



THE COASTSIDE COMMUNICATOR

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JANUARY 2019

WWW.COASTSIDEARC.ORG

PRESIDENT'S COLUMN

Greetings,

By the time you get this it will be the New Year and 2018 will be in the history books.

Here it's December and I was worried that I wouldn't be able to generate 12 President's Reports for the year. And now this is my last one. Walt Long-KG6EDY graciously volunteered to take the helm for 2019. Thank you, Walt.

Membership for 2018 has stayed about the same, we've gained a couple of members, but also lost a couple. Peace to all the SK members of CARC.

We're still working on getting our new repeaters ready. Thanks to everyone for your patience. I know the "Grunge" can be annoying at times, but bear with us, we will get it done. Remember this is an all-volunteer effort, and we have work and family to take care of. Thank you Roy-KE6MNJ and the Replacement Repeater Committee, for the work you've done in 2018!

Our December 12th meeting was our annual "Pot Luck" meeting. We didn't have a big turnout, but there was a lot of great food. Thank you all for sharing your favorites.

Thank you all for your support and assistance (when I needed it!) this past year as President.

Take care & hope to see you at the next meeting!

Merry Christmas & Happy New Year

73...Tom-KJ6OGL



THE 2019 MEMBERSHIP FORMS
ARE NOW AVAILABLE!

RENEW YOUR MEMBERSHIP
TODAY!

CONTACT FRANK-N6FG

DECEMBER MINUTES

The December 12, 2018 meeting was called to order at 7:37pm by: President Tom Oliver-KJ6OGL, at the Linda Mar Fire Station, Linda Mar Blvd., Pacifica.

Self-introductions by members in attendance followed.

Motion made by Frank-N6FG and seconded by Ralph-KC6YDM to approve the November minutes as posted in the Coastside Communicator. Motion was passed by unanimous vote of the membership present.

TREASURER'S REPORT

The Treasurer, Frank Erbacher-N6FG reported. Financial report: General Fund: \$1,697.32 Repeater Fund: \$339.23, APRS/Digipeater Fund: \$1,230.84 EOC/Public Service Fund: \$13,530.11. Grand Total: \$16,797.50.

Frank went to the Fog Fest Meeting: Stated that if you didn't put in 168 hours you only got half of the amount. CARC put in 68 hours. Still received a check for \$2300.00. Frank deposited into the General Fund, asked for a motion to transfer the funds to the EOC/Public Service Fund. Motion by Dave Conroy-KM6CPF and seconded by Ralph Kugler-KC6YDM. Motion was passed by unanimous vote of the membership present. Frank saw that that would put us in the negative. Decided it would work out as 2019 dues are received.

CORRESPONDENCE

None

MEMBERSHIP

66 members, ARRL – 68%

BILLS NEEDING APPROVAL

None at this time

COMMITTEE REPORTS

REPEATER

1. Update on current status of WA6TOW repeater from David Rinck-K6DMR: it's working.

committee reports cont.

2. Digipeater: No Report

3. Repeater Replacement Committee: progress report from Roy Brixen-KE6MNJ:

Replacement Repeater

Roy is waiting for the 440-receiver controller from Casey. Casey has the radio and filter to be tuned. Trying to coordinate schedules. Roy working on finals and dealing with the results of unhealthy air quality from the Camp Fire and shutting down the campus. Will start working on after first of the year. to go up on the tower.

FIELD DAY

No Report.

FOG FEST

See meeting notes.

NEWSLETTER

Published

WEBSITE

No report.

NET SCRIPT

Using approved script.

UNFINISHED BUSINESS

A. Mesh node: No updates

B. Results of the ARRL Pacific Division Leadership Meeting
Walt was not able to attend

C. Dave Chamberlin-AE6DC and Dave Conroy-KM6CPF
installed a radio for W6VJJ.

D. Ralph Bailey-K6DLZ's Memorial Service – Dave
Lawrence & Frank attend. Said it was a very nice service at
Hiller Aviation Museum in San Carlos. Lots of stories. About
100 people attended.

NEW BUSINESS

None. Officially turn control over to Walt Long-KG6EDY

ADJOURNMENT

Meeting adjourned at: 8:55p.m. Meeting adjourned.

PRESENT AT THE MEETING

The following Life Member has become a Silent Key:
Roger Spindler-WA6AFT

Officers: - Officers: President: Tom Oliver-KJ6OGL, Vice-
President: Absent, Secretary: Absent, Treasurer: Frank
Erbacher-N6FG

Members: Casey Villyard-N6TZE, Steve Paganelli-K6YUA,
Dave Conroy-KM6CPF, Ted Niemira-K6TET, Paul Atkins-
AI6BB, Dave Rinck-K6DMR, Walt Long-KG6EDY, Roy
Brixen-KE6MNJ, Ralph Jugler-KC6YDM, Dave Lawrence-
KF6TWW.

Submitted by Secretary
Tom Oliver-KJ6OGL, acting Secretary



NEWS

ARRL UPDATE

ARRL Petitions FCC to Incorporate Parity Act Provisions into its Amateur Radio Rules

The ARRL has filed a *Petition for Rulemaking* ([PRM](#)) asking the FCC to amend its Part 97 Amateur Service rules to incorporate the provisions of the Amateur Radio Parity Act.



The *Petition* has not yet been assigned a rule making (RM) number and is not yet open for public comment. In the past, the FCC has said that it would not take such action without guidance from the US Congress, but, as ARRL's *Petition* notes, Congress

"has overwhelmingly and consistently" offered bipartisan support for the Amateur Radio Parity Act.

"Private land use regulations which either prohibit or which do not accommodate the installation and maintenance of an effective outdoor antenna in residences of Amateur Service licensees are unquestionably the most significant and damaging impediments to Amateur Radio Service communications that exist now," ARRL said in its *Petition*. "They are already precluding opportunities for young people to become active in the avocation and to conduct technical self-training and participate in STEM [science, technology, engineering, and mathematics] learning activities inherent in an active, experiential learning environment. Without the relief in this *Petition*, the future of Amateur Radio is bleak indeed." The proposed amendments would have no effect on the FCC's limited preemption policy in §97.15(b), which pertains to state and municipal governing bodies, ARRL said.

Specifically, ARRL is proposing that the FCC amend Part 97 by adding a new subsection under §97.15 that prohibits and ceases the enforcement of "any private land use restriction, including restrictive covenants and regulations imposed by a community association," that either fails to permit a licensee to install and maintain an effective outdoor antenna capable of operation on all Amateur Radio frequency bands; on property

arrl letter cont.

under the exclusive use or control of the licensee; precludes or fails to permit Amateur Service communications, or which does not constitute the minimum practicable

restriction on such communications to accomplish the lawful purposes specifically articulated in the declaration of covenants of a community association seeking to enforce such restriction. ARRL's proposed rule would not affect any existing antenna approved or installed before the effective date of a *Report and Order* resulting from ARRL's petition.

The proposed provisions reflect the accommodation reached in the ultimate version of the Parity Act bill at the urging of federal lawmakers between ARRL and the Community Associations Institute (CAI), the only organization representing homeowners' associations. "That legislation was passed unanimously by the House of Representatives four separate times and has the support of the Senate Commerce Committee and the current Administration," ARRL stressed.

"Private land use regulations are not 'contracts' in the sense that there is any meeting of the minds between the buyer and seller of land," ARRL said. "Rather, they are simply restrictions on the use of owned land, imposed by the developer of a subdivision... They bind all lots in the subdivision." ARRL noted in its *Petition* that an increasing number of homes available for purchase today are already subject to restrictive covenants prohibiting outdoor antennas.

In addition, ARRL pointed out that the Telecommunications Act of 1996 gives the FCC jurisdiction "to preempt private land use regulations that conflict with federal policy..."

"It is now time for actual and functional parity in the Commission's regulations in order to protect the strong federal interest in Amateur Radio communications," ARRL said.

ARRL's Logbook of The World Tops 1 Billion QSO Records

As of December 19, more than 1 billion contact records have been entered into ARRL's [Logbook of The World](#) (LoTW) system. And, while 1 billion QSO records represents a significant milestone, a more important statistic may be the nearly 187 million contacts confirmed via LoTW over its 15-year history.

The one billionth record was uploaded by 7X3WPL, the Sahara DX Radio Club, at 2332 UTC for a 20-meter SSB



contact with with Davide Cler, IW1DQS, that took place on December 28, 2016. The upload resulted in a match (QSL).

LoTW debuted in 2003 after a lot of behind-the-scenes planning and development. Initially, LoTW got off to a slow start. While user numbers gradually grew to about 5,000, a lot of hams didn't fully understand what LoTW was or how it worked, and opening an account could be cumbersome.

LoTW continued with few major changes until October 2011, when a perfect storm struck -- a large ingestion of logs after the CQ World Wide DX Contest and a freak snowstorm that knocked out power for more than a week in most places.

Field Services and Radiosport Department Manager Norm Fusaro, W3IZ, said uninterruptible power source (UPS) backup power quickly depleted in the days-long power outage. "When the system came back online, it was overwhelmed with the amount of data coming in and could not keep up," Fusaro said. "The water was coming in faster than the pumps could pump it out. *Crash!*"

The disaster was a blessing in disguise, though, because it revealed weaknesses in the LoTW software and hardware.

Fusaro said the League spent tens of thousands of dollars for new hardware. IT Manager Mike Keane, K1MK, implemented code changes to expedite log processing by giving priority to small- to medium-sized logs and inserting mega-files as openings occurred. Fusaro said a lot of the large files contained duplicate data, bogging down the process so much that users were resending logs already in the queue. Through all of this, not one QSO record was lost, because LoTW uses a redundant backup process, Fusaro said.

A LoTW users' group reflector and a queue-processing status page were set up. With better communication, Fusaro said, the system attracted additional numbers. Today, LoTW boasts some 112,000 users in all 340 DXCC entities, and 75% of all DXCC applications are filed via LoTW, which accounts for 86% of confirmations applied.

Now, ARRL is looking at the development of LoTW 2.0, Fusaro said. "Over the years, we have added more awards that can be applied for using LoTW QSL credits: VUCC, Triple Play, and two CQ awards -- WPX and WAZ."

"The service still has room for a lot of improvement, but it continues to grow and is the preferred method of confirming QSOs because it strives to protect the integrity of DXCC and all awards," Fusaro said



FCC Reaches \$900,000 Settlement in Unauthorized Satellite Launch Case

The FCC has settled an investigation into an alleged unauthorized launch and operation of small satellites by Swarm Technologies. The company agreed to a **Consent Decree** that included a \$900,000 penalty, an extended period of FCC oversight, and a requirement of pre-launch notices to the FCC, among other stipulations.

“We will aggressively enforce the FCC’s requirements that companies seek FCC authorization prior to deploying and operating communications satellites and earth stations,” FCC Enforcement Bureau Chief Rosemary Harold said. “These important obligations protect other operators against radio interference and collisions, making space a safer place to operate.”

In April 2017, Swarm applied for an Experimental license to deploy and operate two Earth stations and four tiny 0.25 U CubeSats called SpaceBEEs. The FCC denied Swarm’s application in December 2017 over concerns about the ability to track the satellites. Swarm nevertheless launched the satellites on January 12, 2018, on a vehicle that also carried an Amateur Radio satellite into space. After reports of the unauthorized SpaceBEEs launch surfaced, the FCC launched an investigation last March.

The FCC determined that Swarm had launched the four SpaceBEEs from India and had unlawfully transmitted signals between Earth stations in Georgia and the satellites for more than a week. In addition, the FCC discovered that Swarm had also performed unauthorized weather balloon-to-ground station tests and other unauthorized equipment tests prior to the launch. All these activities required FCC authorization.

The December resolution requires Swarm to pay a penalty \$900,000 to the US Treasury and to submit pre-launch reports to the FCC for the next 3 years. The FCC said Swarm has committed to a strict compliance plan to prevent future FCC rule violations.

The FCC issued an **Enforcement Advisory** last April to remind satellite operators that they must obtain FCC authorization for space station and Earth station operations. The advisory cautioned satellite operators and launch companies against proceeding with launch arrangements following a license denial or prior to receiving an FCC authorization.



AMATEUR RADIO HISTORY *THE WAYBACK MACHINE*

by *Bill Continelli - W2XOYI*

On December 7, 1941, the Japanese attacked Pearl Harbor. Less than 24 hours later, the United States was officially at War, and the FCC had issued Order Number 87, which suspended all amateur radio operation in the U.S., and withdrew "our" frequencies from the amateur service. However, the FCC did recognize that limited amateur operation would be required in connection with domestic Civil Defense work.

Thus, in June, 1942, the FCC issued regulations which created the War Emergency Radio Service, or W.E.R.S. for short. This was not an amateur operation, even though the frequencies used were our former bands at 112-116, 224-230, and 400-401 Mc. Note that the 5 meter band, 56-60 Mc., was not included. The FCC apparently sought to limit operations to the "UHF" frequencies, where long distance skip was impossible. A WERS License was not given to an individual, but rather to a municipality or other local government entity, to cover the operation of all such stations engaged in emergency civilian defense communications. Operations could only be conducted upon authorization of the local Civil Defense Corps.

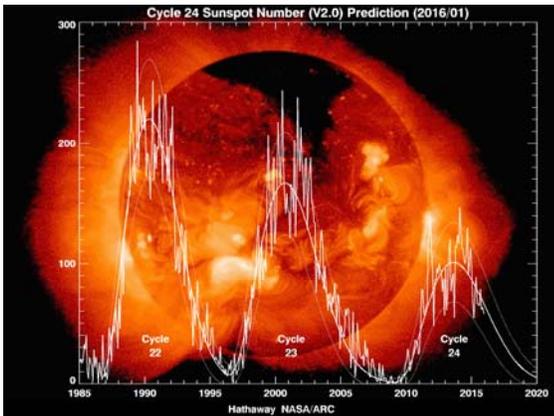
Operators in W.E.R.S. had to be loyal U.S. citizens, with fingerprints and proof of U.S. Citizenship on file with the FCC. They also needed to have an FCC commercial or amateur license, or an FCC 3rd class operating certificate. Thus, although most operators were hams, many non-amateurs were active in this service also.

Authorized operations in the War Emergency Radio Service were limited to emergencies relating to enemy activity. There was no provision for operations in natural disasters. Practice and training sessions were allowed, and local governments may have used these "practice" activities to provide needed communications during natural disasters.

Technical standards were strict for 1942. The carrier frequency could not deviate more than 0.1% in the lower half of each band, and 0.3% in the upper half. In the 2 1/2 meter band, this meant that the signal could not vary more than 112 kc at the lower end, and 340 kc at the upper end. While this sounds incredibly wide today, remember that in the 30's and 40's, almost all "UHF" transmitters used the "modulated oscillator"--cheap to build, but not very stable. The only receiver useful with this type of signal was the super-regenerative. Power was limited to 25 watts input, which is about 10-15 watts output.

By default, 2 1/2 meters became the band of choice for W.E.R.S. operations. In fact, it came to be known as "The Civil Defense Band". The most popular radio in W.E.R.S. operation was the TR-4, by Abbott Instruments of New York City. The unit measured only 9" x 8" x 4.5", ran on 6 volts DC or 110 volts AC, had a range up to 75 miles, and cost less than \$40.

SOLAR UPDATE



Tad Cook, K7RA, Seattle, reports: On Wednesday, December 19, Spaceweather.com reported, "Solar minimum conditions are in effect," adding, "The sun has been without sunspots for 209 days in 2018." Spaceweather.com said the most recent similar stretch of blank suns was in 2009, "when the sun was experiencing the deepest solar minimum in a century."

My records show the average daily sunspot number for all of 2009 was 5.05, and average daily solar flux was 70.6. Looking at the past 2 months, the same values were 3.6 and 69.4, so we are clearly in the same sort of minimum. Looking at all the numbers for 2018 to date, we see averages of 6.6 and 69.9.

Average daily sunspot numbers for the past week were 3.4, down from 9.7 in the previous week. Average daily solar flux declined slightly, from 70.7 to 70.4.

The average planetary A index decreased from 8 to 4.1, while the average mid-latitude A index went from 6.4 to 3.

Predicted solar flux for the next 45 days is 70 on December 20 - 23; 72 on December 24 - 26; 71 on December 27; 72 on December 28 - January 4; 70 on January 5 - 16; 72 on January 17 - 31, and 70 on February 1 - 2.

The predicted planetary A index is 5 on December 20 - 23; 8 on December 24; 5 on December 25 - 27; 8, 12, 10, and 8 on December 28 - 31; 5 on January 1 - 2; 10, 12, 10, 10, and 8 on January 3 - 7; 5 on January 8 - 12; 8 on January 13; 5 on January 14 - 23; 8, 12, 10, and 8 on January 24 - 27; 5 on January 28 - 29, and 10, 12, 10, and 10 on January 30 - February 2.

Sunspot numbers for December 13 - 19 were 0, 12, 12, 0, 0, 0, and 0, with a mean of 3.4. The 10.7-centimeter flux was 70.2, 70.8, 71.2, 69.8, 70.1, 70.4, and 70.2, with a mean of 70.4. Estimated planetary A indices were 3, 3, 2, 2, 6, 7, and 6, with a mean of 4.1. Estimated mid-latitude A indices were 2, 3, 1, 1, 5, 5, and 4, with a mean of 3.

Share your reports and observations.

COMING EVENTS

Pacifica CERT (Community Emergency Response Team) For training and information

<https://pacificacert.samariteam.com/RequestInfo.aspx>
email: <mailto:cert@pacificapolice.org>

QCWA NorCal Chapter 11 - Lunch at Harry's Hofbrau
3rd Wednesday of every month
1909 El Camino Real Redwood City, CA.
No host. 11:00AM to 1:00PM (approx).

ASVRO Silicon Valley Electronics Flea Market

2nd Saturday of each month from March through October.
Web Page: <http://www.electronicfleamarket.com/>
Talk-In: W6ASH 145.27- (100Hz PL)
N6NFI 145.23- (100Hz PL)

LICENSE EXAMS

Bay Area Educational Amateur Radio Society

Offering a one day study session for Technician or General theory, followed by testing. Fee: \$35.00

When: Sat Jan 12

Where: San Francisco CA

Registration required, class size is limited.

Web Page: <http://www.baears.com/> for info and registration.
Questions: Ross Peterson (650) 349-5349 or wb6zbu@arrl.net

Silicon Valley Volunteer Examiner Group

First and third Saturdays of each month, 8AM-11:00AM.
Saratoga Fire Station 14380 Saratoga Ave, Saratoga, CA
Fee: \$15

Walk-ins only, No pre-registration

Web Page: <http://www.svve.org>

Sunnyvale VEC Exam Sessions

Fee: \$15 Cash

Cut-off-time, 30 min. after starting time.

Exam: changes, directions, call (408) 255-9000 24/hr

Sat Jan 12th Sunnyvale, CA 10:30 AM

Sat Jan 19th Redwood City, CA 10:30 AM

Web Page: <http://www.amateur-radio.org>



Online Practice Exams

Within the practice tests, online study resources, (Wikipedia, NASA, ARRL, etc.), are provided for many of the questions. The list of resources available for each question is constantly growing because users can add their own favorite links to the study materials. Users can also track their test scores over time and see which sub-elements are giving them the most trouble. Practice Tests <http://copaseticflow.blogspot.com/>

CARC MEETING/EVENT SCHEDULE

Jan 9th	2019 Agenda Planning, LM Fire Station
Feb 13th	Agenda Final, LM Fire Station
Mar 10th	Daylight Savings Time Begins
Mar 13th	LM Fire Station
Apr 11th	LM Fire Station
Apr 28th	Dream Machines, El Granada
May 8th	Field Day Planning Mtg, LM Fire Station
Jun 8th	Devils Slide Ride, PARCA Bike Event
Jun 10th	Field Day Planning Mtg, LM Fire Station
Jun 22-23	CARC Field Day, Sweeney Ridge
Jul 11th	Field Day Wrap-Up Mtg, LM Fire Station
Aug 13th	LM Fire Station
Sept 11th	LM Fire Station
Sept 28-29	Pacific Coast Fog Fest, Pacifica
Oct 9th	2020 Officer Nomination , LM Fire Station
Nov ?	Election Dinner, Nick's, Rockaway Beach
Dec 11th	Holiday Potluck Dinner Meeting, LM Fire

? to be determined # updated ---- canceled * tentative date



www.smcready.org
cert@pacificapolice.org



In Memoriam



Roger G. Spindler-WA6AFT/SK



**THE COASTSIDE
COASTSIDE AMATEUR
RADIO CLUB**

The Coastsides Amateur Radio Club (CARC) is affiliated with ARRL, and meets the second Wednesday of each month at 19:30 hrs. in the Linda Mar Fire Station Community Room, on Linda Mar Blvd. in Pacifica. Visitors are welcome.

