



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **83180** | Service: **DTS** | Call **KKAI** | Channel: **25 (UHF)** |
ID: | Sign: |
File **0000028496**
Number:
FRN: **0032881088** | Date **09/14**
Submitted: **/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
KAILUA TELEVISION, LLC Doing Business As: KAILUA TELEVISION, LLC	CHRISTOPHER RACINE PO Box 8969 HONOLULU, HI 96810 United States	+1 (808) 591-1683	chris@tonga. com	Limited Liability Company

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Christopher Racine <i>President</i> <i>Kailua Television, LLC</i>	Christopher Racine PO Box 8969 Honolulu, HI 96830 United States	+1 (808) 591-1683	chris@tonga.com

**Broadcaster
Information
and
Transition
Plan**

Question		Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.		No
Briefly describe transition plan		KKAI installing new tower, transmitter, antenna, combiner at one DTS site, new transmitter, antenna, combiner at second DTS site. Both sites to be shared with at least one other station. A Memo of Understanding between the licensees is under preparation.

Transmitters

Section	Question	Response
Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

**Auxiliary
Transmitter****Add Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup transmitter for DTS transmitter
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	TXUP 2500 LD
	Year	2003
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	1.2 kW

**Auxiliary
Transmitter****New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 102 U /XE
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.2 kW
	Justification for New Transmitter	Existing auxiliary transmitter is 14 years old and cannot be retuned to comply with current standards.

**Auxiliary
Transmitter****Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A

	Length	N/A
	Other Electrical Service	Yes
	Description	UPDATE - 1/8/18: See Attachment re emergency generator
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary Transmitter **Other Transmitter Cost Not Listed**
Information not provided.

**Auxiliary
Transmitter****Add Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup transmitter for main transmitter
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	TXUP 2500 LD
	Year	2003
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	1.2 kW

**Auxiliary
Transmitter****New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 102 U /XE
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.2 kW
	Justification for New Transmitter	Existing auxiliary transmitter is 14 years old and cannot be retuned to comply with current standards.

**Auxiliary
Transmitter****Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A

	Length	N/A
	Other Electrical Service	Yes
	Description	UPDATE - 1/8/18: See Attachment re emergency generator
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary Transmitter **Other Transmitter Cost Not Listed**
Information not provided.

**Primary
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	1
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DUAL SCREEN SERVICE SCT 242 UB
	Year	2001
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.5 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 252 U /XE/A
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	5 kW
	Justification for New Transmitter	Current transmitter is 16 years old, was already converted from analog to digital, and cannot be retuned to new channel, according to manufacturer.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes

	Size	3 inches
	Length	128.0 feet
	Other Electrical Service	Yes
	Description	New transmitter building will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATES - 1/8/18, 2/5/18: See Attachments re generators
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	640.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A

	Number of Days	N/A
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Primary
Transmitter

Other Transmitter Cost Not Listed

Name	Description
Electrical meter	New site requires new meter from electric company
Proof of performance	Main transmitter proof of performance
Related electrical work	Electrical work and related materials (cables, outlets, etc.) to bring power to building and transmitters from meter
Building installation	A new building will be obtained and installed, requiring concrete foundation, delivery and installation of building and related work
Logo inserter	To provide station identification

**Primary
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	2
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DUAL SCREEN SERVICE SCT 242 UB
	Year	2001
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.5 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 252 U /XE/A
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	2.5 kW
	Justification for New Transmitter	Current transmitter is 16 years old, was already converted from analog to digital, and cannot be retuned to new channel, according to manufacturer.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes

	Size	3 inches
	Length	120.0 feet
	Other Electrical Service	Yes
	Description	WW2-era building being repurposed for transmitter. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATE: Attachments re generators
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	620.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A

Is additional field engineering time needed?	N/A
Number of Days	N/A

**Primary
Transmitter**

Other Transmitter Cost Not Listed

Name	Description
Transmitter building renovation	A World War II-vintage building will be repurposed for the transmitter building (to include equipment for up to five stations). Work will include repainting, reflooring, lighting, rewiring, refurbishing.
Proof of performance	DTS transmitter proof of performance
Related electrical work	Electrical work and related materials (cables, outlets, etc.) to bring power to building and transmitters from meter
Electrical meter	New site requires new meter from electric company
Logo inserter	To provide station identification
Emergency Generator	Emergency generator for the site since existing standby generator cannot be taken to the new site.

**Interim
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	SFT501 U /XE
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	0.5 kW
	Justification for New Transmitter	Interim transmitter system required while construction and preparation is completed on permanent transmission locations.

**Interim
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A

	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

Interim Transmitter **Other Transmitter Cost Not Listed**
Information not provided.

Interim Transmitter **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	SFT251 U /XE

Transmitter Type	Solid State
Solid State Cooling	Air Cooled
Solid State Power capacity	0.3 kW
Justification for New Transmitter	Interim transmitter system required while construction and preparation is completed on permanent transmission locations.

Interim Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A

Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

Interim Transmitter **Other Transmitter Cost Not Listed**
Information not provided.

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	2
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	15.0 kW

Manufacturer	
Model	12-bay slot antenna
Year	1998

Primary
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	5
	Number of Panels/Bays	12
	Lower Limit	460.00 MHz
	Upper Limit	620.00 MHz
	Design power capacity in use	80.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	25.0 kW
	Manufacturer	

Model	JUHD 12/2 (24) NARROW CARDIOID PATTERN 20 Kw INPUT
Year	2017
Justification for New Antenna	Current antenna is nearly 20 years old, cannot accommodate new channel, and cannot be retuned. New antenna will be used by two-three Hawaii stations.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	5
	Frequencies of channels supported	Upper and lower frequency
	Frequency	460.0 MHz - 620.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A

	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	No

**Primary
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	1
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	3.0 kW

Manufacturer	
Model	10 b
Year	1998

Primary
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels/Bays	6
	Lower Limit	460.00 MHz
	Upper Limit	620.00 MHz
	Design power capacity in use	80.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	3.0 kW
	Manufacturer	

Model	JUHD 6/1(6) VERY NARROW CARDIOID PATTERN
Year	2017
Justification for New Antenna	Current antenna is nearly 20 years old, cannot accommodate new channel, and cannot be retuned. New antenna will be used by two-three Hawaii stations.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	3
	Frequencies of channels supported	Upper and lower frequency
	Frequency	460.0 MHz - 620.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary
Antenna**

Other Antenna Cost Not Listed

Information not provided.

**Interim
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Type	Class	Class A
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	16
	Lower Limit	560.00 MHz
	Upper Limit	566.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	24.1 kW
	Manufacturer	
	Model	ATUH-20- 050
	Year	2019

	Justification for New Antenna	Site 2 Interim antenna needed to continue broadcast coverage during repack and meet cutover deadline. Construction and modifications at permanent transmission sites delayed due to terrain and staffing limitations.
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Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	No

Interim
Antenna

Other Antenna Cost Not Listed

Information not provided.

Interim
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Type	Class	Class A
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	16
	Lower Limit	560.00 MHz
	Upper Limit	566.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	2.6 kW
	Manufacturer	

Model	ATUH-16-050
Year	2019
Justification for New Antenna	Site 1 Interim antenna needed to continue broadcast coverage during repack and meet cutover deadline. Construction and modifications at permanent transmission sites delayed due to terrain and staffing limitations.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	No

**Interim
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	1
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	0
	Length	132 feet per run

Primary
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	132 feet per run
	Justification for New Transmission Line	Existing line is 12-14 years old, deteriorated from exposure to harsh weather, and unable to be moved to new pole and re-bent to new positions. New line will be used to accommodate two-three Hawaii "re-pack" stations.

Primary Transmission Line	Other Transmission Line Expenses Not Listed
Information not provided.	

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	2
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	0
	Length	238 feet per run

Primary Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	228 feet per run
	Justification for New Transmission Line	Existing line is 12-14 years old, deteriorated from exposure to harsh weather, and unable to be moved to new pole and re-bent to new positions. New line will be used to accommodate four-five Hawaii "re-pack" stations.

Primary Transmission Line	Other Transmission Line Expenses Not Listed
Information not provided.	

Tower Equipment And Rigging Costs

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1246610
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	21° 25' 19.6" N-
	Longitude (NAD83)	157° 45' 27.1" W-
	Overall Structure Height	116.14 feet
	Support Structure Height	116.14 feet
	Ground Elevation Above Mean Sea Level (AMSL)	464.89 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	General Telcourier, Inc.
	Date Constructed	01/01/1990

**FM, AM or TV radio
broadcasters. Facility ID's,
Call Signs and Services of
other broadcast stations with
whom the tower is shared**

Facility ID	Call Sign	Service
89714	KUPU	DTV

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Minor Reinforcements needed

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

Primary Tower	Other Tower Expenses Not Listed
	Information not provided.

**Primary
Tower****Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Construct New
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	No
	ASR Number	
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	21° 24' 10.1" N-
	Longitude (NAD83)	158° 05' 52.2" W-
	Overall Structure Height	100.00 feet
	Support Structure Height	100.00 feet
	Ground Elevation Above Mean Sea Level (AMSL)	2765.00 feet
	Structure Type	POLE - Any type of Pole
	Tower Owner	Palehua Ranch, LLC
	Date Constructed	07/09/2017

**FM, AM or TV radio
broadcasters. Facility ID's,
Call Signs and Services of
other broadcast stations with
whom the tower is shared**

Facility ID	Call Sign	Service
89714	KUPU	DTV

Primary
Tower

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Primary (Main)
	Description of Use	N/A
	Is this a request for upgraded equipment?	No
	Height	100.00 feet
	Justification for New Tower	Existing pole is termite-ridden and unable to support new mounts and hanging of new transmission line. Other factors support replacement of existing pole with a new pole. See attachment.

Primary
Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	Yes

Primary
Tower

Other Tower Expenses Not Listed

Name	Description
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Tower installation expenses	Site preparation (clearing, concrete, hole drilling), rigging and related items
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**Interim
Tower**

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Interim
	Description of Use	N/A
	Height	80.00 feet
	Justification for New Tower	KKAI will lease an interim tower space from Hawaii Catholic TV while construction and modifications are underway on KKAI's permanent transmission sites. This interim tower is necessary to continue broadcast coverage during the transition.

**Interim
Tower**

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

**Interim
Tower**

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional Services Costs**

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	995
	Explanation	Proposal involves construction, remodeling, installation at two sites, requiring management of multiple subcontractors & project management. The work is beyond the scope of licensee's existing personnel.
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	Do you have Distributed Transmission System engineering services?	No

	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	Yes
RF Field Engineering Services	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Other engineering work - local	Local engineering to assist with design and preparation of two separate sites and installation of equipment at both sites.
Other legal work - local	Local counsel to assist with leases, utility companies, cable companies, other stations
Other Accounting Services	Please see attached quote from Sandlin and Associates for repack-related accounting services

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	No
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

**Other
Expenses**

Other Expenses Not Listed

Name	Description
Fiber Optic drop	Deliver all repack stations to cable operator (Hawaiian Telcom) by fiber

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmitter SFT501 U/XE	\$52,338.00	\$52,338.00		\$52,338.00	
UHF - Air Cooled Solid State Transmitter 0.5 kW	<i>\$52,338.00</i>	\$52,338.00	N/A	\$52,338.00	N/A
Interim Transmitter SFT251 U/XE	\$37,530.00	\$37,530.00		\$37,530.00	
UHF - Air Cooled Solid State Transmitter 0.3 kW	<i>\$37,530.00</i>	\$37,530.00	Please see Bri-Comm Quote 1903-028	\$37,530.00	N/A
Primary Transmitter SFT 252 U/XE/A	\$277,461.79	\$146,665.15		\$31,261.15	
Logo inserter	<i>\$0.00</i>	\$0.00	N/A	N/A	N/A
Building installation	<i>\$2,025.00</i>	\$2,025.00	N/A	N/A	N/A
Related electrical work	<i>\$0.00</i>	\$0.00	N/A	N/A	N/A
Proof of performance	<i>\$2,800.00</i>	\$2,800.00	N/A	N/A	N/A
Electrical meter	<i>\$5,030.79</i>	\$5,030.79	Per invoices received	\$5,030.79	N/A

Other -- Building Addition Size: 640.0	\$4,200.00	\$4,200.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	\$236,500.00	\$102,979.00	N/A	\$0.00	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$6,656.00	\$3,400.00	N/A	N/A	N/A
Other Electrical Service: New transmitter building will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATES - 1/8/18, 2/5 /18: See Attachments re generators	\$0.00	\$0.00	N/A	N/A	N/A
5 Ton system	\$20,250.00	\$26,230.36	808 Air Conditioning Quote #20181004	\$26,230.36	N/A
Primary Transmitter SFT 252 U /XE/A	\$314,902.74	\$271,391.74		\$264,694.11	

Emergency Generator	\$54,971.34	\$54,971.34	Station currently has access to a standby generator at the primary site. The station cannot take the standby generator to the new site.	\$54,971.34	N/A
Logo inserter	\$0.00	\$0.00	N/A	N/A	N/A
Electrical meter	\$4,550.00	\$4,550.00	N/A	\$0.00	N/A
Related electrical work	\$10,546.35	\$10,546.35	See invoice Pro Service, Inc. #19037	\$10,546.35	N/A
Proof of performance	\$2,800.00	\$2,800.00	N/A	N/A	N/A
Transmitter building renovation	\$30,493.00	\$30,493.00	Invoice Harding Containers Kailua 1--1, Islandwide Excavation and Services LLC 1675 and 1676	\$30,493.00	N/A
Other -- Building Addition Size: 620.0	\$0.00	\$0.00	N/A	N/A	N/A
5 Ton system	\$20,250.00	\$4,200.00	N/A	N/A	N/A

UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$102,979.00	N/A	\$107,831.37	As indicated in the attached explanation, in its initial estimate the licensee inadvertently failed to include the cost of the tax associated with this item,
3" Rigid Conduit and Wiring (Cost per foot)	\$6,240.00	\$1,800.00	N/A	\$1,800.00	N/A
Other Electrical Service: WW2-era building being repurposed for transmitter. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATE: Attachments re generators	\$15,607.75	\$15,607.75	Per Vans Electric, Inc Invoice 1158	\$15,607.75	N/A

Other Electrical Service: World War II-vintage building being repurposed for DTS transmitter building. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).	\$43,444.30	\$43,444.30	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$43,444.30	See attached invoice. Work includes preparation of site for use by four additional broadcasters involved in channel repack.
Auxiliary Transmitter SFT 102 U /XE	\$146,250.00	\$120,000.00		\$107,831.37	
5 Ton system	\$20,250.00	\$0.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$120,000.00	N/A	\$107,831.37	N/A
Other Electrical Service: UPDATE - 1 /8/18: See Attachment re emergency generator	\$0.00	\$0.00	N/A	\$0.00	N/A

Auxiliary Transmitter SFT 102 U /XE	\$201,221.34	\$201,201.70		\$54,971.34	
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$120,000.00	N/A	N/A	N/A
Other Electrical Service: UPDATE - 1 /8/18: See Attachment re emergency generator	\$54,971.34	\$54,971.34	Emergency Generator Set for transmitter site. See Justification Cover Letter.	\$54,971.34	N/A
5 Ton system	\$20,250.00	\$26,230.36	Please see the attached invoice from 808 Air Conditioning, LLC # 20181004	N/A	N/A
Sub-total	\$1,029,703.87	\$829,126.59	N/A	\$548,625.97	N/A
Total for all systems	\$2,827,147.95	\$2,546,121.09	N/A	\$1,084,088.48	N/A

Components

Actual Information	
Description	File Name
UHF - Air Cooled Solid State Transmitter 0.5 kW	<p>Component Description: Digital Compact Transmitter, UHF (IV and V band), LD-MOS Doherty Amplifiers, Large color Display, Internal GPS /Glonass receiver</p> <p>Amount: \$52,338.00</p>

UHF - Air Cooled Solid State Transmitter 0.3 kW	<p>Component Description:</p> <p>Digital Compact Transmitter, UHF (IV and V band), LD-MOS Doherty Amplifiers, Large color Display, Internal GPS /Glonass receiver, Input ASI and IP</p> <p>Amount:</p> <p>\$37,530.00</p>
Logo inserter	Information not provided.
Building installation	Information not provided.
Related electrical work	Information not provided.
Proof of performance	Information not provided.
Electrical meter	<p>Component Description:</p> <p>Professional services</p> <p>Amount:</p> <p>\$5,030.79</p>
Other -- Building Addition Size: 640.0	Information not provided.
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	Information not provided.
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Other Electrical Service: New transmitter building will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATES - 1/8/18, 2/5/18: See Attachments re generators	Information not provided.

5 Ton system	Component Description: Mitsubishi Split Systems Amount: \$26,230.36
Emergency Generator	Component Description: Emergency standby generator system for new primary transmitter site. Amount: \$54,971.34
Logo inserter	Information not provided.
Electrical meter	Information not provided.
Related electrical work	Component Description: In house repairs and alignments of a linear 1 Watt exciter. Amount: \$1,446.35 Component Description: The total invoice covers electrical work under three separate categories, including \$9,100 for "related electrical work" Amount: \$9,100.00
Proof of performance	Information not provided.

Transmitter building renovation	Component Description: Container Relocation /Welding Amount: \$1,900.00
	Component Description: Chain link fence installation Amount: \$8,900.00
	Component Description: 20' Side-by-Side DUO-CON building for Pu'u Papa'a tower site Amount: \$19,693.00
	Component Description: Building permit fees Amount: \$723.40
	Component Description: Building Permit & Plan Review fee from Hawaiian Electric Co. Amount: \$854.40
Other -- Building Addition Size: 620.0	Information not provided.
5 Ton system	Information not provided.
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Component Description: This reflectst the cost of the main transmitter to be installed at KKAI's principal site (Pu'u Papa'a). Amount: \$107,831.37

<p>3" Rigid Conduit and Wiring (Cost per foot)</p>	<p>Component Description:</p> <p>The total invoice covers electrical work under three separate categories, including \$1,800 for 3" rigid conduit and wiring at the Mauna Kapu transmitter site</p> <p>Amount:</p> <p>\$1,800.00</p>
<p>Other Electrical Service: WW2-era building being repurposed for transmitter. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATE: Attachments re generators</p>	<p>Component Description:</p> <p>Electrical Work Installation of meter</p> <p>Amount:</p> <p>\$15,607.75</p>
<p>Other Electrical Service: World War II-vintage building being repurposed for DTS transmitter building. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).</p>	<p>Component Description:</p> <p>The total invoice covers electrical work under three separate categories, including \$43,444.30 for "other electrical service" relating to preparation of the Mauna Kapu transmitter site.</p> <p>Amount:</p> <p>\$43,444.30</p>
<p>5 Ton system</p>	<p>Information not provided.</p>

UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	<p>Component Description:</p> <p>This reflects the cost of the auxiliary transmitter to be used at KKAI's principal site (Pu'u Papa').</p> <p>Amount:</p> <p>\$107,831.37</p>
Other Electrical Service: UPDATE - 1/8/18: See Attachment re emergency generator	<p>Component Description:</p> <p>generator moved to main transmitter per Cindy Cavell.</p> <p>Amount:</p> <p>N/A</p>
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Information not provided.
Other Electrical Service: UPDATE - 1/8/18: See Attachment re emergency generator	<p>Component Description:</p> <p>30 kw Diesel Generator Set for Mauna Kapu Site</p> <p>Amount:</p> <p>\$54,971.34</p>
5 Ton system	Information not provided.

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna ATUH-20-050	\$46,460.00	\$16,836.14		\$16,836.14	
UHF - Lower Power Side Mount, Class A One Station antenna -- basic	\$26,300.00	\$16,836.14	Please see attached quote from Aldena. Cost includes proportional freight expenses.	\$16,836.14	N/A
UHF - Lower Power Side Mount, Class A broadband panel (cost per panel)	\$20,160.00	\$0.00	PHANTOM ANTENNA, IGNORE	N/A	N/A
UHF " Broadband Panel, Side Mount Auxiliary /Interim, 24 horizontally polarized	<i>\$0.00</i>	\$0.00	PHANTOM ANTENNA, IGNORE	N/A	N/A
Interim Antenna ATUH-16-050	\$46,460.00	\$12,752.86		\$12,752.85	

UHF - Lower Power Side Mount, Class A broadband panel (cost per panel)	\$20,160.00	\$0.00	PHANTOM ANTENNA, IGNORE	N/A	N/A
UHF â€“ Broadband Panel, Side Mount Auxiliary /Interim, 3 horizontally polarized	\$0.00	\$0.00	PHANTOM ANTENNA, IGNORE	N/A	N/A
UHF - Lower Power Side Mount, Class A One Station antenna -- basic	\$26,300.00	\$12,752.86	Please see attached quote from Aldena. Cost includes proportional freight expenses.	\$12,752.85	N/A
Primary Antenna JUHD 12/2 (24) NARROW CARDIOID PATTERN 20 Kw INPUT	\$178,913.55	\$183,938.55		\$0.00	
UHF - High Power, Side Mount, broadband panel, 12 bay,, 25 kW input, horizontally polarized	\$71,563.55	\$71,563.55	Chaison Technologies Invoice N0812213	\$0.00	N/A

New combiner, cost per channel (without antenna)	\$84,200.00	\$112,375.00	Combiner is designed for use by up to five stations in the Hawaii repack. KKAH licensee is acquiring the combiner itself for joint use by participating stations.	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	N/A	N/A	N/A
Primary Antenna JUHD 6/1 (6) VERY NARROW CARDIOID PATTERN	\$119,340.00	\$83,581.45		\$0.00	

New combiner, cost per channel (without antenna)	\$84,200.00	\$54,400.00	N/A	\$0.00	The difference between the actual cost and the estimated cost is attributable to the licensee's inadvertent failure to include in its original estimate the costs of: (a) mounting hardware for the combiner and (b) taxes.
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$17,781.45	N/A	\$0.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A

UHF - High Power, Side Mount, broadband panel, 6 bay,, 3 kW input, horizontally polarized	\$0.00	\$0.00	N/A	N/A	N/A
Sub-total	\$391,173.55	\$297,109.00	N/A	\$29,588.99	N/A
Total for all systems	\$2,827,147.95	\$2,546,121.09	N/A	\$1,084,088.48	N/A

Components

Actual Information	
Description	File Name
UHF - Lower Power Side Mount, Class A One Station antenna -- basic	<p>Component Description: KKAI-280-2nd Interim Antenna - UHF - Lower Power Side Mount, Class A One Station antenna -- basic</p> <p>Amount: \$16,836.14</p>
UHF - Lower Power Side Mount, Class A broadband panel (cost per panel)	Information not provided.
UHF " Broadband Panel, Side Mount Auxiliary /Interim, 24 horizontally polarized	Information not provided.
UHF - Lower Power Side Mount, Class A broadband panel (cost per panel)	Information not provided.
UHF " Broadband Panel, Side Mount Auxiliary /Interim, 3 horizontally polarized	Information not provided.

UHF - Lower Power Side Mount, Class A One Station antenna -- basic	<p>Component Description: UHF TV Horizontal Polarization - 16 Panels (ATU0807420) antenna (8 bay, 2 panel per bay - Narrow Cardiod pattern)</p> <p>Amount: \$12,752.85</p>
UHF - High Power, Side Mount, broadband panel, 12 bay,, 25 kW input, horizontally polarized	<p>Component Description: 8-Bay (8) (16) UHF Broadband Panel Antenna System Horizontally Polarized; Peanut Pattern Configuration Maximum Input Power: 20 kW</p> <p>Amount: \$71,563.55</p>
New combiner, cost per channel (without antenna)	Information not provided.
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.

New combiner, cost per channel (without antenna)	<div> <div> Component Description: </div> <div> This reflects the cost of the combiner (including mounting brackets) to be installed at KKAI's principal site (Pu'u Papa'a). </div> </div> <div> Amount: </div> <div> \$64,549.41 </div> <div> Component Description: </div> <div> Credit Memo and Certification Statement </div> <div> Amount: </div> <div> (\$64,549.41) </div>
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.
Side mount brackets for high power antennas (if not included in antenna base cost)	<div> <div> Component Description: </div> <div> This is the cost of the mounting brackets for the antenna to be installed at KKAI's principal site (Pu'u Papa'a). </div> </div> <div> Amount: </div> <div> \$17,781.45 </div>
Sweep test of existing antenna	Information not provided.
UHF - High Power, Side Mount, broadband panel, 6 bay,, 3 kW input, horizontally polarized	Information not provided.

Cost
Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$7,788.00	\$12,280.00		\$2,514.00	
Flexible Air Transmission Line - dielectric, 3"	\$7,788.00	\$12,280.00	Two separate lengths of transmission line is required: a length of 3" line from the transmitter to the combiner, and another length of 4" line from the combiner to the antenna.	\$2,514.00	N/A
Primary Transmission Line	\$13,452.00	\$25,080.00		\$2,514.00	
Flexible Air Transmission Line - dielectric, 3"	\$13,452.00	\$25,080.00	Two separate lengths of transmission line is required: a length of 3" line from the transmitter to the combiner, and another length of 4" line from the combiner to the antenna.	\$2,514.00	N/A

Sub-total	\$21,240.00	\$37,360.00	N/A	\$5,028.00	N/A
Total for all systems	\$2,827,147.95	\$2,546,121.09	N/A	\$1,084,088.48	N/A

Components

Actual Information	
Description	File Name
Flexible Air Transmission Line - dielectric, 3"	<p>Component Description: Field visit to evaluate interim sites for KKAI and to determine what is necessary for installation at both DTS1 and DTS 2 transmission sites.</p> <p>Amount: \$2,514.00</p>
Flexible Air Transmission Line - dielectric, 3"	<p>Component Description: KKAI-320-2nd Primary Transmission Line - 3" Air Dielectric Flexible</p> <p>Amount: \$2,514.00</p>

Cost Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower POLE	\$0.00	\$0.00		\$0.00	
Primary Tower TOWER	\$268,500.00	\$55,800.00		\$35,256.08	
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	\$2,597.06	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$30,800.00	See attachment	\$32,659.02	The actual cost of this work came in slightly higher than the original estimate. However, the related site mapping cost was considerably lower than the estimate, resulting in actual costs for the two line items well below the estimate.

Short Tower (less than 500')	\$84,200.00	\$0.00	N/A	N/A	N/A
Primary Tower	\$257,450.00	\$173,250.00		\$29,539.50	
Tower Helicopter Lift	\$21,000.00	\$21,000.00	Helicopter necessary to deliver new pole to site. Estimated three-hour project at \$7,000/hour.	N/A	N/A
Short Tower (less than 500')	\$84,200.00	\$0.00	N/A	N/A	N/A
New tower	\$93,500.00	\$93,500.00	See attachment	N/A	N/A
Tower installation expenses	\$58,750.00	\$58,750.00	See attachment.	\$29,539.50	N/A
Interim Tower	\$84,200.00	\$84,000.00		\$43,995.00	
Short Tower (less than 500')	\$84,200.00	\$84,000.00	Per the Hawaii Catholic TV Site lease agreement, this is the estimated cost of the interim tower rent for the duration of the period. This estimate does not include tax.	\$43,995.00	N/A

New tower	\$0.00	\$0.00	This category is not necessary - no new tower construction needed.	N/A	N/A
Sub-total	\$610,150.00	\$313,050.00	N/A	\$108,790.58	N/A
Total for all systems	\$2,827,147.95	\$2,546,121.09	N/A	\$1,084,088.48	N/A

Components

Actual Information	
Description	File Name
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	<p>Component Description: This reflects the cost of site mapping, analysis and assessment of the existing tower and equipment at KKAI's principal site (Pu'u Papa'a).</p> <p>Amount: \$2,597.06</p>
Minor tower reinforcement /modifications	<p>Component Description: This reflects the cost of repairs and restructuring of the tower at KKAI's principal site (Pu'u Papa'a).</p> <p>Amount: \$32,659.02</p>
Short Tower (less than 500')	Information not provided.
Tower Helicopter Lift	Information not provided.
Short Tower (less than 500')	Information not provided.
New tower	Information not provided.

Tower installation expenses	<div> <div>Component Description:</div> <div>Preparatory work re tower installation at Mauna Kapu site</div> <div>Amount:</div> <div>\$29,539.50</div> </div>
Short Tower (less than 500')	<div> <div>Component Description:</div> <div>Tower rent Palehau Ridge for the first six months</div> <div>Amount:</div> <div>\$43,995.00</div> </div>
New tower	Information not provided.

**Cost
Information**

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$516,782.50	\$820,777.47		\$380,695.55	
Other Accounting Services	<i>\$47,137.50</i>	\$47,137.50	Please see attached quote from Sandlin and Associates for repack-related Accounting services.	\$0.00	N/A
Other legal work - local	<i>\$95,000.00</i>	\$95,000.00	See Quote from local attorney, Thomas R. Sylvester	\$67,173.84	Local law firm used for state permitting issues. Mauna Kea towers have been more difficult and time consuming than original estimate.
Other engineering work - local	<i>\$68,900.00</i>	\$68,900.00	N/A	\$9,820.31	See Attachment "Supplier to Response to 12/31 Inquiry"
RF Exposure Measurements	\$21,050.00	\$20,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A

Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	\$0.00	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,584.00	N/A	N/A	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$101,949.95	State of Hawaii Department of Land and Natural Resources issues for the Mauna Kapu tower site. see Actual Cost Justification: Attorneys' Fees as well as Thomas Sylvester invoices; see Justifying Invoice - Thomas R Sylvester #19-0119	\$50,793.90	See Attachm Actual C Justifica for Attorne Fees
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$4,500.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,100.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$10,000.00	Station is a DTS facility, which entails two separate transmission systems.	\$4,425.00	See attachm Actual C Justificat Attorne Fees
Prepare request for Special Temporary Authorization	\$4,100.00	\$2,750.00	See invoice Smith and Fisher #7108	\$2,750.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$3,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,050.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$6,000.00	Station is a DTS facility, which entails two separate transmission systems.	\$0.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$14,000.00	Station is a DTS facility, which entails two separate transmission systems.	\$6,900.00	N/A

Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,560.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$36,977.50	See attached invoice for actual legal fees related to preparation and review of the reimbursement form.	\$38,993.93	N/A
Project management of the transition	\$157,210.00	\$318,268.52	See PINEAPPLE ENGINEERING Quote - \$90k Widelity Strategic Support Quote - \$99,675 Chaison invoices forwarded for payment - \$122,393.52 Fletcher Heald forwarded for payment - \$6200	\$199,838.57	See attached exhibit which includes revised invoice reflecting work on previous identification and providing further detail concerning the work involved
Sub-total	\$516,782.50	\$820,777.47	N/A	\$380,695.55	N/A
Total for all systems	\$2,827,147.95	\$2,546,121.09	N/A	\$1,084,088.48	N/A

Components

Actual Information
Description

File Name

Other Accounting Services	<div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>KKAI Repack Accounting Services</div> <div>\$14,141.25</div> </div>
Other legal work - local	<div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>Local legal services rendered in September 2017 in connection with State of Hawaii Department of Land and Natural Resources issues for the Mauna Kapu tower site.</div> <div>\$16,129.57</div> </div> <div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>Local legal services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with Hawaii Department of Land and Natural Resources regulations and applications.</div> <div>\$11,944.35</div> </div>

Component Description:	Local legal services rendered from January through May 2018 in connection with Department of Plans and Permits requirements, permitting by Hawaii Department of Land and Natural Resources, and Hawaiian Elec. Co service for the Mauna Kapu tower site.
Amount:	\$26,575.90

Component Description:	KKAI-550-Attorney - Local Legal Work
Amount:	\$1,820.55

Component Description:	KKAI-550-Attorney - Local Legal Work
Amount:	\$2,661.69

Component Description:	KKAI-550-Attorney - Local Legal Work
Amount:	\$432.09

Component Description:	KKAI-550-Attorney - Local Legal Work
Amount:	\$2,615.60

Component Description:	KKAI-550-Attorney - Local Legal Work
Amount:	\$3,076.50

Component Description:

KKAI-550-Attorney
- Local Legal Work

Amount:

\$2,442.77

Component Description:

Continue to work
on issues relating
to construction,
transfer of physical
plant with
Department of
Plans and Permits.

Amount:

\$12,091.93

Other engineering work -
local

Component Description:	Engineering Services
Amount:	\$400.00
Component Description:	Removed
Amount:	N/A
Component Description:	Prior coordination for 6.7 GHz link from studio to Mauna Kapu site.
Amount:	\$300.00
Component Description:	Analysis of 7 GHz Channel Availability from studio to Mauna Kapu site.
Amount:	\$350.00
Component Description:	Removed
Amount:	N/A
Component Description:	Consulting and Services for: KKAI (Facility ID-83180) including Technical and Engineering consulting
Amount:	\$9,820.31
Component Description:	Application preparation and FCC filing fee for upper 6 GHz microwave link between studio and Mauna Kapu tower site.
Amount:	\$980.00

RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees - Negotiation of lease and other matters for shared locations	Component Description: Amount:	Legal services \$10,646.79
	Component Description: Amount:	Meetings with client; Update on KKAI repack plans. \$10,462.43
	Component Description: Amount:	January 1 - 6, 2019 Exchange emails with client re repack issues. Review Form 387 for filing. \$6,481.40
	Component Description: Amount:	Telephone call from client. \$9,771.08
	Component Description: Amount:	Legal services \$7,282.22

	Component Description: Amount:	Current charges for legal work in connection with KKAI repack for January through June 2018. \$24,562.50
	Component Description: Amount:	Attorneys' fees - negotiation of lease and other matters for shared locations \$19,750.00
	Component Description: Amount:	Review emails from client. \$12,306.03
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Attorneys' fees re preparation of construction permit applications \$4,425.00

Prepare request for Special Temporary Authorization	<p>Component Description:</p> <p>Preparation of engineering portion of KKAI-DT STA request for interim facilities for repack Channel 29 on Pu u Papa a and Mauna Kapu DTS Sites 1 and 2</p> <p>Amount:</p> <p>\$2,750.00</p>
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<p>Component Description:</p> <p>Preparation of repack engineering plans for Station KKAI and other stations to be co-located with KKAI</p> <p>Amount:</p> <p>\$3,050.00</p>

Perform engineering study for new channel assignment and antenna development	Component Description:		Consulting engineering services concerning preparation of spectrum repack engineering
	Amount:		\$6,250.00
	Component Description:		Consulting engineering services relative to maximization of KKAI facilities
	Amount:		\$3,500.00
	Component Description:		Consulting services concerning interference analysis
	Amount:		\$650.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.		
Prepare and or review reimbursement form	Component Description:		Legal Services
	Amount:		\$5,250.00
	Component Description:		Attorney fees for preparation and review of reimbursement form
	Amount:		\$31,727.50
	Component Description:		KKAI-590-Prepare and/or Review Reimbursement Form
	Amount:		\$2,016.43

Project management of the transition

Component Description:	Project Management
Amount:	\$3,712.75
Component Description:	Project management re preparation of Mauna Kapu transmitter site - REVISED
Amount:	\$48,537.72
Component Description:	Project Management
Amount:	\$6,216.80
Component Description:	Project Management
Amount:	\$6,758.00
Component Description:	Project Management
Amount:	\$10,506.85
Component Description:	Project Management
Amount:	\$3,985.70
Component Description:	Project Management
Amount:	\$17,529.15
Component Description:	Project Management
Amount:	\$28.75

Component Description:	Project Management
Amount:	\$2,638.95

Component Description:	Project Management
Amount:	\$3,507.90

Component Description:	Project management, processing of invoices by law firm.
Amount:	\$6,200.00

Component Description:	Project Management
Amount:	\$3,067.85

Component Description:	Project Manager services for KKAI-TV repack at Pu'u Papa'a tower site (DTS 1) and Mauna Kapu tower site (DTS 2).
Amount:	\$21,685.32

Component Description:	Project Management
Amount:	\$9,094.55

Component Description:	Please deny this invoice.
Amount:	N/A

Component Description:	KKAI Repack Accounting Services
Amount:	\$14,141.25

Component Description:	Project Management
Amount:	\$4,197.80

Component Description:	Licensee's employee engineer's time spent on project management of KKAI repack from July 2017 through May 2018.
Amount:	\$19,860.00

Component Description:	Project manager
Amount:	\$40,852.50

Component Description:	Project Management fees for the period from November 18, 2017 through May 31, 2018.
Amount:	\$52,170.48

Component Description:	KKAI Repack Accounting Services
Amount:	\$14,141.25

Component Description:	KKAI Repack Accounting Services
Amount:	\$14,141.25

**Cost
Information**

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$258,098.03	\$248,698.03		\$11,359.39	
Fiber Optic drop	<i>\$177,603.03</i>	\$177,603.03	See attachment.	N/A	N/A
MVPD Notification of Channel Change	<i>\$2,000.00</i>	\$2,000.00	N/A	\$2,000.00	N/A
Develop and air announcement of upcoming channel change	<i>\$2,000.00</i>	\$2,000.00	Estimated cost of production /broadcast of channel change announcements	\$1,257.00	N/A
Equipment Storage	<i>\$2,500.00</i>	\$2,500.00	N/A	N/A	N/A
Local Zoning	<i>\$27,600.00</i>	\$27,600.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	\$4,785.00	As explained in the attachment because it anticipates interference problems Kailua Television LLC was required to propose a channel (channel 29) other than the channel (25) initially identified by the FCC for KKAI
DTV Medical Facility Notification	\$11,550.00	\$2,200.00	N/A	\$2,200.00	N/A
Equipment Delivery and Handling Charges	\$14,000.00	\$14,000.00	Estimated cost of delivery of transmitters, antennas to Hawaii	\$750.80	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$1,400.00	\$1,400.00	Old transmitters, antennas cannot be used, must be scrapped.	\$366.59	N/A
Non-zoning permits	\$18,000.00	\$18,000.00	N/A	N/A	N/A
Sub-total	\$258,098.03	\$248,698.03	N/A	\$11,359.39	N/A
Total for all systems	\$2,827,147.95	\$2,546,121.09	N/A	\$1,084,088.48	N/A

Components

Actual Information	
Description	File Name
Fiber Optic drop	Information not provided.
MVPD Notification of Channel Change	Component Description: MVPD Notification Amount: \$2,000.00
Develop and air announcement of upcoming channel change	Component Description: Produce and edit on-air announcements in both standard definition and high definition notifying views of the upcoming channel change for KKAI from channel 50 to channel 29. Amount: \$1,257.00
Equipment Storage	Information not provided.
Local Zoning	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.
FCC Filing Fees - Form 2100 minor change CP application	Component Description: Application fee for major change application. See attachment. Amount: \$4,785.00
DTV Medical Facility Notification	Component Description: KKAI Medical Notification Amount: \$2,200.00

Equipment Delivery and Handling Charges	<p>Component Description: Transportation of a shipping container from Kawaihae to Hololulu.</p> <p>Amount: \$750.80</p>
Disposal Costs (for equipment and other waste, net of any salvage value)	<p>Component Description: Truck rental for hauling debris to the dump from clearing tower location at Mauna Kapu site.</p> <p>Amount: \$366.59</p>
Non-zoning permits	Information not provided.

**Cost
Information**

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,827,147.95	\$2,546,121.09	\$1,084,088.48

Reimbursement Status

Question	Response
The facility has ceased operating on its pre-auction channel.	No
Construction of final facilities or all necessary modifications are complete.	No
All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Christopher
Racine**
President

09/14/2020

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 	

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Christopher Racine <i>President</i></p> <p>09/14/2020</p>

Attachments