



THE COASTSIDE COMMUNICATOR

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WWW.COASTSIDEARC.ORG

PRESIDENT'S COLUMN

One of the neatest technologies for me that I encountered on becoming a ham was APRS. It was the coolest thing to be able to visualize the other hams around me. Jillian KN6PIV and I got a pair of Yaesu FT5D/FT3D radios and experimented with tracking each other around the area. We also used one to update our position while volunteering at the Double Dipsea foot race in Marin. It was with much sadness that I learned that Bob Bruninga WB4APR, the inventor of APRS, had become a Silent Key in February. Bob was a great contributor to the art. The definitive source of information on ARPS is <http://www.aprs.org/> and a great site for monitoring APRS traffic is <https://aprs.fi/> - it also includes Automatic Identification System traffic for ships, similar to APRS, but operating on maritime frequencies.

We have had some welcome news regarding the pandemic, with the CDC suggesting that we are entering a less dangerous phase. I hope that this will last and that we can get back to in-person meetings and events. Fingers crossed - we have had our hopes dashed before in the last couple of years.

Preparations for Field Day 2022 are progressing. We have identified possible locations and we are applying for permissions to conduct operations on the day. Thanks to Jon N6SJF for taking the lead in this and scouting out possible locations. We will talk more about this at our Zoom meeting on March 9th.

73,
Steve, KN6ORM
Club President

CARC FEBRUARY 9, 2022, MEETING MINUTES

Call to Order

The February 9, 2022 meeting was called to order at 7:35pm by: President Steve Austin-KN6ORM, on Zoom Video Conference hosted by Jon Lancelle-N6SJF.

Self-introductions

Introductions by members in attendance.

Minutes

Motion made by Ron-WB9EGG and seconded by Walt-KG6EDY to approve the January 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:

General Fund	5,395.20
Repeater Fund	1,847.00
APRS/Digipeater	1,455.00
EOC/Public Service	13,530.00
Grand Total	22,227.20

Membership

Still receiving membership renewals. Need to verify number of Club members

Still receiving membership renewals. Need to verify number of Club members who are members of ARRL.

Bills needing approval

None

Correspondence

None

COMMITTEE REPORTS

Current Repeater

1. Current status of WA6TOW repeater: Still working but has been noisy lately – may have to do with the current geomagnetic storm.
2. APRS – No Report
3. Emergency Services – No Report

Replacement Repeater

1. Update on Replacement Repeater: Need someone to volunteer to host a site to setup and test the new repeater.

NEWSLETTER - Published

WEBSITE – Working. Newsletter has been uploaded and available to view and download.

UNFINISHED BUSINESS

1. Finalize CARC Events Calendar: Leave open for possible future events – wait and see what opens up after mask restrictions are lifted on February 15th. Discussed options for get together locations to hold meetings other than Zoom and the Linda Mar Fire Station.
2. 20-meter antenna: Frank-N6FG and Gary-KI6HIG to get together and test the antenna.
3. Field Day location and point person: Discussed three locations to possibly hold Field Day – 1) Milagra Ridge off Sharp Park Road, 2) Junipero Serra Park in San Bruno, 3) North end of Skyline College Campus. Tom-KJ6OGL to check his past emails from Frank-N6FG for information on permits from the GGNRA. He will also check the San Mateo County Parks and Recreation website for reservation requirements. As of this meeting no one has volunteered to be point person for Field Day.

NEW BUSINESS

1. HMB Dream Machines event cancelled for 3rd year-in-a-row.
2. Big Sur International Marathon is looking for Amateur Radio Support on April 24, 2022. If

interested email Jeff Ackerman-KG6UYZ at kg6uyz@gmail.com for a volunteer form.

3. The Ham Radio Flea Market is returning and to a new location - the Sunnyvale Library. The date is to be determined/announced.

Adjournment

Motion made by Dave-K6NIA and seconded by Walt-KC6EDY to adjourn the meeting at: 8:52p.m. Meeting adjourned.

Present at the Meeting

Officers: President: Steve-KN6ORM, Vice-President: Paul-AI6BB, Secretary: Tom-KJ6OGL, Treasurer: Frank-N6FG

Members:

Ted-W6SY, Dennis-KN6QER, Jillian-KN6PIV, Gary-KI6HIG, Ralph-KC6YDH, Bill-N6BCT, Dave K6NIA, Georgia-KE6KRT, Ron-WB9EGG, Dave-KF6TWW, Pete-WA6ECH, Walt-KG6EDY, Dave-K6DMR

Submitted by: Tom Oliver-KJ6OGL, CARC Secretary

NEWS



Amateur Radio in Ukraine Ordered Off the Air in State of Emergency

02/24/2022 ~ [UPDATED on 2/28/2022 @ 1812 UTC] A state of emergency was declared in Ukraine just prior to the Russian military invasion. Among other things, the February 24 decree from President Volodymyr Zelensky will remain in effect at least for 30 days and may be extended. As published on the website of the Verkhovna Rada, Ukraine's unicameral legislative body, the state of emergency includes regulation of TV and radio activities and "a ban on the operation amateur radio transmitters for personal and collective use."

The decree also imposes a ban on mass events and on strikes and authorizes checking the documents of citizens, and if necessary, conducting searches on persons, vehicles, cargo, office space, and housing. A curfew could be imposed. "The situation changes rapidly," IARU Region 1 Secretary Mats Espling, SM6EAN, said. "IARU

Region 1 continues to monitor the development and expect all radio amateurs to follow their national laws and regulations.”

IARU subsequently issued a short statement: “IARU is an apolitical organization focused on promoting and defending amateur radio and the amateur radio services. The Amateur Radio Service is about self-instruction in communications and friendship between people.”

The DARC HF Committee issued this statement on February 27: “Any radio amateur currently transmitting from Ukraine is risking his or her life. If you hear a Ukrainian station, do not broadcast its call sign, location, or frequency — whether on the band, in a cluster or on social media. You may be putting lives at risk.” Some stations with Ukrainian call signs may still be active, since an exception was made for stations in the Donbas region of eastern Ukraine (eastern Donetsk and Luhansk oblasts), which have special legal status owing to Russia’s occupation since 2014. Stations from Ukraine with the letter “I” after the number in the prefix are located in this region and can, at least in theory, be active.



Registration is Open for USA ARDF Championships

03/03/2022 ~ Registration is now open for the 21st USA Championships of Amateur Radio Direction Finding (ARDF), set for April 7 – 10, 2022. The competition will take place in Prince William Forest Park near Quantico, Virginia.

“Radio orienteers from all over the country, plus visitors from abroad, are invited to attend,” said ARRL ARDF Co-coordinator Gerald Boyd, WB8WFK. “The competitive courses are open to anyone of any age, with or without an amateur radio license. The results will help select who will be invited to fill positions on ARDF Team USA, which will travel to Serbia for the 2022 ARDF World Championships in September.

Wednesday, April 6, will be a practice day for equipment testing and a competitor briefing. From Thursday through Sunday, competitors will have the opportunity to compete in the sprint, foxoring, and classic courses on 2 meters and 80 meters. Awards for first through third places will be presented at ceremonies following the events. Members of the Backwoods Orienteering Klub (BOK) will organize the 2022 USA Championships. All are experienced radio orienteers who organized the successful 2013 and 2019 national championships. The

event director is Joseph Huberman, K5JGH, and the registrar is Ruth Bromer, WB4QZG.

The International Amateur Radio Union (IARU) sets ARDF championship rules. For scoring and awards, participants are divided into 12 age/gender categories. In the classic ARDF events, competitors start together in small groups made up of different categories. As they seek the “fox” transmitters, they navigate through the forest from the starting corridor to the finish line, a distance ranging between 4 and 12 kilometers (about 2.5 miles and 7.4 miles). They plot their direction-finding bearings on orienteering maps that show terrain features, elevation contours, and vegetation type.

“The USA ARDF Championships are open to anyone who can safely navigate the woods by themselves. A ham radio license is not required,” Boyd emphasized. “In ARDF, personal navigation skills are important because each participant competes as an individual — any teamwork or GPS map use is forbidden. Competitors bring their own direction-finding gear to the events, although extra gear is often available for loan from other attendees. Competitors may not transmit on the course, except in emergencies.”

Information bulletin #2 contains the complete schedule, technical details, fees, rule variations, and more. An email reflector is available for Q&A with the organizers, as well as for coordinating transportation and arranging equipment loans.

Announcements, rules, organizer instructions, and more are available at the ARRL ARDF website. Basic information on international-style transmitter hunting is on the Homing In website, which includes equipment ideas for 2 meters and 80 meters, plus photos and stories from previous championships. — Thanks to Joe Moell, K0OV



ARRL Seeks Exemption from Proposed US Forest Service Communication Facility Fees; Comment Period to be Re-Opened Through March 31

02/28/2022 ~ ARRL has filed **comments** with the US Forest Service (USFS) seeking an exemption for amateur radio facilities to a proposed new \$1,400 annual administrative fee. The USFS proposal resulted from requirements in the Agriculture Improvement Act of 2018 (aka “the Farm Bill”), which directs the Forest Service to collect fees for issuing communications use authorizations based on the cost to the agency for

processing the applications, maintenance, and other related activities. These fees would be in addition to annual rental and cost-recovery fees already being collected.

On February 24, the Forest Service filed a *Notice* with the Federal Register that the comment filing window will be re-opened on March 1 and additional comments will be accepted through March 31. Any radio amateurs missing the first comment period or wishing to add to their earlier comments are encouraged to do so during this additional period.

“Although the discussion put forward by the Forest Service in its proposal focuses on commercial uses, the proposal would sweep within its requirements amateur radio uses that are solely noncommercial,” ARRL said in comments filed on February 22. “Radio amateurs establish and maintain facilities at certain locations for public service purposes with no remuneration or reimbursement. Unlike broadcasters and commercial wireless and fiber providers, radio amateurs are uniquely barred by the terms of their federal licenses from receiving compensation of any sort.”

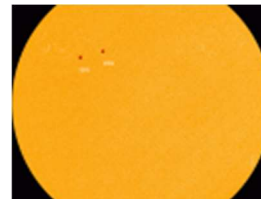
“Non-commercial and uncompensated communication uses by radio amateurs within Forest Service areas long have served the public interest in many ways, among them by providing the means for otherwise unobtainable emergency communication capabilities in times of need,” ARRL noted. “Amateurs perform this valuable public service without cost to taxpayers. The importance of these capabilities [has] been demonstrated repeatedly. The skills of amateur operators have served our country well with their carefully located equipment when enabling exchanges of possibly life-saving messages in difficult terrain during forest fires, extending communications assistance help during hurricanes, and providing communications capabilities during search-and-rescue missions in remote areas.”

ARRL stressed that equipment, maintenance, and other costs associated with amateur radio facilities on USFS lands “are borne solely by the volunteer radio amateurs themselves.”

ARRL continued, “Commercial applicants usually request more extensive use of the lands administered by the Forest Service, and these requests necessarily result in more complex issues having to be considered and resolved.”

“It is foreseeable that many radio amateurs providing these services would have to opt to withdraw and cease their work,” if not exempted from the proposed fees, ARRL said. “In many cases the most useful locations for needed coverage from their stations is uniquely on Forest Service lands. In short, the proposal to include volunteer uncompensated amateur service applicants with the commercial wireless service and broadcast applicants is grossly inequitable. There is a disparity in the amount of resources necessary to consider applications from radio amateurs as compared to that required by commercial applicants.”

“[O]ur best estimate is that there are fewer than 100 covered amateur locations, but those likely are unique and essential to covering forested areas in times of need, such as forest fires or lost hikers,” ARRL said. “These dissimilarities in complexity and scope should be recognized in this fees proposal and amateur radio applications exempted.”



The K7RA Solar Update

02/25/2022 ~ New sunspot groups appeared on February 17, 19, 20 and 21, but solar

activity declined, even though sunspots were seen covering the sun every day.

Average daily sunspot number declined 21 points from 75.3 last week to 54.3 in the current reporting week, February 17-23. Average daily solar flux was down nearly 15 points from 110.1 to 95.4. On Thursday, February 24 the decline in sunspot numbers continued to 23, 31.3 points below the average in the previous seven days.

Average daily planetary A index went from 13 to 9.6, and average daily middle latitude A index was off by one point to 7.3.

Predicted solar flux is 95 on February 25, 100 on February 26-27, 105 on February 28 through March 2, 110 on March 3-4, 108 on March 5-8, 105 on March 9-11, 103 on March 12-13, 100 on March 14, 98 on March 15-16, 102 on March 17-19, 104 on March 20-22, 108 on March 23-26, 110 on March 27, 115 on March 28-29, then 112 and 110 on March 30-31, then 108 on April 1-4.

Predicted planetary A index is 5 and 10 on February 25-26, 8 on February 27 through March 3, 10 on March 4-5, 8 on March 6, 5 on March 7-10, then 15, 12 and 10 on March 11-13, 5 on March 14-18, then 8, 5, 12, 18, 15 and 10 on March 19-24, 5 on March 25-29, then 12, 15, 10 and 8 on March 30 through April 2, and 5 on April 3-6.

Weekly Commentary on the Sun, the Magnetosphere, and the Earth's Ionosphere, February 24, 2022 from OK1HH: "Solar activity gradually declined to very low levels with a slight chance of Class C flares. The solar wind speed and particle density fluctuate irregularly. The geomagnetic field was quiet to minor storm levels. Total solar radiation, accompanied by an irregular occurrence of enhanced geomagnetic activity caused a subsequent gradual decrease to overall below-average shortwave propagation conditions. A slight improvement can be expected in connection with seasonal changes with the approaching spring equinox."

I regularly check propagation on ten meters using FT8, low power, and a modest full wave end fed wire antenna that is mostly indoors on the second floor of my home. Sometimes I will see my coverage on pskreporter.info/pskmap.html concentrated in an area 2000-2300 miles away in Georgia and South Carolina, which is what I saw on February 24 around 1830 UTC. Twenty-four hours earlier I saw only two reception reports, none in the USA, with one station down in central Mexico and the other way down in Southern Argentina around 53 degrees south latitude. Very odd, but this being ten meters, soon the coverage changed, and I saw coverage across the East Coast.

Using this same modest antenna on 40 meters, where it is one quarter wave long, at 0330 UTC on February 25 I see coverage all over the United States, but only one station reporting my signal in Europe, at -17 dB from IZ1CRR in JN35TD.

On his QRZ.com page he says he is a shortwave listener, and not to call him on FT8 as he is listening only.

Even if you are not an FT8 operator, you could use pskreporter.info to discover propagation paths on different bands from your local area by searching for signals received from your grid square over the previous 15 minutes. This assumes there are other stations in your grid square active at the time.

In grid square CN87 in my area, there seem to be active local stations on at all times on every band. You should probably look for stronger signals with positive signal levels if you plan to use CW or SSB.

Solar eruption in the news: <https://abc7.com/solar-eruption-sun-image-sunspot/11589207/>

Article about instability of sunspots: <https://bit.ly/3LXYEC4>

A blog post about recent solar events: <https://bit.ly/3t9ERHa>

New Maui solar telescope: <https://bit.ly/3ImQxNb>

February 21 update from Dr. Tamitha Skov, WX6SWW: <https://youtu.be/wJaV5RnIEFE>

For more information concerning shortwave radio propagation, see <http://www.arrl.org/propagation> and the ARRL Technical Information Service at <http://arrl.org/propagation-of-rf-signals>. For an explanation of numbers used in this bulletin, see <http://arrl.org/the-sun-the-earth-the-ionosphere>. An archive of past propagation bulletins is at <http://arrl.org/wlaw-bulletins-archive-propagation>. More good information and tutorials on propagation are at <http://k9la.us/>.

Instructions for starting or ending email distribution of ARRL bulletins are at <http://arrl.org/bulletins>.

Sunspot numbers for February 17 through 23, 2022 were 103, 53, 51, 49, 48, 38, and 38, with a mean of 54.3. 10.7 cm flux was 96.7, 93.3, 95.7, 93.3, 97.8, 95.3, and 95.5, with a mean of 95.4. Estimated planetary A indices were 5, 6, 9, 13, 12, 16, and 6, with a mean of 9.6. Middle latitude A index was 4, 5, 6, 8, 11, 13, and 4, with a mean of 7.3.

MARCH PUZZLER

PAUL ATKINS, AI6BB

C N R U B F R S E M S I T I V I T Y R U
 D I F F R A C T O J B E T S R S D G X S
 R E S O N A N T V R E R A T I R Y O E N
 Y S M A K A T L E D C E G R N E R L D E
 V K V B I E S A V H A G E A G T E A O D
 D E C I L G K J P T M I M I X P T N M D
 F N Z F O I C T A R M O D G Y A T A Q U
 M R S Z N B O P C A E N Q H N D A N R S
 Z K A T F I H S K E T Y V T I A B S A O
 H A R M F U L I N T E R F E R E N C E S
 L A D D E R L I N E R E T N U O C R T C
 H S Q E L E C T R O M O T I V E E O M I
 X M P A R T I C I P A T I O N I R O T L
 C H E C K S U M L I N E E S L O U Y Y L
 Y M R O F S N A R T X N L P I N H M R A
 T K H V K E I S P O O L I D T V P E A T
 U K Z G T T A D E M G T A Y D Q N D N E
 D S T O R A G E M L L L O G O A N O I L
 V A L U E L N O T U F B G P I T P M B D
 H A I B I P C W M E F F I C I E N C Y L

WORDLIST

adapters	erection	participation
ammeter	frame	plates
analog	fsk	resonant
arqmode	gain	rftburn
battery	harmfulinterference	ring
binary	kilo	self
breakin	ladderline	semsitivity
checksum	line	shift
common	loop	sma
counter	mega	storage
deci	modem	straight
delta	mount	sudden
diffract	multiplier	tip
duty	nvis	to
earth	oscillate	toroidal
efficiency	pack	transform
electromotive	paddle	value

ANSWER TO FEBRUARY'S PUZZLER

H A R M F U L I N T E R F E R E N C E B
 F K X S E C O N D A R Y J K T E F S O M
 L D E T A I D A R W E N C O D I N G K Y
 A H H S E M S I T I V I T Y B Q J E W P
 T I P R K E S R E W O P D R A W R O F O
 T E I E B G W K E L A N A L Y Z E R D H
 O C H L O A I C T H C A S S A L C P B I
 P N C A O M T A A F U L L S U P P L Y T
 P A H Y M I C B R E S I S T O R J U H L
 I R U R M S H O L A N A L O G P I H W U
 N E M I M D Q T O S S B E L O C A L X M
 G L O J Q E B T B L L E V E L P O H M A
 G O L O O N R N M I F C C R O T A T O R
 V T K I C I I O Y K A T L E D E L B A C
 L N D Q J F P R S H T Z D K R O W T E N
 G A T X T E P F U C S E T R A I L E R H
 R N R F X D L R T W A V E L E N G T H C
 S I N G L E E I N T E G R A T E D E G T
 G I G A T P L A T E S F S E I R E S Z O
 G W X Y T T E L B U O O Q M E T E R N

COMING EVENTS

Pacifica CERT (Community Emergency Response Team)

For training and information

<https://pacificacacert.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

Important note: All flea markets for 2022 have been canceled due to the lack of a location and the ongoing COVID-19 restrictions.

State and county health orders and restrictions are still in effect, but we expect most restrictions to be lifted before March of 2022. We are now looking for a new location for the market and plan to reopen in March 2022.

Fry's Electronics closed their doors in late 2020. They were a unique institution of the Silicon Valley and they will be missed. This also means the Electronics Flea Market needs a new location for our events. For updates, please visit:

<https://www.electronicfleamarket.com>

CARC MEETING/EVENT SCHEDULE *

Date	Event
Jan 12th	Zoom Meeting - 2022 Agenda Planning
Feb 9th	Zoom Meeting - 2022 Agenda Final
Mar 9th	Zoom Meeting
Mar 13th	Daylight Savings Time Starts
Apr 13th	Zoom Meeting
May 11th	Zoom Meeting - Field Day Planning
Jun 8th	Zoom Meeting - Final Field Day Planning
Jun 25th-26th	Field Day - Details TBD
Jul 13th	Pizza Meeting
Aug 10th	Zoom Meeting
Sep 14th	Zoom Meeting - 2023 Officer Nominations
Oct 12th	Zoom Meeting - Review 2023 Slate of Officers
Nov 6th	Daylight Savings Time Ends
Nov 12th	Dinner Meeting & Election of Officers
Dec 14th	Holiday Potluck Dinner - Location TBD

* All meetings will be held via Zoom until COVID-19 restrictions are lifted by the state and county for in-person gatherings in public places.

COASTSIDE AMATEUR RADIO CLUB

The Coastside 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 Coastside 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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www.smcready.org
cert@pacificapolice.org



63 years



of Service

53 years



Affiliation

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:

7:00-7:45 AM on WA6TOW
146.925 MHz, PL 114.8
Knights of the Megahertz Net

Note: All 2m repeater traffic is recorded and
may be replayed at audiostickerburr.net.

CLUB OFFICERS				
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**MEETING
NOTICE:**



JANUARY 12, 2022 7:30 PM (ZOOM)
WATCH FOR INVITATION VIA E-MAIL OR CONTACT
CARC_INFO@COASTSIDEARC.ORG TO BE ADDED

COASTSIDE COMMUNICATOR

EDITOR

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FIRST CLASS

TO: