise, references in this Agreement to “Sections” mean sections of this Agreement and include all subsections thereof. For the purpose of the construction and interpretation of this Agreement, the words “including,” “include,” “includes,” and “such as” are not terms of limitation, but rather will be deemed to be followed by the words “without limitation,” and the words “herein,” “hereof,” and “hereunder” refer to this Agreement as a whole. All references to days (other than business days) and quarters in this Agreement mean, respectively, calendar days and calendar quarters. References to “third party” or “third parties” do not mean either Party or any Affiliate of either Party. Whenever a Party’s approval or consent is required under this Agreement, the Party may grant or withhold its consent, or impose conditions on granting its consent, in its absolute discretion without any requirement to act reasonably, unless expressly stated otherwise. Capitalized terms used in this Agreement that are not defined elsewhere in this Agreement are defined in Attachment 1.

“**Covered Product**” means a CDMA Access Point or an LTE Access Point.

“**Covered Standard**” means a CDMA Standard or an LTE Standard.

“**Other IPR**” means each unexpired claim of any Patent where (i) a Party or any of its Affiliates owns or has the right to license such Patent to the other Party without the payment of any royalties or other monetary consideration to any third party unless the other Party agrees to pay, and pays, such royalties or other monetary consideration, and (ii) such Patent is not Essential to a Wireless Wide-Area Network Standard.

“**Qualcomm’s Included Other IPR**” means each unexpired claim of any Patent, excluding claims of any Chinese Patents, that constitutes Qualcomm’s Other IPR and that is issued on or prior to the Effective Date, provided that, notwithstanding the foregoing, “Qualcomm’s Included Other IPR” does not include any claim of any patent that is owned by SnapTrack, Inc.

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“**Qualcomm’s Licensed IPR**” means (1) Qualcomm’s Technically Necessary IPR and (2) Qualcomm’s Included Other IPR.

“**Qualcomm’s Technically Necessary IPR**” means each unexpired claim of any Patent (regardless of whether such Patent was or is filed or issued before, on, or after the Effective Date), excluding claims of any Chinese Patents, where (a) Qualcomm or any of its Affiliates, at any time during the period that begins on the Effective Date and ends upon the earlier of the expiration or termination of this Agreement, either (1) owns such Patent or (2) has the right to license such Patent to Licensee without the payment of any royalties or other monetary consideration to any third party unless Licensee agrees to pay, and pays, such royalties or other monetary consideration, and (b) such Patent claim is, as determined separately for each Covered Product, Essential to a Covered Standard implemented in such Covered Product.

2. TERM OF AGREEMENT.

This Agreement will take effect on the Effective Date and will continue in full force and effect for a period of ten (10) years from and commencing with the Effective Date (the “**Initial Term**”), unless earlier terminated pursuant to the express terms of this Agreement or by express written agreement of the Parties. Licensee may, by written notice given to Qualcomm (a “**Renewal Notice**”), on or before the tenth (10th) anniversary of the Effective Date (the “**Initial Term Expiration Date**”), elect to renew this Agreement on the same terms and conditions for an additional ten (10)-year period (the “**Renewal Term**”). If Licensee does not provide a Renewal Notice to Qualcomm on or before the Initial Term Expiration Date and continues to Sell Covered Products after such date, then this Agreement will automatically renew for the entirety of the Renewal Term on the same terms and conditions as the Initial Term, subject to the following sentence. If, during the six (6)-month period prior to the Initial Term Expiration Date, Licensee notifies Qualcomm in writing that Licensee believes that offering the terms of this Agreement would not fulfill Qualcomm’s obligation under its commitments to the European Telecommunications Standard Institute (ETSI) to offer a license to Qualcomm’s Technically Necessary IPR licensed in Section 3 on terms that are fair, reasonable, and non-discriminatory (“**FRAND**”) for the Renewal Term, then the issue of whether the terms set forth in this Agreement are FRAND for the Renewal Term will be submitted to arbitration in accordance with Section 7.14 of this Agreement, and the sole issue to be decided in such arbitration proceeding will be whether such terms for the Renewal Term are FRAND.

3. QUALCOMM LICENSES.

3.1 Grant of Rights from Qualcomm. Subject to the terms and conditions of this Agreement, as well as the timely and proper reporting and payment in full of each quarterly report and payment due hereunder, Qualcomm hereby grants to Licensee and to each of Licensee’s Affiliates the rights set forth in this Section 3. No other, further, or different license from Qualcomm to Licensee (or any other Person, including Affiliates of Licensee) is granted in or implied by this Agreement. Licensee acknowledges and agrees, on behalf of itself and each of its Affiliates, that (a) the rights granted in this Section 3 are expressly limited or restricted in scope to specific patent claims and specific products, and (b) the exclusion of rights or licenses for other patent claims is not a derogation of the rights expressly granted herein.

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3.2 Not Used.

3.3 Not Used.

3.4 Rights and Royalties for Access Points. The following defined terms are relevant to Access Points:

“**Access Point**” means a complete device that (a) connects to network infrastructure equipment over a wireless network utilizing a Wireless Wide-Area Network Standard, whether through a module embedded into such complete device or otherwise; (b) does not incorporate a speaker or keypad; (c) does not enable end-user initiation or reception of a voice call or data transmission (other than certain operator and/or device requested status information) without connection to another device, wherein such connection may be made by a physical connection (such as wire or optical fiber), or by a wireless connection (such as an IEEE 802.11 wireless local area network) that does not implement a Wireless Wide-Area Network Standard; (d) when electronically connected to another device, is not physically attached to such device, such that a visible gap is maintained between such device and the Access Point at all times and the device and the Access Point would not be handled, viewed as, or deemed to be a single or complete integrated product by an end-user; and (e) is capable of supporting multiple simultaneous users.

“**CDMA Access Point**” means an Access Point that connects to network infrastructure equipment over a wireless network using a Wireless Wide-Area Network Standard included in the definition of CDMA Standard.

“**LTE Access Point**” means an Access Point that connects to network infrastructure equipment over a wireless network using a Wireless Wide-Area Network Standard included in the definition of LTE Standard but is not capable of implementing any wireless air interface standard included in the definition of CDMA Standard.

3.4.1 Grant of Rights for Certain Access Points. Qualcomm hereby grants to Licensee and to each of Licensee’s Affiliates a personal, nontransferable, nonexclusive, royalty-bearing license, without the right to sublicense, solely under Qualcomm’s Licensed IPR, to make (and have made), import, use, and Sell (and offer to Sell) CDMA Access Points and LTE Access Points.

3.4.2 Royalties for Certain Access Points. In partial consideration for and subject to the rights granted by Qualcomm in Section 3.4.1, Licensee shall pay to Qualcomm, [***], a royalty in the amount of [***].

3.4.3 Qualcomm Covenant to Licensee Customers for Certain Access Points. Qualcomm covenants not to Assert (and to ensure that none of its Affiliates Asserts) Qualcomm’s Licensed IPR against any Licensee Customer or any of its Affiliates for making, having made, using, importing, offering to sell, selling, leasing or otherwise disposing of any CDMA Access Point or LTE Access Point for which Qualcomm has received payment in full from Licensee of the royalty payable under Section 3.4.2 of this Agreement. For purposes of this Section 3.4.3, “**Licensee Customer**” means any Person that purchases or otherwise lawfully obtains, directly or indirectly, from Licensee or any of its Affiliates any Access Point.

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3.5 Not Used.

3.6 Rights to Have Made Components. Qualcomm hereby grants to Licensee and to each of Licensee's Affiliates a personal, nontransferable, nonexclusive license, without the right to sublicense, solely under Qualcomm's Licensed IPR, to have made Components solely for use in Covered Products made or Sold under the rights granted by Qualcomm in this Section 3 or as replacement parts for such Covered Products. Except as otherwise provided in this Section 3.6, no license, right or other authorization is granted by Qualcomm to make (or have made), import, use, Sell, offer to Sell, or otherwise dispose of any Components. This license will terminate as to any Components made by a particular manufacturer if such manufacturer or any of its Affiliates Asserts a patent claim Essential to a Covered Standard against Qualcomm or any of its Affiliates.

3.7 Other Provisions Regarding Royalties.

3.7.1 Calculation and Payment of Royalties. [***].

3.7.2 Royalties Payable Regardless of Components Purchased. [***].

3.8 Transfer of Qualcomm's Licensed IPR. If (a) Qualcomm or any of its Affiliates assigns, sells, or transfers any Patent containing, or provides any right to Assert, any of Qualcomm's Licensed IPR to any third party (a "New Qualcomm Patent Owner"), or (b) any Affiliate of Qualcomm that has any right to Assert any of Qualcomm's Licensed IPR is divested, spun-off, split-up, or reorganized so that it is no longer at that time an Affiliate of Qualcomm (each a "Reorganized Qualcomm Entity") and the Reorganized Qualcomm Entity has or retains any right to Assert any of Qualcomm's Licensed IPR after such divestiture, spin-off, split-up, or reorganization, then, in either instance, Qualcomm shall: (1) notify the proposed New Qualcomm Patent Owner or Reorganized Qualcomm Entity, as the case may be, of the existence of this Agreement and the rights granted under Qualcomm's Licensed IPR in Section 3; and (2) obtain a written confirmation from the New Qualcomm Patent Owner or Reorganized Qualcomm Entity, as the case may be, that such assignment, sale, or transfer of any Patent containing, or any grant or retention of any right to Assert, Qualcomm's Licensed IPR is subject to the licenses and covenants granted in Section 3 and that, subject to (A) Licensee's continued fulfillment of its obligations under this Agreement and (B) any applicable terms in Section 7.5, Licensee and each of its Affiliates will continue to have the licenses set forth in Section 3 and Licensee's Customers will continue to have the covenants granted in Section 3. Qualcomm intends that Licensee and each of its Affiliates will be a third party beneficiary of any such written confirmation from the New Qualcomm Patent Owner or Reorganized Qualcomm Entity, as the case may be.

3.9 Additional Provisions Regarding Qualcomm's Other IPR.

3.9.1 Licensee Acknowledgment. Licensee acknowledges that Licensee's acceptance of licenses under Qualcomm's Included Other IPR in Section 3 is not a condition to Qualcomm's grant of licenses to Licensee under Qualcomm's Technically Necessary IPR. Licensee further acknowledges that prior to entering into this Agreement, Qualcomm provided Licensee with the option to negotiate a license under Qualcomm's Technically Necessary IPR licensed in Section 3 separately from any license under Qualcomm's Included Other IPR, and Licensee voluntarily chose to take the licenses in Section 3 under both Qualcomm's Technically Necessary IPR and Qualcomm's Included Other IPR (i.e., Qualcomm's Licensed IPR) and upon the terms set forth in this Agreement.

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3.9.2 Partial Termination of Licensee's License to Sell Covered Products. The licenses granted by Qualcomm to Licensee and each of Licensee's Affiliates in Section 3 under Qualcomm's Included Other IPR to Sell Covered Products will continue with respect to each customer of such Covered Products only for so long as such customer and its Affiliates do not Assert, or threaten in writing to Assert, any of their Patents (a) against Qualcomm or any of its Affiliates for manufacturing, having manufactured, using, importing, offering to sell, selling, leasing, or otherwise disposing of Components and/or (b) against Qualcomm's or any of its Affiliates' foundries or suppliers for manufacturing Components for, or selling Components to, Qualcomm or any of its Affiliates. In the event of any such Assertion or threat by a customer of Licensee or any of its Affiliates, Qualcomm may provide written notice to such customer and to Licensee (the "**Assertion Notice**") of Qualcomm's intent to terminate Licensee's and each of its Affiliates' license under Qualcomm's Included Other IPR to Sell Covered Products to such customer. If such customer or its Affiliate withdraws its Assertion in writing to Qualcomm within sixty (60) days of such Assertion Notice, then such license under Qualcomm's Included Other IPR to Sell Covered Products to such customer will not terminate. If the customer or its Affiliate does not withdraw such Assertion within this sixty (60)-day period, then Licensee's and each of its Affiliates' license under Qualcomm's Included Other IPR to Sell Covered Products to such customer will terminate as of the date of the Assertion Notice and, to the extent such customer's or its Affiliate's Assertion seeks damages for infringement allegedly occurring prior to the date of the Assertion Notice, retroactively to the date of the first allegedly infringing act.

3.10 Unlicensed China Activity. Licensee represents and warrants that, as of the Effective Date, neither Licensee nor any of its Affiliates has directly or indirectly engaged in any Unlicensed China Activity. If, at any time after the Effective Date, Licensee or any of its Affiliates commences any Unlicensed China Activity, Licensee shall notify Qualcomm of such Unlicensed China Activity no later than ninety (90) days after Licensee or any of its Affiliates first commences such Unlicensed China Activity, and Licensee shall negotiate with Qualcomm in good faith the terms of a royalty-bearing, nonexclusive license under at least Qualcomm's Chinese Patents that are Essential to the Covered Standards covering such Unlicensed China Activity. "**Unlicensed China Activity**" means making (or having made), using, or importing any Covered Products in China or Selling any Covered Products for use in China.

4. ROYALTIES PAYABLE FOR PRIOR SALES.

Licensee shall report to Qualcomm any Sales of Covered Products by Licensee or any of its Affiliates that have occurred prior to the Effective Date (collectively, the "**Prior Sales**"). In addition, Licensee shall pay royalties to Qualcomm with respect to all Prior Sales in accordance with the royalty terms in Section 3 (determined for this purpose as if the licenses granted in this Agreement and such royalty terms in this Agreement had been in effect at the time of such Prior Sales). Licensee shall submit to Qualcomm, [***], a report and certificate in accordance with Section 7.6 with respect to all Prior Sales, and include in such certificate the aggregate royalties payable to Qualcomm for the Prior Sales (the "**Prior Sales Royalties**"). [***]. For the avoidance of doubt, no royalties will be payable for Prior Sales of Covered Products manufactured under the "have made" rights of a Licensee customer provided in such customer's agreement with Qualcomm. This Section 4 will survive any termination of this Agreement.

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5. LICENSEE'S LICENSE.

The following defined terms are relevant to Licensee's license:

"Licensee's Included Other IPR" means each unexpired claim of any Patent that constitutes Licensee's Other IPR and that is issued on or prior to the Effective Date.

"Licensee's Licensed IPR" means Licensee's Technically Necessary IPR and Licensee's Included Other IPR, excluding in both cases claims of any Chinese Patents.

"Licensee's Technically Necessary IPR" includes only each unexpired claim of any Patent (regardless of whether such Patent was or is filed or issued before, on, or after the Effective Date) where (a) Licensee or any of its Affiliates (1) owns such Patent or (2) has the right to license such Patent to Qualcomm without the payment of any royalties or other monetary consideration to any third party unless Qualcomm agrees to pay, and pays, such royalties or other monetary consideration, and (b) such Patent claim is Essential to a Covered Standard.

"Successor" means any successor (by purchase, divestiture, merger, or otherwise) to all or substantially all of Qualcomm's Components business or assets.

5.1 Grant of License from Licensee. Subject to the terms and conditions of this Agreement, Licensee, on behalf of itself and each of its Affiliates, hereby grants a personal, nontransferable, worldwide, nonexclusive, fully-paid, and royalty-free license, without the right to sublicense, under Licensee's Licensed IPR, to Qualcomm and a Successor, and each of their respective Affiliates, to make (and have made), import, use, offer to sell, sell, lease, and otherwise dispose of Components.

5.2 Licensee Covenant to Qualcomm Customers. Licensee hereby covenants not to Assert (and to ensure that none of its Affiliates Asserts) Licensee's Licensed IPR against any Qualcomm Customer or any of its Affiliates for making, having made, using, importing, offering to sell, selling, leasing or otherwise disposing of products that incorporate one or more Qualcomm Components where the alleged basis for infringement arises from the use or incorporation of Qualcomm Components in such products. For purposes of this Section 5.2, **"Qualcomm Customer"** means any third party that purchases or otherwise lawfully obtains, directly or indirectly, any Component that Qualcomm is licensed to sell under this Agreement.

5.3 Transfer of Licensee's Licensed IPR. If (a) Licensee or any of its Affiliates assigns, sells, or transfers any Patent containing, or provides any right to Assert Licensee's Licensed IPR, to any third party (a **"New Licensee Patent Owner"**), or (b) any Affiliate of Licensee that has any right to Assert any of Licensee's Licensed IPR is divested, spun-off, split-up, or reorganized so that it is no longer at that time an Affiliate of Licensee (each a **"Reorganized Licensee Entity"**) and the Reorganized Licensee Entity has or retains any right to Assert any of Licensee's Licensed IPR after such divestiture, spin-off, split-up, or reorganization, then, in either instance, Licensee shall: (1) notify the New Licensee Patent Owner or Reorganized Licensee Entity, as the case may be, of the existence of this Agreement and the

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licenses and covenants granted under Licensee's Licensed IPR in Section 5.1 and 5.2, respectively; and (2) obtain a written confirmation from the New Licensee Patent Owner or Reorganized Licensee Entity, as the case may be, that such assignment, sale, or transfer of any Patent containing, or any grant or retention of any right to Assert, Licensee's Licensed IPR is subject to the licenses and covenants granted under Section 5.1 and 5.2, respectively, and that, subject to (A) Qualcomm's continued fulfillment of its obligations under this Agreement, and (B) the applicable terms of Section 7.5, Qualcomm and the Successor, and each of their respective Affiliates, will continue to have the rights and licenses under Licensee's Licensed IPR that are set forth in this Agreement, and Qualcomm's Components customers will continue to have the covenants herein. Qualcomm and the Successor (if any) will each be a third party beneficiary of any such written confirmation from the New Licensee Patent Owner or Reorganized Licensee Entity, as the case may be.

5.4 Licensee Representation and Warranty. Licensee represents and warrants that Licensee has the authority to grant, on its own behalf and on behalf of Licensee's Affiliates, the licenses and covenants provided under this Section 5.

6. NOT USED.

7. GENERAL TERMS.

7.1 General Terms Regarding License and Royalties.

7.1.1 Acknowledgment Regarding Qualcomm's Licensed IPR. Licensee acknowledges and agrees that (a) Qualcomm has given Licensee access to a list of Qualcomm's Licensed IPR, (b) prior to entering into this Agreement, Licensee has had a full and fair opportunity to review and consider fully the expiration dates for Qualcomm's Licensed IPR, and (c) any amount payable to Qualcomm pursuant to this Agreement is in partial consideration for the applicable rights granted to Licensee in Section 3 under claims of Qualcomm's Licensed IPR that are not expired as of the due date of such royalty or other payment. Licensee further acknowledges and agrees that it is not paying royalties for any expired claim of Qualcomm's Licensed IPR.

7.1.2 Licensee Representation and Warranty. Licensee warrants that neither it nor any of its Affiliates, nor any of their respective shareholders or employees will form an Entity, acquire an Entity, or assist in forming or acquiring an Entity for the purpose of evading Licensee's royalty obligations under this Agreement.

7.1.3 Overpayment Claims. Qualcomm will credit to Licensee the amount of any overpayment of royalties made hereunder in error if (a) such overpayment is identified and fully explained in a written notice from Licensee to Qualcomm delivered no later than [***] after the due date of the payment that included such alleged overpayment, and (b) Qualcomm is able to verify to its own satisfaction the existence and extent of such overpayment. The foregoing procedure constitutes the sole basis for Licensee to claim overpayments under this Agreement and will not be affected by any statement appearing on any check, royalty report, cover letter, or other document, except to the extent expressly agreed upon by Qualcomm in a writing signed by an authorized representative of Qualcomm.

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7.1.4 Taxes.

7.1.4.1 Licensee shall pay all amounts due to Qualcomm under this Agreement without deduction for any levies or charges of any nature that may be imposed. Licensee will be solely responsible for any and all applicable taxes, including taxes on Licensee's income (but not taxes on Qualcomm's income), sales and use taxes, value-added tax, service tax, excise tax, consumption tax, customs duties, or similar charges or fees ("**Taxes**"). At Qualcomm's request, Licensee shall provide documentation reasonably satisfactory to Qualcomm evidencing payment of such Taxes by Licensee to the applicable taxing authority. If Qualcomm pays any Taxes on behalf of Licensee (other than withholding of income taxes on Qualcomm's income), then Licensee shall reimburse Qualcomm for such Taxes within [***] after the date of Qualcomm's invoice.

7.1.4.2 Notwithstanding the foregoing, if Licensee is required by applicable law to withhold taxes on Qualcomm's income for Qualcomm from any payment due to Qualcomm, then the amount due to Qualcomm in respect to such payment will be reduced by the amount of such income tax withholding, and Licensee shall, promptly after paying such withholding income taxes to the applicable taxing authority, deliver to Qualcomm an income tax withholding certificate or similar documentation reasonably satisfactory to Qualcomm evidencing payment of any such withholding tax. If there is an applicable tax treaty, Qualcomm will provide Licensee with the necessary documentation in order to enable Licensee to withhold at the beneficial treaty rate. Licensee agrees that upon receipt of the necessary documentation, Licensee will only withhold at the beneficial treaty rate. Licensee will be solely responsible for any penalty, additional tax, interest, or other charge if Licensee fails to meet its income tax withholding obligations.

7.1.5 U.S. Dollars. All payments to be made hereunder must be made in dollars of the United States of America and by wire-transfer of immediately available funds to an account designated by the payee. If the transfer of or the conversion into U.S. dollars is not lawful or possible, the payment of such part of the royalties as is necessary will be made by the deposit thereof, in the currency of the country where the Sale of such Covered Product was made to the credit and account of Qualcomm or its nominee in any commercial bank or trust company of Qualcomm's choice located in that country, prompt notice of which will be given by Licensee to Qualcomm.

7.2 Licensee's Affiliates.

7.2.1 Compliance with Agreement by Affiliates. Licensee shall ensure that each of its Affiliates that makes, has made, imports, offers to Sell, or Sells any Covered Product complies with the terms and conditions of this Agreement as if such Affiliate was the "Licensee" under this Agreement with respect to such Covered Products made, have made, imported, offered for Sale, or Sold by such Affiliate. Licensee and its Affiliates will be jointly responsible and liable to Qualcomm if any of Licensee's Affiliates fails to comply with any of the applicable terms of this Agreement, and any breach of such terms by an Affiliate of Licensee will be considered a breach of this Agreement by Licensee as well. Licensee represents and warrants that Licensee has the right, power, and authority to bind each of its Affiliates and to make the agreements and assurances that are set forth in this Agreement on behalf of each of its Affiliates.

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Upon Qualcomm's request, Licensee shall promptly provide to Qualcomm a list of each of its Affiliates that makes, has made, imports, offers to Sell, or Sells any Covered Products. Additionally, at Qualcomm's request, Licensee shall promptly provide Qualcomm with copies of share certificates, public financial statements and reports, and such other documentation as may be reasonably requested by Qualcomm to determine whether a Person meets all of the requirements of being an "Affiliate" under this Agreement.

7.2.2 Termination of License as to Affiliates. Notwithstanding anything to the contrary in this Agreement, with respect to any Person that is an Affiliate of Licensee at any time during the term of this Agreement and later (during the term of this Agreement) ceases to be an Affiliate of Licensee, all license and other rights granted by Qualcomm to such Person in this Agreement will terminate, with respect to such Person and without any further action on the part of Qualcomm, immediately on the date that such Person ceases to be an Affiliate of Licensee.

7.3 Information.

7.3.1 Restrictions on Disclosure and Use. All documentation and technical and business information and intellectual property in whatever form recorded that a Party does not wish to disclose without restriction ("**Information**") will remain the property of the furnishing Party and may be used by the receiving Party only as follows. Such Information (a) will not be reproduced or copied by the receiving Party, in whole or part, except for use as expressly authorized in this Agreement; and (b) will be disclosed by the receiving Party only to employees or agents of the receiving Party with a need to know. Moreover, such Information will be used by the receiving Party only for the purpose of performing under this Agreement or in the exercise of its rights under this Agreement. Unless the furnishing Party consents in this Agreement or otherwise in writing, such Information will be held in strict confidence by the receiving Party. The receiving Party may disclose such Information to other Persons, with the furnishing Party's prior written authorization, but solely to perform acts that this clause expressly authorizes the receiving Party to perform itself, and further provided that such other Person agrees in writing (a copy of which writing will be provided to the furnishing Party at its request) to the same conditions respecting use of Information in this Section 7.3. These restrictions on the use or disclosure of Information will not apply to any Information: (a) that can be proven to have been independently developed by the receiving Party or lawfully received by the receiving Party free of confidentiality obligations to the furnishing Party from another source having the right to so furnish such Information; (b) after it has become generally known to the public without breach of this Agreement by the receiving Party; (c) that at the time of disclosure to the receiving Party was known to such Party free of confidentiality obligations to the furnishing Party and clearly evidenced by documentation in such Party's possession; (d) that the furnishing Party expressly agrees in writing is free of such restrictions; or (e) that is the subject of a subpoena or other legal or administrative demand for disclosure or is disclosed in response to a valid order or request of a court or other governmental body, but only to the extent of and for the purposes of such demand, order, or request; provided, however, in the case of clause (e), that such receiving Party shall first notify the furnishing Party in writing of the demand, order, or request and permit and cooperate with the furnishing Party in seeking an appropriate protective order (or an equivalent mechanism for protecting such Information in the relevant jurisdictions).

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7.3.2 Scope of Information. Information is subject to this Section 7.3 only if (a) it is in writing or other tangible form and is clearly marked as proprietary or confidential when disclosed, or (b) if it is not disclosed in tangible form, (1) such Information is clearly identified as confidential or proprietary at the time of disclosure, and (2) the disclosing Party subsequently provides the receiving Party with a written summary of the content of such oral or other non-tangible disclosure and the summary is clearly marked as proprietary or confidential.

7.3.3 Furnishing Information to Third Parties. Nothing herein will be deemed to bar disclosure of Information by a receiving Party to third parties, with written consent of the furnishing Party, if such disclosure is reasonably necessary for enjoyment of the disclosing Party's rights to use intellectual property rights licensed under this Agreement, and provided that each such third party agrees in writing to protect the Information under terms and conditions comparable, in all material respects, to the terms in this Section 7.3 and the survival terms in Section 7.9.

7.4 Negation of Representations and Warranties. Nothing in this Agreement will be construed as (a) requiring the filing of any Patent application, the securing of any Patent, or the maintaining of any Patent in force, (b) a warranty or representation by either Party as to the validity or scope of any Patent, copyright, or other intellectual property right, (c) a warranty or representation that any manufacture, sale, lease, use, or importation will be free from infringement of Patents, copyrights, or other intellectual property rights of others, (d) an agreement to bring or prosecute actions or suits against third parties for infringement, (e) an obligation to furnish any technical documentation or manufacturing assistance, or (f) conferring any right to use (in advertising, publicity, or otherwise) any name, trade name, or trademark, or any contraction, abbreviation, or simulation thereof. It will be the sole responsibility of Licensee to determine whether it needs licenses or other rights under patents or other intellectual property of third parties. The terms of this Section 7.4 will survive any termination or expiration of this Agreement.

7.5 Termination.

7.5.1 Termination for Cause by Qualcomm.

(a) Termination for Breach. Qualcomm may terminate this Agreement, by written notice to Licensee, if Licensee (1) fails to pay, in full or in a timely manner, any royalties or other amounts owed to Qualcomm hereunder, (2) fails to submit in a timely manner any report required to be submitted to Qualcomm hereunder or submits any false or inaccurate report to Qualcomm, (3) refuses to allow an audit of Licensee's Sales of Covered Products as provided in Section 7.6.2 or breaches Section 7.7, or (4) commits any other material breach of any representation, warranty, or obligation in or under this Agreement; provided, however, that in the case of any such breach that is capable of being cured, Qualcomm will not have a right to terminate this Agreement unless and until Licensee has failed to cure such breach within thirty (30) days after Qualcomm has given Licensee written notice thereof.

7.5.2 Termination for Cause by Licensee. Licensee may terminate this Agreement, by written notice to Qualcomm, if Qualcomm commits any material breach of any representation, warranty, or agreement in or under this Agreement; provided, however, that in the case of any such breach that is capable of being cured, Licensee will not have a right to terminate this Agreement unless and until Qualcomm has failed to cure such material breach within thirty (30) days after receipt by Qualcomm of written notice thereof by Licensee.

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7.5.3 Termination due to Bankruptcy, Dissolution, or Liquidation. A Party shall provide written notice to the other Party immediately upon the occurrence of any of the following events (each, an “**Event**”) concerning the first Party or any of its Affiliates: (a) insolvency, bankruptcy, or liquidation or filing of any application therefor, or other commitment of an affirmative act of insolvency; (b) attachment, execution, or seizure of substantially all of the assets or filing of any application therefor; (c) assignment or transfer of that portion of the business to which this Agreement pertains to a trustee for the benefit of creditors; or (d) termination of its business or dissolution. If either Party becomes the subject of an Event, the other Party will have the right to terminate this Agreement with immediate effect by giving written notice of termination to the first Party no earlier than sixty (60) days after the Event occurs (unless such Event ceases within such sixty (60)-day period). If an Affiliate of either Party becomes the subject of an Event, all rights granted to such Affiliate under or pursuant to this Agreement will automatically terminate upon the expiration of sixty (60) days after such Event occurs (unless such Event ceases within such sixty (60)-day period).

7.5.4 Rights and Obligations upon Termination or Expiration.

7.5.4.1 Upon any termination or expiration of this Agreement (a) all licenses granted by a Party hereunder will terminate and (b) each Party shall, upon the written request of the other Party, use commercially reasonable efforts to return or destroy all Information furnished to it under this Agreement by the other Party, if any.

7.5.4.2 Notwithstanding anything to the contrary in Section 7.5.4.1:

(a) Any termination or expiration of this Agreement will not (1) relieve Licensee from its obligations to submit any royalty reports or certificates to Qualcomm, or from its liability for the payment of any royalties, with respect to Covered Products Sold on or prior to the date of such termination or expiration, (2) prejudice Qualcomm’s right to recover any royalties or other sums due or accrued at the time of such termination or expiration, or (3) prejudice any cause of action or claim accrued or to accrue on account of any breach or default (A) before the date of such termination or expiration or (B) of any provision or obligation surviving such termination or expiration.

(b) Any termination or expiration of this Agreement will not prejudice Qualcomm’s right to conduct a final audit of the books and records of Licensee and its Affiliates in accordance with Section 7.6.

(c) For a period of [***] following the termination or expiration of this Agreement, Licensee and its Affiliates will have the right to Sell Covered Products solely to the extent that (1) such Sale would have been licensed under this Agreement had the Agreement not terminated or expired; and (2) such Covered Products were in Licensee’s or its Affiliates’ inventory at the time of such termination or expiration, and subject to (A) the payment by Licensee of all royalties applicable to such Sales of such Covered Products that

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would have otherwise become due in the absence of the termination or expiration of this Agreement, and (B) Licensee's and its Affiliates' continued compliance with all of the other applicable provisions of this Agreement. Except as otherwise provided in the preceding sentence, upon the termination or expiration of this Agreement for any reason, [***].

7.6 Records, Audits and Notice of Certain Activities.

7.6.1 Records. Licensee shall keep (and shall ensure that each of its Affiliates keeps) accurate and complete books and records concerning all Covered Products Sold by Licensee or any of its Affiliates and all Prior Sales. Such books and records will include (a) sales contracts and other documents evidencing Licensee's and its Affiliates' Sales of such Covered Products (including the number of such products Sold) and the consideration charged by Licensee and its Affiliates for such Sales, (b) sales and purchase invoices, (c) inventory records, and (d) manufacturing records. Each Affiliate's applicable books and records (together with all supporting information) will be included in the books and records described above and will be subject to audit by Qualcomm as provided in this Section. Licensee shall furnish to Qualcomm, within [***], an estimate of (i) the quantity of Covered Products Sold during [***] and (ii) the aggregate royalties due under this Agreement with respect to such Covered Products. Licensee shall furnish to Qualcomm, within [***] after the end of each quarter, a certificate in the form attached as Exhibit A that is signed by a responsible official of Licensee and contains the information specified in Exhibit A for each Covered Product Sold by Licensee or any of its Affiliates during such quarter.

7.6.2 Audits. Qualcomm may, no more than once each year, conduct (by itself and/or through a third party auditor designated by Qualcomm) an audit of the applicable books and records, including the books and records described in Section 7.6.1, of Licensee and those of its Affiliates that have made, supplied parts for, assembled, or Sold any Covered Products, to confirm that Licensee has not underpaid the royalties due to Qualcomm under this Agreement. Qualcomm's written notice to Licensee of Qualcomm's intention to audit Licensee's and its Affiliates' books and records will include a proposed commencement date for such audit, such proposed commencement date to be no earlier than thirty (30) days after the date of such notice. Licensee shall allow the audit to commence no later than thirty (30) days after Qualcomm's proposed audit commencement date. Prior to the commencement date of the audit, Licensee shall assemble in a single location Licensee's and its Affiliates' necessary books and records for such audit to be carried out and shall make available such personnel as are reasonably necessary to interpret and explain such books and records. The cost of such audit, other than Licensee's and its Affiliates' cost of providing their books, records, and personnel, will be borne by Qualcomm, [***]. Qualcomm shall treat Licensee's and its Affiliates' books and records and other information provided to Qualcomm or its auditors for the purpose of conducting an audit under this Section 7.6 as Licensee's Information in accordance with Section 7.3.

7.7 Assignment. Licensee shall not assign this Agreement (or any of Licensee's rights or interests under this Agreement) or delegate any of Licensee's obligations under this Agreement without Qualcomm's prior written consent. For purposes of this Section 7.7, any Change in Control of Licensee will be deemed to be an assignment of this Agreement by Licensee which is subject to this Section 7.7. Any attempted assignment of this Agreement or any of Licensee's rights or interests under this Agreement by Licensee (other than a deemed

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assignment resulting from a Change in Control of Licensee), or any attempted delegation of any of Licensee's obligations under this Agreement by Licensee, without Qualcomm's prior written consent will be, at Qualcomm's option (and in Qualcomm's discretion), null, void, and ineffective from inception. In addition, any assignment or attempted assignment of this Agreement or any of Licensee's rights or interests under this Agreement by Licensee (including a deemed assignment resulting from a Change in Control of Licensee), or any delegation or attempted delegation of any of Licensee's obligations under this Agreement by Licensee, without Qualcomm's prior written consent will constitute a material breach of this Agreement by Licensee that is incapable of being cured.

7.8 Export Compliance. Each Party acknowledges and agrees that it will comply with (and will ensure that each of its Affiliates complies with) all applicable United States ("U.S.") and foreign export control and economic sanctions laws and regulations in exercising any rights or performing any obligations under this Agreement, and that it will not take any action that causes any other Party to violate any such laws.

7.9 Survival of Obligations. The provisions in this Agreement that are expressly stated to survive or that, by their nature, would reasonably be expected to continue beyond the expiration or termination of this Agreement (including Section 1 (CONSTRUCTION AND DEFINITIONS), Section 2 (TERM OF AGREEMENT), Section 7.4 (Negation of Representations and Warranties), Section 7.5.4 (Rights and Obligations upon Termination or Expiration), Section 7.7 (Assignment), Section 7.8 (Export Compliance), and Section 7.10 (Severability) through Section 7.20 (No Rule of Strict Construction)) will survive such termination or expiration. However, except to the limited extent expressly provided in Section 7.5.4, in no event will any license to Qualcomm's Licensed IPR survive the termination or expiration of this Agreement.

7.10 Severability. If any provision in this Agreement is held to be invalid or unenforceable in whole or in part (the "**Invalid Provision**"), the remaining portions of such provision (if any) and the other provisions in this Agreement will remain in effect and the Invalid Provision will remain in effect to the maximum extent allowed by law. If requested by either Party within ninety (90) days after a final decision (i.e., a decision that is not or cannot be appealed) holding the Invalid Provision invalid or unenforceable, the Parties shall promptly negotiate a replacement for the Invalid Provision that provides, to the maximum extent possible, substantially the same rights, benefits, and obligations to each Party as did the Invalid Provision. If the Parties are unable to agree on a replacement provision within one hundred eighty (180) days after such final decision and if the Invalid Provision is reasonably considered to be an essential element of this Agreement by a Party that did not challenge the validity or enforceability of such provision in the course of the proceeding that led to such final decision, then such Party may, at any time after such one hundred eighty (180)-day period and before the one-year anniversary of such final decision, terminate this Agreement effective immediately upon written notice to the other Party. Without limitation, the Parties agree that each of Section 3.4.2 and Section 4 is an essential element of this Agreement.

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7.11 Non-Waiver. No waiver of the terms and conditions of this Agreement, or the failure of either Party strictly to enforce any such term or condition on one or more occasions, will be construed as a waiver of the same or of any other term or condition of this Agreement on any other occasion. A waiver of any right or remedy under this Agreement will be binding on a Party only if it is expressly stated in a written document that (a) specifically refers to this Agreement and expressly states such Party's intent to waive one or more rights or remedies under this Agreement, and (b) is signed by an authorized representative of such Party (which in the case of Qualcomm, will be only the CEO or President, or an authorized representative of the Qualcomm Technology Licensing Division, of Qualcomm).

7.12 Notices and Other Communications. All notices, requests, demands, consents, agreements, reports, certificates, and other communications required or permitted to be given, or otherwise intended to have legal effect, under this Agreement (a "**Notice**") must be provided in writing and in English and must be sent to the Party to whom it is to be given as provided in this Section 7.12. Each Party may change its address for receipt of Notices by providing notice of the new address to the other Party in accordance with this Section, and each Party shall change its address if such address is no longer used by such Party. If a Notice that is provided by Qualcomm to Licensee hereunder applies to activities performed by any of Licensee's Affiliates, such Notice will be deemed to also be provided by Qualcomm to Licensee's Affiliates on the same date that such Notice is provided by Qualcomm to Licensee, and Licensee shall promptly provide copies of all such notices to its applicable Affiliates.

(a) Notices to Qualcomm. All Notices to be provided by Licensee pursuant to Section 7.6.1 must be sent to Qualcomm by electronic mail to the following email address: qtl.royalty@qualcomm.com. All other Notices to Qualcomm must be sent by facsimile or by courier service (e.g., DHL, FedEx), and if sent by facsimile, a copy must be sent by first class mail, postage prepaid, or by courier service. Each such Notice must be properly addressed as follows (in which case such Notice will be deemed to have been duly given on the date of receipt of such Notice by Qualcomm):

Qualcomm Incorporated
5775 Morehouse Drive
San Diego, CA 92121-1714
Facsimile No.: (858) 658-2500
Attention: President

with copies sent to:
Division Counsel, Qualcomm Technology Licensing Division
General Manager, Qualcomm Technology Licensing Division

(b) Notices to Licensee. All Notices to Licensee must be sent by facsimile or electronic mail or by courier service (e.g., DHL, FedEx), and if sent by facsimile or electronic mail, a copy must be sent by first class mail, postage prepaid, or by courier service. Each such Notice must be properly addressed as follows (in which case such Notice will be deemed to have been duly given on the date of receipt of such Notice by Licensee):

Gogo LLC
111 N. Canal Street
Chicago, IL, 60606
Telephone No.: [***]
Email: [***]
Attention: Mike Begler, Senior Vice President

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7.13 Publication of Agreement. Each Party shall keep this Agreement and its provisions confidential, and shall not disclose this Agreement or any of its provisions to any third party without first obtaining the written consent of the other Party. Notwithstanding the foregoing, (a) Qualcomm may, without notice to Licensee, disclose this Agreement or any of its provisions as may be required by a valid order or request of a Governmental Authority conducting an investigation of Qualcomm or its Affiliates; (b) without limiting clause (a) of this Section 7.13, each Party may disclose this Agreement or any of its provisions as may be required by a valid order or request of a court or other Governmental Authority (but only to the extent of and for the purposes of such order or request), provided, however, that the disclosing Party shall first notify the other Party in writing of the demand, order, or request and, if so requested by the other Party, permit and cooperate with the other Party in seeking an appropriate protective order or an equivalent mechanism for protecting the Agreement; and (c) each Party may disclose this Agreement or any of its provisions as reasonably necessary for performance hereunder. The confidentiality obligations in this Section 7.13 do not apply to the existence of this Agreement, the fact that Qualcomm and Licensee have executed this Agreement, or the scope of the licenses granted to Licensee hereunder but do apply to the other terms and conditions of this Agreement. In addition, without using the respective logos of the other Party, Licensee may identify itself as a Qualcomm licensee or authorized supplier in its marketing materials, website, and other public communications, and Qualcomm may identify Licensee as a Qualcomm licensee or authorized supplier in its marketing materials, website, and other public communications. Any press release or other announcement by either Party concerning the entering into of this Agreement will be subject to the prior written approval of the other Party, which approval will not be unreasonably withheld.

7.14 Applicable Law; Dispute Resolution.

7.14.1 Applicable Law. This Agreement is made and entered into in the State of California and will be governed by and construed and enforced in accordance with the laws of the State of Delaware without regard to conflicts of laws principles.

7.14.2 Dispute Resolution. Any dispute, claim, or controversy arising from or relating to this Agreement or the breach or validity hereof (each a “**Dispute**”) will be finally settled by a confidential arbitration proceeding conducted in accordance with the Rules of Arbitration of the International Chamber of Commerce (“**ICC Rules**”). The number of arbitrators will be three (3); provided however, if the Dispute is solely over a past due amount of less than [***] or is solely to seek specific performance of obligations in Section 7.6, then either Party will have the option to request that one (1) arbitrator preside over such Dispute, in which case the number of arbitrators will be one (1). Such arbitrators will be appointed in accordance with the ICC Rules. The place of arbitration will be San Francisco, California. The language of the arbitration will be English. Except as may be required by law, neither Party may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both Parties. The arbitrator’s award will be final and binding on the Parties. The Parties agree that judgment may be entered upon such an award in any court of competent jurisdiction.

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7.15 LIMITATION OF LIABILITY. QUALCOMM WILL NOT BE LIABLE TO LICENSEE OR ANY OF ITS AFFILIATES FOR ANY INCIDENTAL, CONSEQUENTIAL, OR OTHER INDIRECT LOSSES OR DAMAGES ARISING FROM OR RELATING TO THIS AGREEMENT, OR ANY ACTIVITIES PERFORMED UNDER THIS AGREEMENT, WHETHER BASED ON AN ACTION FOR BREACH OF CONTRACT OR TORT, OR ANY OTHER THEORY OF LIABILITY.

7.16 Late Charge. Qualcomm may charge Licensee a late charge with respect to any amounts (including royalties, late charges, and audit fees) that Licensee owes hereunder and fails to pay on or before the due date, in an amount equal to the lesser of (a) [***], and (b) the maximum amount permitted by law. Such late charge will be due and payable by Licensee at the end of each month following the due date of such past due amount until such past due amount has been paid in full. The Parties agree that such late charges are administrative in nature and are intended to defray Qualcomm's costs in processing and handling late payments.

7.17 Attorneys' Fees. In the event of any proceeding that is undertaken to enforce the provisions of this Agreement or to resolve any claim or dispute arising from or relating to this Agreement, the prevailing Party (as determined by the arbitrator or court) will be entitled to recover its reasonable attorneys' fees as fixed by the arbitrator or court.

7.18 Entire Agreement. This Agreement was prepared and executed in the English language; no translation of this Agreement into any other language will be binding on either Party or will have any effect on the meaning or interpretation of the Agreement. The terms and conditions in this Agreement supersede and replace all prior and contemporaneous communications or understandings (whether oral or written, and whether direct or indirect) between the Parties solely with respect to the subject matter of this Agreement, and constitute the entire agreement of the Parties solely with respect to such subject matter. This Agreement can be modified or amended only by a written document that (a) specifically refers to this Agreement and expressly states the Parties' intention to amend or modify it and (b) is signed by (1) an authorized representative of Licensee and (2) the CEO or President, or an authorized representative of the Qualcomm Technology Licensing Division, of Qualcomm. For the avoidance of doubt, the Parties acknowledge and agree that a communication, whether made electronically or otherwise, containing only the typed name and/or signature block of a Party, and made without the handwritten signature of an authorized representative of a Party within a signature block in such a communication, will not be deemed to be a written document "signed" by a Party for purposes of the immediately preceding sentence.

7.19 Independent Contractors. The relationship between Qualcomm and Licensee is that of independent contractors. Qualcomm and Licensee are not joint venturers, partners, principal and agent, master and servant, or employer and employee, and Qualcomm and Licensee have no relationship other than as independent contracting parties.

[remainder of page intentionally left blank]

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7.20 No Rule of Strict Construction. Regardless of which Party may have drafted this Agreement, or any provision hereof, no rule of strict construction will be applied against either Party. Each Party represents and warrants that it has had an opportunity to be represented by competent legal counsel in negotiating and executing this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed effective as of the Effective Date through their duly authorized representatives. This Agreement may be signed in counterparts.

Qualcomm Incorporated

By: /s/ John Han _____
Printed Name: John Han
Title: Sr. Vice President & General Manager
Execution Date: July 6, 2018

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Gogo LLC

By: /s/ John Wade _____
Printed Name: John Wade
Title: President, Commercial Aviation
Execution Date: 05 July 2018

Attachment 1

Certain Definitions

“**Affiliate**” means (a) as to Qualcomm, any present or future Subsidiary of Qualcomm, but only for so long as the Subsidiary remains a Subsidiary of Qualcomm, and (b) as to any other Entity (including Licensee), any present or future Parent of such Entity and any present or future Subsidiary of such Entity or its Parent, but only for so long as the Parent remains the Parent of such Entity and the Subsidiary remains a Subsidiary of such Entity or its Parent.

“**Assert**,” “**Asserted**,” and “**Assertion**” mean to commence or prosecute patent infringement Litigation.

“**CDMA**” means code division multiple access.

“**CDMA Standard**” means any wireless air interface standard that implements CDMA and is adopted as an industry standard by the Telecommunications Industry Association (“TIA”), the European Telecommunication Standards Institute (“ETSI”), Japan’s Association of Radio Industries and Businesses (“ARIB”), or any other recognized international standards body, including the CDMA2000 family of standards (e.g., CDMA2000 1xRTT, 1xEV-DO, 1xEV-DO Rev. A, 1xEV-DO Rev. B), the WCDMA family of standards (e.g., UMTS, HSDPA, HSUPA, HSPA+), and TD-CDMA, but excluding the TD-SCDMA Standard.

“**Change in Control**” of an Entity means the occurrence of any of the following:

(a) a merger, consolidation, share exchange, tender offer, exchange offer, or similar transaction involving such Entity or any Subsidiary of such Entity after the completion of which the shareholders of such Entity immediately prior to the completion of such merger, consolidation, share exchange, tender offer, exchange offer, or similar transaction beneficially own (within the meaning of Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended (the “United States Exchange Act”), or comparable successor rules), directly or indirectly, outstanding voting securities representing less than fifty percent (50%) of the combined voting power of either the surviving Entity in such merger, consolidation, share exchange, tender offer, exchange offer, or similar transaction or the Parent of the surviving Entity;

(b) an acquisition by any Person or “group” (within the meaning of section 13(d) or 14(d) of the United States Exchange Act or any comparable successor provisions), other than any employee benefit plan or related trust sponsored or maintained by such Entity or an Affiliate of such Entity, and other than in a merger, consolidation, share exchange, tender offer, exchange offer, or similar transaction of the type referred to in clause (a) of this definition, of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the United States Exchange Act, or comparable successor rules) of outstanding voting securities of such Entity representing at least fifty percent (50%) of the combined voting power of such Entity (in a single transaction or series of related transactions); or

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(c) if the individuals who, as of the Effective Date, are members of such Entity's Board of Directors (the "**Incumbent Board**"), cease for any reason to constitute at least fifty percent (50%) of such party's Board of Directors (provided that if the election, or nomination for election by such Entity's shareholders, of any new member of the Board of Directors is approved by a vote of at least fifty percent (50%) of the Incumbent Board, such new member of the Board of Directors will be considered as a member of the Incumbent Board).

"**China**" means the mainland of the People's Republic of China, excluding Taiwan, Hong Kong, and Macao (also known as Macau).

"**Chinese Patents**" means Patents that are filed in China. For clarity, this definition does not include foreign counterparts of Patents filed in China.

"**Component**" means (a) an application-specific integrated circuit, (b) a multi-chip module, (c) any other type of integrated circuit such as system in package (SiP) and system on chip (SoC), and (d) any other electronic device (such as a fixed gate array, field programmable gate array (FPGA), erasable programmable read only memory (ePROM), microprocessor, diode, transistor, thyristor, or display), including, in each case, any firmware thereon and accompanying or associated software. For the avoidance of doubt, and by way of example and not by limitation, a complete end-user terminal is not a Component.

"**Entity**" means any corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust, cooperative, foundation, society, political party, union, company (including any limited liability company or joint stock company), firm, or other enterprise, association, organization, or entity.

"**Essential**" means, with respect to a patent claim in relation to a Wireless Wide-Area Network Standard, that it is not possible on technical (where "technical" does not include and is not otherwise construed to mean "commercial") grounds to implement the air interface specifications of such Wireless Wide-Area Network Standard without practicing such claim.

"**Governmental Authority**" means any: (a) nation, principality, state, commonwealth, province, territory, county, municipality, district, or other governmental jurisdiction of any nature; (b) federal, state, local, municipal, foreign, or other government; (c) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body, or Entity and any court or other tribunal); (d) multi-national governmental organization or body; or (e) Entity or body exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military, or taxing authority.

"**Litigation**" means any procedure for the resolution of a controversy in any jurisdiction in the world, whether created by a claim, a counterclaim, or otherwise, in the broadest sense, in whatever form, administrative, judicial, arbitral, or otherwise, and the filing of a complaint with any Governmental Authority (including any proceeding in the United States International Trade Commission).

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“**LTE Standard**” means (a) the commercially available LTE wireless wide-area network air interface standard adopted and maintained by the 3rd Generation Partnership Project (“**3GPP**”) up to and including 3GPP Release 14 (including LTE-FDD, LTE-TDD, and LTE-Advanced up to and including 3GPP Release 14); and (b) the specifications developed by the LTE-U Forum that support LTE operation in the 5 GHz UNII-1 and UNII-3 bands as Supplemental Downlink (SDL) carriers, in conjunction with an LTE deployment in licensed bands.

“**Parent**” of an Entity means any Person (or group of related or affiliated Persons) that owns or controls, directly or indirectly, (a) more than fifty percent (50%) of the voting power held by the shares or other securities of such Entity entitled to vote for election of directors (or other managing authority) of such Entity, or (b) if such Entity does not have outstanding shares or securities, more than fifty percent (50%) of the equity interests in such Entity, but only for so long as such ownership or control referenced in clause (a) or (b) above exists.

“**Party**” individually means Qualcomm or Licensee, and “**Parties**” collectively means Qualcomm and Licensee.

“**Patent**” means any patent (including any utility model, but excluding any design patent).

“**Person**” means any individual, Entity, or Governmental Authority.

“**Sold**,” “**Sale**,” “**Sell**,” and “**Selling**” mean put into use, sold, leased, or otherwise transferred, and a Sale will be deemed to have occurred upon first use, shipment, or invoicing, whichever occurs first.

“**Subsidiary**” of a Person means any Entity (a) in which the majority (more than fifty percent (50%)) of the voting power held by the shares or other securities entitled to vote for election of directors (or other managing authority) is now or hereafter owned or controlled by such Person, either directly or indirectly, or (b) that does not have outstanding shares or securities but the majority (more than fifty percent (50%)) of the equity interests in which is now or hereafter owned or controlled by such Person, either directly or indirectly, but only for so long as such ownership or control referenced in clause (a) or (b) above exists.

“**TD-SCDMA Standard**” means the third generation direct sequence, single carrier TDD-CDMA air interface standard that (a) has been adopted as an industry standard by the China Communications Standards Association (CCSA), and (b) has a spreading bandwidth of approximately 1.6 MHz. For clarity, the term “**TD-SCDMA Standard**” does not include TD-CDMA.

“**Wireless Wide-Area Network Standard**” means any wide area wireless air interface standard, including GSM, CDMA, TD-SCDMA, Universal Mobile Telecommunications System (UMTS), Wideband Code Division Multiple Access (WCDMA), HSPA, HSDPA, HSUPA, HSPA+, WiMAX, WiBro, IEEE 802.16 (including 802.16e and 802.16m), IEEE 802.20, UMB (formerly known as 1xEV-DO Rev. C), LTE (including any FDD mode and any TDD mode of LTE), and LTE-Advanced, in each case whether adopted as an industry standard by TTA, ETSI, IEEE, ARIB, or another recognized international standards body or industry consortium such as 3GPP, 3GPP2 or Next Generation Mobile Network (NGMN) consortium, or deployed as a de facto standard by a wireless operator.

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**EXHIBIT A
CERTIFICATE**

The undersigned official of Gogo LLC (“LICENSEE”) is providing the attached information (as a separate file) to QUALCOMM pursuant to that certain Access Point Patent License Agreement entered into between LICENSEE and QUALCOMM (the “Agreement”). All capitalized terms used in this certificate have the definitions ascribed to them in the Agreement. Nothing in this certificate is intended to expand or otherwise modify the license expressly granted to LICENSEE under the Agreement. This certificate reflects the royalties payable by LICENSEE for the calendar quarter ended:

20 .

The attached file identifies the following information pertaining to each Covered Product Sale:

- * Quarter of Sale
- * Reporting Entity (Licensee or Affiliate name)
- * Made in (name of country)
- * Covered Standard(s) (e.g., CDMA Standard, LTE Standard)
- * Country of Sale
- * For use in (name of country)
- * Name of Applicable Unaffiliated Purchaser, or, if Sold to Related Buyer, name of final vendee Related Buyer or if retained for own use, “own use”
- * Type of Covered Product (i.e., CDMA Access Point, LTE Access Point)
Royalty calculations not necessary for Covered Products provided to a customer under the “have made” rights of that customer
- * Make/Model of baseband ASIC used in Covered Product
- * Marketed model (corresponds to identified brand)
- * Internal model
- * Quantity Sold
- * Selling Price paid by Applicable Unaffiliated Purchaser, or charged by final vendee Related Buyer or, if used by LICENSEE, the Selling Price that would be realized in a sale to an Applicable Unaffiliated Purchaser (refer to Selling Price and Net Selling Price definitions in the Agreement)
- * Type(s) & amount(s) of deduction(s) (refer to Selling Price definition in the Agreement)
- * Type of Net Selling Price Adjustment if applicable (e.g., due to Related Buyer, own use).
- * Applicable Net Selling Price
- * Applicable royalty percentage
- * Amount of royalty

The undersigned hereby certifies that LICENSEE Sold _____ Covered Products and owes \$ _____ in royalties to QUALCOMM for these Sales.

The attached file represents an accurate and complete record of all royalties due and payable by LICENSEE for the calendar quarter specified above.

Signature: _____

Title: _____

Date _____

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Exhibit A: Example Format for Supporting Data

																		Royalty calculations not necessary for Covered Products provided to a customer under the " " of that customer							
																		Selling Price		Deduction		Calculation			
Quarter	Reporting Entity	Made in (country)	Covered Standard(s) (see cover pages for examples)	Country of Sale	in (country)	Buyer or "own use"	Name of Unaffiliated Purchaser, final vendee Related	Type of Covered Product (see cover pages for examples)	Make/ Model of base bond ASIC used in	Covered Product	Marketed model	Internal Model	Quantity Sold	Applicable Unaffiliated Purchaser	Other Considerations	Insurance & Parking	Transportation	Taxes Import, Export, Excise, Sales & VAT	Other Products (Accessories)	Type of Net Selling Price adjustment (if applicable)	Applicable Net Selling Price	Applicable royalty rate	Amount of royalty (US)		

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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: November 6, 2018

/s/ Oakleigh Thorne

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

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: November 6, 2018

/s/ Barry Rowan

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

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 Thome, 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 September 30, 2018 (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: November 6, 2018

/s/ Oakleigh Thome

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

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 September 30, 2018 (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: November 6, 2018

/s/ Barry Rowan

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