The CARC has been organized since 1959, serving Bay Area amateurs, and providing emergency communications services to the City of Pacifica. Membership dues are \$20.00 per year for the administration of the Club and the publication of the Communicator.

CARC supports two repeaters, WA6TOW/R (VHF and UHF); a Packet Digipeater, WA6TOW-1; and an APRS Digipeater, WA6TOW-2. Users of the machines provide repeater support and maintenance strictly through donations.

VHF: 146.925 MHz –offset 600 KHz PL 114.8
UHF: 441.075 MHz +offset 5 MHz PL 114.8

PL Tone: 114.8 Hz is used on both repeaters, as needed, for noise suppression.

Packet Digipeater: 145.050 MHz, Packet Node: PAC
APRS Digipeater: 144.390 MHz.

CARC/Pacifica OES VHF Simplex: 146.535 MHz
PL Tone: 114.8 Hz is used, as needed, for noise suppression

VHF Net

The club sponsors a VHF net each Wednesday, with the exception of meeting nights, at 20:00 hrs. for membership check-ins, notices, and QST's. Note: The WA6TOW repeater on 441.075 MHz may be used as an alternate if the WA6TOW VHF repeater is down.

HF Net

The club sponsors a HF rag chew net on 3.852 MHz, or the first clear frequency up/dn, on Saturday at 09:00 hrs. with an alternate frequency of 7.228 MHz.



The Coastsides Communicator is a monthly publication of the CARC. All articles contained herein are the opinions of the authors and not necessarily those of the club members or editor.

This newsletter contains material from The ARRL Letter as permitted by the American Radio Relay League

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CARC, P.O. Box 1106, Pacifica, CA 94044



COASTSIDE NETS

Monday

7:00 PM on WA6TOW
146.925 MHz, PL 114.8
Pacifica CERT Net

7:30 PM on WA6TOW
146.925 MHz, PL 114.8
San Bruno ARC Net

Tuesday

7:30 PM on WA6TOW
146.925 MHz, PL 114.8
Daly City ARES Net

8:00 PM on WA6TOW 146.925 MHz, PL 114.8 and KC6ULT 146.865 MHz, PL 114.8 simultaneously, but not linked.
San Mateo County ACS Net

Wednesday

8:00 PM on WA6TOW
146.925 MHz, PL 114.8
Coastside Amateur Radio Club Wednesday Night Check-in.

Saturday

9:00 AM on 3.852 MHz, or the first clear frequency up/dn.
(alt freq of 7.228 MHz.)
Coastside Saturday Morning Group.

10:00 AM on WA6TOW
146.925 MHz, PL 114.8
QCWA Ch. 11 NorCal. Net

Sunday

7:00-7:30 AM on WA6TOW
146.925 MHz, PL 114.8
Knights of the Megahertz Net



**MEETING
NOTICE:**

**JANUARY 9TH
LINDA MAR FIRE STATION
PACIFICA
7:30PM**

**JANUARY MEETING
2019 CALENDAR
PLANNING MEETING**

CLUB OFFICERS			
Office	Name	Call	Phone
President	Walt Long	KG6EDY	(650) 992-9491
V. President	Bill Lillie	N6BCT	(650) 726-3630
Secretary	Carmel Gallagher	KJ6ERS	(650) 670-2322
Treasurer	Frank Erbacher	N6FG	(650) 355-4355
CLUB STAFF			
Control Operator	David Rinck	K6DMR	(650) 355-1778
Emergency Services	Frank Erbacher	N6FG	(650) 355-4355
Field Day	Frank Erbacher	N6FG	(650) 355-4355
Membership	Frank Erbacher	N6FG	(650) 355-4355
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Newsletter Publisher	Frank Erbacher	N6FG	(650) 355-4355
Station Technician	Michael Herbert	WB6JKV	(650) 355-6541
Trustee of Club Call	David Rinck	K6DMR	(650) 355-1778
Website	Scott Mercer	KI6SEJ	-

COASTSIDE COMMUNICATOR

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FIRST CLASS

TO:

