



Big Island Amateur Radio Club Newsletter

February 2020

How to disagree

"To disagree, one doesn't have to be disagreeable." - Sen. Barry Goldwater (K7UGA/SK)

Recently, during one of our Wednesday night sessions of the Tech Net, we discussed the new ban on radio use on Mauna Kea, enacted as a University of Hawaii management rule, which was signed by Governor Ige on January 14, 2020.



William Polhemus, NH6ET

If you were on the air with us on the Tech Net, you are already aware of my views on the matter. Simply put, I don't think that the Governor has the

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ARRL expands its roster of online discussion groups

ARRL's Committee on Communication with Members has launched three new online discussion forums as part of its ongoing efforts to enhance and improve communication between ARRL leadership and members or prospective members.

The new forums, which focus on antenna law, regulatory issues, and support for new amateur radio licensees, went live Jan. 30 at 0400 UTC.

The committee launched the three new discussion groups on the basis of requests from the amateur radio community, to support ARRL's efforts to provide more resources for beginner-to-intermediate operators.



The online discussion program launched last fall with three forums -- contesting, awards, and the International Amateur Radio Union (IARU) -- all open to the amateur radio community. The program was based on the success of the online ARRL-LoTW Group, which, for the past several years, has served to answer questions and generate discussions about ways to improve the service. To subscribe, use a current or new Groups.io account.



Tips on how to get on air!

If you have questions about how to get started in ham radio, *On the Air* has the answers.

On the Air, ARRL's new bimonthly magazine for beginner and intermediate hams, is here!

All ARRL members can access the digital edition through the new ARRL Magazines app.

In the first issue of *On the Air* January/February 2020, you'll get:

- A guide to buying your first handheld radio
- Step-by-step instructions for building simple antennas for VHF and HF
- A full-page infographic that explains how the ionosphere makes long-distance radio communication possible
- An "Up Close" Q & A with Jeremy Hong, KD8TUO, who reveals his favorite resources for new hams.

... and much more!

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right and/or authority to regulate radio use; on Mauna Kea, or anywhere else for that matter. In the United States, authority to regulate radio use lies solely with the Federal government.

That Wednesday night on the tech net, to support my position, I cited the 9th Circuit Court of Appeals decision in *City of Rancho Palos Verdes v. Abrams* (2002). The court upheld that the regulation of amateur and commercial radio privileges is an exclusive power of the United States Government. They affirmed that a license granted by the FCC is immutable by state law. Further, they affirmed that under the doctrine of 'federal preemption' any regulations enacted by a local or state government regulating radio transmissions are preempted by federal laws.

In light of this precedent setting case, I feel that I am on firm ground. You can read that decision at bit.ly/37mW7g3

Having said this, I strongly discourage anyone from storming the mountain to exercise their privileges.

Being the guinea pig in a matter like this is likely to be costly and unpleasant. Even when you're right, you can be in the wrong.

I have been asked over the air and in person what can be done. Some operators want the ability to transmit from the

summit during events. Others are concerned that the state will expand their rules to include other locations, and possibly for other purposes. We certainly don't want our community to suddenly become the next Green Bank. If you refer to the quote cited at the beginning of this article, we need to follow K7UGA's sage advice; we need to find a way to disagree, without being disagreeable. This may not be something to take head on. The state won't want to hear that they don't hold an authority they obviously believe that they hold. Further, they may find ways for the amateur community to feel effects we like less than the new UH management rule. They could go so far as to seek action by the FCC to create a quiet zone. Again, we don't want to be the next Green Bank.

We must tread lightly. I feel strongly that we must protect our spectrum and our privileges.

However, we should do so in a way that does not put them at risk. My first course of action will be to discuss your concerns with ARRL. I may not always see eye to eye with the Board of Directors of the ARRL. Just as I would not have always seen eye to eye with Senator Barry Goldwater. However, I can recognize the wisdom. Let's see what wisdom the ARRL can offer us.

73, William - NH6ET

EmComms: Lessons from the California Camp Fire disaster

There is an excellent video on the lessons learned from the 2018 California Camp Fire passed on to us by Oliver Dully (K6OLI), ARRL ARES DEC LAX. Oliver has been assisting the Winlink projects in Hawaii this past year and continues to share information about EmComm.

The link discusses the "Camp Fire" in CA and does not specifically address Amateur Radio communications. However, it is a powerful message about the need to develop our skills and devote time to plan for disasters.

Participation in CERT training is something we should all consider.

Oliver contributed important comments during viewing, (below, with time listed at mm:ss) Please note: Video contains content some may find distressing. (<https://youtu.be/bo0yBOCvuWU>)

"As you are watching ask yourselves:

- Are my skills at the level where I can adjust my actions to meet changes of the situation?
- What is the difference

10-10 International Aloha Chapter open to all

Local hams active on 10 meters encourage amateur radio licensees at all levels to join in the fun. [More info on the world of Ten-Ten is available on Facebook and at <https://www.ten-ten.org>]

between plans and planning?

- What were the benefits of participating in drills and exercises? (56 55)
- How many resource requests were typical per day in an incident before the Camp Fire? How many resource requests per day were there during and after the Camp Fire? (40 45)
- What was the impact of the Camp Fire on the communications infrastructure? (45 47)
- The Paradise Ridge area had 56,000 evacuees impacted - how different would we expect the impact to be with 10 million living in Los Angeles County?
- What three things can you do today to better prepare for disruptions in your own life?
- Can you do one thing every month that will help you and your family be more resilient and flexible in the face of disruptions?

Note that from the word "Go" communications in Butte County were compromised (19 25) and continued to deteriorate (45 47). It is also

important for us to acknowledge the limits of amateur radio: while we are good at point-to-point communications which can connect hospitals, sheriff stations and so on during disruptions, we have neither the equipment, nor the training and capabilities to support mass public notification systems.

What we can do is to cooperate, collaborate, coordinate and communicate with agencies and organizations across the county and offer our support, our skills and our training. That may help prioritize, stabilize and move communications in disruptions."

**ARRL Pacific Section
Section Manager
Joseph Speroni, AH0A
ah0a@arrl.org**

From the coconut wireless

Visit Pohakuloa

Ever wonder what's going on at the Pohakuloa Training Area? Here's your chance to see and ask questions.

SAVE THE DATE (April 23, 2020) for the annual PTA Open House, also known as Experience PTA Day.

For more information on "Experience PTA Day," and how you can take part in this fun and educational event, (school groups included) call PTA Public affairs at 808-969-2411 or email michael.o.donnelly.civ@mail.mil.

I went last year and found it interesting.

73 and aloha, Eric KH6CQ

AREDN MESH

Aloha all:

The LAX ARES DEC, Oliver Dully (K6OLI), gave one of the Honolulu clubs a presentation on deployments of AREDN MESH networks for EMComm events.

It was an eye opening presentation of effectiveness of amateur radio digital technologies.

Tim Bryan (KH6TOB) captured the talk on video and it is now available on YouTube at <https://tinyurl.com/yhmdp7px>

AREDN MESH support

is already an integral part of Winlink messaging, providing a natural migration for a statewide messaging system.

We're hopeful some of those abilities will be added to the Hawaii Winlink network in 2020.

The video is a good overview of digital networks in EmComm and worth watching.

**ARRL Pacific Section
Section Manager Joseph Speroni,
AH0A
ah0a@arrl.org**

Discussion on vital role of proper grounding

During the January meeting, President William Polhemus coordinated an impromptu discussion on grounding. He recommended the Motorola R56 manual, which is the defacto bible for site preparation and grounding in the public safety radio world.

Repeater-Builder.com has a copy of the 2005 version on its page at <http://www.repeater-builder.com/antenna/site-stuff/are-fifty-six-man-2005.pdf>.

William notes that the fact that he is a Motorola Manufacturer's Representative is coincidental to this recommendation.

"I have recommended the R56 guide for much longer

than I have been working with Motorola," he said. "However, my relationship with Motorola probably has to be discussed with my recommendation.

Mannix Miller, WH6GBP, silent key

Mannix W. Miller, 72, WH6GBP, of Kapoho died in Hilo on June 21, 2019. He was born in Berkeley, CA.

The scattering of ashes was on Sept. 7 at Honokohau Harbor. The news of Miller's passing came from one of BIARC's newer members, Carl Urban Jr., WH6GFX.

New book shares joys of contesting

Alan Maenchen (AD6E/KH6TU) brought this to our attention. He passed on this plug for a new book on contesting aimed at newbies. The book is now available at ARRL.

"Doug Grant, K1DG, just came out with a book on contesting. The teaser pages are interesting alone. Don't let the title fool you. Doug is one of the best."

Get it here:
<http://www.arrl.org/shop/A-mateur-Radio-Contesting-for-Beginners/>

It is available on Kindle, too!
<https://www.amazon.com/Amateur-Radio-Contesting-Beginners-Grant-ebook/dp/B083XF2BWW>

From BIARC

Listserve:

Disaster comms report to FCC

The following is an excerpt from a report to the FCC from the Intergovernmental Advisory Committee concerning disaster communications. The entire report can be found at:

<https://docs.fcc.gov/public/attachments/DOC-360696A4.pdf>

... One of the mainstays for many decades in disaster communications in a recovery has been the use of Amateur Radio Operators, often referred to as ham operators.

Ham radio's ability to operate when other telecommunications systems cannot is critical to understand in this discussion.

"More Americans than ever have been licensed by the [FCC] as amateur operators, and those in the know say that emergency communications is driving their passion to be hams."

Citizen interest in emergency communications is a result of citizens who saw their cellular phones overwhelmed by excess traffic and system outages.

This has resulted in over 30,000 licenses being issued for amateur radio operators by the FCC in 2016, 2015 and

2014.

Generally, amateur radio operators assist when other means of communications are down or overloaded.

Ham radio resources are available for emergency communications support to any public service agency and can bridge interoperability gaps between agencies on a local, tribal, and/or state level. Potential ham deployment locations include, but are not limited to, auxiliary command posts, emergency operations centers, emergency shelters, evacuation sites, fire stations, medical facilities, mobile disaster vehicles, police stations, public works sites, and volunteer intake centers.

They can also be deployed to provide links to:

- Create communications links between similar agencies across political boundaries, especially where there are misalignments in frequency bands and modes;

- Establish communications in locations outside the existing coverage areas of public service and commercial communications systems;

- "Shadow" critical public officials and emergency management personnel to facilitate constant and rapid contact; • Monitor critical infrastructure (such as highways and bridges) and provide periodic

situation reports; • Staff operation posts (river levels, flooding, damaged areas) and provide periodic situation reports;

- Every hospital has a ham radio station on premises and there are volunteer hams ready to operate (they are generally not hospital employees). These systems are tested on a very regular basis. A typical emergency activity might be identifying which hospitals have the available capacity to accept the injured after an event; and

- Another overlooked ham application is continuing communications support after an event. An example of this would be after a hurricane has blown through and fires are out, etc. There is still no power or phone service. Hams have provided on-going coordination to families outside the disaster area.

As a communications provider, ham radio falls under the Emergency Support Function #2 umbrella. Planning for a "when all else fails" communications scenario is essential for all jurisdictions.

Les Hittner, K0BAD
BIARC secretary

BIARC mailing list home:

<http://mailman.qth.net/mailman/listinfo/biarc>

Help:

<http://mailman.qth.net/mmfaq.htm>

BIARC Board Meeting

January 11, 2020

12:03 Meeting called to order

Role Call (7) Quorum (6)

Board Members:

William Polhemus – President
James Huntley – Vice President
Leslie Hittner, Secretary
Tony Kitchen, Treasurer
Mel Uchida
Bob Schneider

Absent: Paul Ducasse – Station Custodian

Minutes of last Board meetings: Regular meetings on 10/12/19 and 11/09/19

William **moved** and Tony **seconded** that the minutes of last two meetings be approved as published and distributed by email. Motion **passed**.

Treasurer's Report: The treasurer's report was submitted in writing.

In summary:	2019 receipts	\$ 1,822.00
	<u>2019 expenses</u>	<u>\$ 923.06</u>
	2019 surplus	\$ 898.94
	12/31/2019 bank balance	\$ 2,909.00

William **moved** and Mel **seconded** to accept the Treasurer's Report subject to audit. Motion **passed**.

Elections: Les **moved** and Tony **seconded** that the officer positions remain unchanged from 2019. The motion **passed** unanimously.

Terms: William asked for board members who would volunteer for a 1-year term. AOs a result, the following terms were assigned:

William Polhemus	1 year expiring January 2021
Leslie Hittner	1 year expiring January 2021
Mel Uchida	1 year expiring January 2021
Robert Schneider	2 years expiring January 2022
Tony Kitchen	2 years expiring January 2022
James Huntley	2 years expiring January 2022
Paul Ducasse	Ex Officio - Station Trustee

Les **moved** and William **seconded** that the terms as specified be adopted. The motion **passed** unanimously.

Budget: Tony presented the proposed budget for 2020. Most of the discussion concerned the budget surplus in 2019 and the proposed budget surplus.

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Les began the discussion by **moving** that \$800 be transferred to a new reserve account to be used for costly emergency infrastructure maintenance. The motion **failed** for lack of a second. William suggested that such a motion might be more appropriate after discussion of the proposed budget. After discussing the proposed budget, Mell **moved** and William **seconded** that the budget proposed by Tony be accepted. The motion **passed** unanimously.

William **moved** and Tony **seconded** that \$1,000 be transferred from the general fund to a reserve account for emergency purposes. The motion **passed** unanimously.

William **moved** and James **seconded** that a New Member is an individual who has never before been a member of BIARC and all of its previous iterations. Tony **moved** and Jim **seconded** that with the permission of William and James, the motion be **amended** to remove “and all of its previous iterations.” The motion to amend **passed** and William and James agreed to the change. The motion as amended **passed** unanimously.

Note: This action governs the granting of discounted dues requirements for **New Members**.

Committee Reports:

(1) **Digital Systems:** (no report) James agreed to be Chair of the Digital Systems Committee. William **moved** and James **seconded** to accept James’ offer. The motion **passed** unanimously.

(2) **Education and Outreach:** (no report) The Member Information Booklet will be updated with the board member terms and officers and will be sent to the printers as soon as possible.

(3) **Operating Activities:** (no report) There was a discussion about porta potties at the Field Day site. It was the general feeling of the Board that the club should rent a porta potty rather than using the one that is normally available in the park, which they found to be dirty and poorly serviced.

(4) **Program:** (No report) upcoming programs included (January) Mobile Installation Considerations presented by John Bush and Roy KunishigeKUNISHIGE, (February) Digital Systems Overview presented by James Huntley, and (March) Coaxial Stubs, construction and uses presented by William Polhemus. Committee members will use the BIARC listserve to seek out additional program requests.

(5) **Public Service Communications:** (no report) Tony noted that the committee is seeking MOUs with each organization with which the club wishes to partner.

(6) **Voice Repeaters:** (No report) The MMDVM – needed to convert the donated Motorola repeater to DMR – has arrived. This repeater – scheduled to be installed on Mauna Loa – will provide wide-ranging DMR and analog coverage on UHF.

The committee is considering a temporary analog link between Pepeekeo (146.88) and Kulani (146.76) on 440.
Internet access is being donated by Paul Agamata.

(7) **Records Retention Ad Hoc:** Dropbox usage being set up.

(8) **Elections Ad Hoc:** Committee dissolved.

(9) **Membership Booklet Ad Hoc:** Committee dissolved.

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Old Business:


- (1) **Records Retention Policy:** No action was taken
- (2) **Offer to help Waimea Club with their hamfest:** No action was taken. Bob indicated that there was some interest in sharing the responsibilities in the future.

Other Business:

- (1) Les **moved** and Mel **seconded** to accept an equipment donation (see attachment to these minutes) from Francis Gilbert, Jr (KG0XR). The motion **passed** unanimously.
- (2) Les **moved** and William **seconded** to authorize postage expense for distributing the Member Information Booklet as needed. The motion **passed** unanimously.
- (3) Mel expressed concern about expanding repeater coverage to La Pahoehoe.
- (4) William **moved** and Tony **seconded** that the responsibility for obtaining the donated items be delegated to the Digital Systems Committee. Motion **passed** unanimously.

Adjourn: There being no further business, William adjourned the meeting at 13:33.

Respectfully Submitted,



Leslie Hittner, Secretary

All hams invited to help with comms for Hilo Marathon on March 15

All hams are invited to help out with communications along the route of the annual Hilo International Marathon the morning of Sunday, March 15.

Each year, the Puna Emergency Radio Club coordinates communications between aid stations along the 26.2-mile route and headquarters at the Hilo Bayfront.

Volunteers get to put their radio skills to work and help out the community at the same time.

"It's a fun way to get in some practice, meet other radio operators and help race volunteers and the athletes that morning," said Bob Gomez, KB6EGA, the PERC president.

For more information, contact Bob at 430-6001 or email him at bbg691@yahoo.com.

PERC also is looking for a ham with a vehicle equipped with a mobile radio to serve as "runner" between aid stations.

**Big Island Amateur Radio Club (BIARC)
2020 Draft Budget & 2019 Operating Statement**

	Proposed 2020 Budget	Actual– 1/1/2019 To 12/31/2019
Income:		
Dues	\$1,590.00	\$1,556.00
Repeater and general donations	\$275.00	\$255.00
Donations for refreshments	\$25.00	\$11.00
Total Income	\$1,890.00	\$1,822.00
Expenses:		
Club Liability Insurance	\$320.00	\$320.00
Club Equipment Insurance	\$185.00	\$185.00
Donations (PCC)	\$50.00	\$25.00
Equipment	\$500.00	\$0.00
Field Day	\$320.00	\$165.91
Printing (Membership Booklet)	\$175.00	\$0.00
Annual Build Project	\$50.00	\$22.65
P. O. Box Fee	\$176.00	\$176.00
Monthly Meeting Refreshments	\$19.00	\$0.00
VOAD Dues	\$25.00	\$25.00
Postage/Office Supplies/Misc.	\$70.00	\$3.50
Total Expenses	\$1,890.00	\$923.06
Excess (Deficit)	\$0.00	\$898.94

Notes Re: Proposed budget:

- Postage/Office Supplies:
 - * Pascal donated his Epson printer to BIARC, but we need new toner: Est. \$35
 - * We need a new receipt book, Estimated \$15
- Changed "Annual Build Project" project to \$50, assuming that we will charge for materials to offset club costs as was done in 2019.
- Eliminated Christmas party refreshments from budget as food has consistently been brought by members and no reimbursement has been requested.
- Reduced monthly meeting refreshment \$ in order to balance the budget.
- Added donation of up to \$50 in case we need to use Puna Covenant church meeting room. We agreed to donate \$25 to PCC when we use their facility.
- Added additional \$120 to allow for portable toilet rental. \$120 basic, \$300 larger model, \$450 ADA Compliant for weekend rental.
- Eliminated Bank fees from budget, as we have none.

**Big Island Amateur Radio Club (BIARC)
2020 Draft Budget & 2019 Operating Statement**

Bank of Hawaii Balance as of: 1/9/2020 **\$3,469.00**
Above balance includes \$520.25 donated by members to the repeater fund.

Estimate of 2020 dues based on

Existing Membership Counts:	
62 Full members (\$20 each)	\$1,240.00
2 Associate members (\$10 each)	\$20.00
11 Family Memberships (\$30 each)	\$330.00
2019 Total Dues Estimate:	\$1,590.00

Deceased member(s) or members who have indicated they will not renew membership are not included in the estimates above.

12-105 MAPUANA AVENUE
RR 2 Box 4623
PAHOA, HI 96778-7718

FRANCIS B. GILBERT, JR.

November 13, 2019

Mr. William A. Polhemus
P.O. Box 1511
Pahoa, HI 96778 1511

Dear Mr. Polhemus:

I was first licensed in the late 1990s and upgraded to Advanced in 2014 (KG0XR) while living in Steamboat Springs, CO. While there, I was a member of the Steamboat Springs Amateur Radio Club and also served as the leader of the ARES Groups for Routt, Moffit and Rio Blanco Counties. Shortly after moving to Hawaii I joined BIARC but failed to renew my membership a couple of years ago due to extensive traveling which I am now no longer able to do.

We live at the entrance to Kalapana Seaview Estates, and being so near to the ocean some of my equipment, especially the antennas suffered from the salt air, and I have decided to close down my station.

I am including a listing of my equipment that I believe might be able to be used by members of BIARC, and I would therefore like to donate all to the Club. Perhaps you might even be able to charge modest amounts for the components and then use the funds received for various Club's purposes.

Please let me know if this equipment is of interest to you, and if so, I can then either bring it up to your home or you can come down here to see what might be of interest. I may be reached by telephone, 965-1206 or Email - frankgilbert1206@gmail.com.

Sincerely,

KG0XR EQUIPMENT LIST

Kenwood TS140S
ICON IC-3200A Dual Band FM Transceiver
Ameritron AL-811 RS-35M Power Supply
MFJ 9993 Intellituner III
MFJ 962C Intellituner 993B
MFJ Tunable DSP Filter
MFJ-1118 Deluxe High Current DC Outlets
Delta Coax Switches (2)
Shure Mag Desktop Mic 444
MFJ 269C HF/VHF 220 MHz/UHF 530 KHz-230 MHz – UHF SWR Analyzer
Larsen Mobile 2/70 Antenna
Larsen Mag Mount NMO Antenna
Perth Plus Mag Mount Mobile Antenna 75M – 2M
Belden RG8 50 Ohm Coax approx. 150 feet total – several lengths with connectors
Box of misc. connectors, etc.

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Big Island Amateur Radio Club (BIARC)
2019 Budget/Operating Statement

As of: 12/31/2019

	<u>2019 Budget</u>	<u>Actual</u>	<u>Variance</u>
Income:			
Dues	\$1,400.00	\$1,556.00	-\$156.00
Repeater Fund Donations	\$300.00	\$255.00	\$45.00
Donations for Refreshments	\$50.00	\$11.00	\$39.00
Total Received	\$1,750.00	\$1,822.00	-\$72.00

Expenses:

Club Liability Insurance	\$320.00	\$320.00	\$0.00
Club Equipment Insurance	\$185.00	\$185.00	\$0.00
Contributions	\$0.00	\$25.00	-\$25.00
Equipment	\$500.00	\$0.00	\$500.00
Field Day	\$200.00	\$165.91	\$34.09
Annual Build Project	\$100.00	\$22.65	\$77.35
P. O. Box Fee	\$168.00	\$176.00	-\$8.00
Refreshments for Christmas Party	\$50.00	\$0.00	\$50.00
Monthly Meeting Refreshments	\$142.00	\$0.00	\$142.00
VOAD Dues	\$25.00	\$25.00	\$0.00
Bank Fees	\$10.00	\$0.00	\$10.00
Postage/Misc.	\$50.00	\$3.50	\$46.50
Total Expenses	\$1,750.00	\$923.06	\$826.94
Net Surplus	\$0.00	\$898.94	

Big Island Amateur Radio Club
2019 Disbursements
as of 12/31/19

<u>Check No.</u>	<u>Date</u>	<u>To</u>	<u>Purpose:</u>	<u>Amount:</u>	<u>Comment</u>
1796	02/09/19	Hawaii V.O.A.D	2019 BIARC VOAD Membership	\$25.00	
1797	03/15/19	Mercer Consumer	2019 Equipment Insurance	\$185.00	
1798		VOID		\$0.00	
1799	04/13/19	Puna Covenant Church	Donation	\$25.00	
1800	04/30/19	Mercer Consumer	Liability Insurance (2019-2020)	\$320.00	
1801	06/20/19	Marvin Kitchen	Field Day Permit \$100Fee/\$200 Deposit	\$300.00	Reimbursement
1802	06/13/19	US Postal Service	PO Box Fee (July-Dec 2019)	\$88.00	
1803	07/08/19	Marvin Kitchen	Field Day Food/Water	\$65.91	Reimbursement
Elec.Chk	07/08/19	DCCA	DCCA Electronic Filing Fee	\$3.50	
1804	09/05/19	Melvyn Uchida	Antenna Build Project Supplies	\$177.65	Reimbursement
1805	12/10/19	US Postal Service	PO Box Fee (Jan-Jun 2020)	\$88.00	
Total				\$1,278.06	
Adjustments:					
	07/15/19	Refund of deposit on parking lot rental from County of Hawaii		-\$200.00	
	08/10/19	Income from build project to offset expense of supplies		-\$155.00	Net Project cost:
Total Expenses	12/31/19	(As shown on 2019 operating statement)		\$923.06	\$22.65
Checking Balance	12/31/19			\$2,909.00	