



ZERO BEAT

Southeastern Massachusetts
Amateur Radio Association, Inc.
54 Donald Street
South Dartmouth, MA 02748



Since 1932

Volume 49 Issue 2

SEMARA-W1AEC

February 2013

R U in LUV?

WITH HAM RADIO, OF COURSE!



GET INVOLVED IN OPERATING. C U ON THE BANDS.

ZERO BEAT

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Amateur Radio Association, Inc.
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2013 SEMARA OFFICERS

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Joe Krisnowsky—N1IXC

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Louis Mester—W1CH (2014)

Joe Krisnowsky—N1IXC (2015)

Dick Halliwell—K1AHA (2016)

Brad Paiva—W1BEP (2017)

STANDING COMMITTEES

Building and Grounds

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Tony Lessa—KB1UAM

Scholarship

Sonny Eddleston—K1USW – chair

Chuck Moszczanski—KB1FRL

Alan Dulong—WB1FQP

Joe Krisnowsky—N1IXC

Technical/Repeater/Web

VACANT – Technical (chair):

Rick Cabral—W1RJC: Repeater

Rick Cabral—W1RJC: Web

SPECIAL COMMITTEES

Activities

VACANT

ARES/SKYWARN/RACES(ACS)

Ed Caron—KA1RSY

QSL Manager

John Nery—WA1ESO

Radio Events

Bob Kelley—K1KVV

Tech Talk

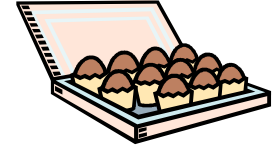
Brad Paiva—W1BEP

It seems to me ... de Bob - K1KVV, Editor



that we can always remind ourselves that the charm of amateur radio is “We say ‘HELLO’ to strangers, and ‘GOODBYE’ to friends.” Don’t you agree? It is an experience you don’t get any other way!

Yes, “Life is like a box of chocolates, You never know what you’re gonna get until you bite into it.”



We could return to our roots by building a QRP kit. Here’s one for you to consider.

Bodan Six - 50MHz Transceiver*

* <http://qrpproject.de/UK/GermanKits.html>

These kits are designed as Club Projects of the German QRP Club, DL-QRP-AG, by club members.

The kits represent a high standard of QRP kits, designed for European RF Environment. That means the kits can handle the strange BC RF levels we encounter.

Bodan Six is a sensitive, low noise **50MHz Transceiver**

- Direct Conversion
- VCXO with 2 Xtals: wide range, super stable
- Easy to build
- English manual
- Includes a complete enclosure
- Shipped from stock

“**Bodan Six** is an easy-to-build kit. The RX front end uses a small bandpass filter and a FET Preamplifier. It is a direct conversion type RX (NE/SA612) with a small 750 Hz AF Filter. The built-in RIT is linearized.

The VCXO (Voltage Controlled Xtal Oscillator) has a range of 35 to 40 kHz, which can be extended to 80-90 kHz with the optional second Xtal.

TX uses the same VCXO. The 2N3553 PA gives **1 to 2 Watt output**. First harmonic suppression is better than **-70dBc**.

Current consumption: RX = 40mA, TX = 200mA.

The complete kit is built on one EUROCard (160mm x 100mm) [6.3” x 3.9”] and fits into a standard profile enclosure (part of the kit).”

You can download the complete English manual in PDF format:

<http://qrpproject.de/Media/pdf/Ebodansix.pdf>.

This might be a fun way to get on 6-m. Let me know what you think.

POINT TO PONDER

“You can’t control the direction of the wind,
but you can set the sails.”

~ Wall Placque

Official Meeting Minutes



January 3, 2013

The meeting was called to order at 7:10 PM by the President, **Marcel (W1MLD)** with salute to the flag. The roll was called with 20 members and 0 guests present. A moment of silence was then observed for **Larry Lygren, W1DBX SK**

SECRETARY'S REPORT

A motion was made, seconded and unanimously passed to accept the Secretary's Report as posted on the board and in Zero Beat.

TREASURER'S REPORT

The Treasurer, **Mike (KB1NB)** reported that NETCOM had made their monthly payment plus an additional \$1000.00 towards arrears. Total monies in accounts total \$56,672.00 currently.

STANDING COMMITTEES

Technical

Dave (W1DJG) reported all was working well at this time.

Scholarship

It was reported that letters went out to the schools with no response yet.

SPECIAL COMMITTEES

ARES, RACES, SKYWARN

Ed (KA1RSY) spoke of NBEMS (Narrow Band Emergency Messaging System) and WINLINK (Email over radio) and the direction those, and Amateur Radio is heading. There was also talk of SEMARA sponsoring classes in Emergency Communications and ARES function in the future.

Radio Events

Bob (K1KVV) mentioned different radio events, also listed in Zero Beat.

Website

Bob (K1KVV) mentioned that there has been an update to the website and there may be some glitches in the software but pages seemed to be rendering properly.

OLD BUSINESS

The President, **Marcel (W1MLD)** mentioned that NETCOM was soon to take possession of the building in the back from NEXTEL and then we

could proceed with negotiations to acquire the building as an addition. The Log Periodic antenna was about ready to be reinstalled. There was also some discussion regarding options for backup power for the repeater shack and systems.

NEW BUSINESS

Fred (N1TF) brought up the fact that, during the Christmas Party, he noticed that the stove cooktop was in disrepair and a replacement should be looked into. After some discussion, he agreed to look into replacement options and report at the next business meeting.

FOR THE GOOD OF THE CLUB

Fred (N1TF) was recognized for an excellent job organizing the Christmas Party last month. There was discussion regarding a possible Corned Beef and Cabbage Dinner, to be held at a banquet hall, in the future.

ADJOURN

A motion was made, seconded and unanimously passed to adjourn at 8:10 PM.

Respectfully Submitted,

Marc M. Dumont (KB1ODE), *Secretary*

50/50 RAFFLE

The 50/50 raffle was won by **Fred Bacon (N1TF)**. The split was \$17.00/\$17.00.

Board of Directors Meeting Minutes January 12, 2013

The SEMARA Board of Directors meeting was called to order by the President, **Marcel (W1MLD)** at 10:20 AM with 6 members present. Topics discussed were as follows:

Dues: In compliance with a membership vote from an earlier business meeting, the topic of membership dues was discussed. An Email submitted by **Bob (K1KVV)** was read into the meeting by the President, **Marcel (W1MLD)**. Discussion followed. By unanimous vote, the Board will recommend to Membership at the next business meeting to continue with no yearly dues and Life Membership to members.

(Continued on page 4)

Club Notes

(BoD Minutes, continued from page 3)

NETCOM: Permission was requested by NETCOM to use the SEMARA building for a class, to last one or two days, in the near future for Tower Climbing. The Board recommended allowing use of the building by unanimous vote.

The Treasurer, **Mike (KB1NB)** also informed that the tax bill had been received and NETCOM's share would be approximately \$5600.00. SEMARA has also receives payment from NETCOM reflecting the new amount.

Nextel Building: The President, **Marcel (W1MLD)** advised that the Nextel building was now empty and the inside was able to be viewed. It is in good condition but may need new flooring as some tiles are broken.

Radio Interference: The issue of recent radio interference to radios on the tower was discussed. Some has been attributed to Sprint radios mounted to the tower itself. Different options are being evaluated to correct this possibility.

Miscellaneous: Other topics discussed include: Cigarette butts being left on the ground by the door, security vulnerabilities on the webcam, a stovetop from storage possibly being used to replace the existing defective one in the kitchen, backup power by generator for the radios, access to storage sheds, cleaning out storage and reinstallation of the antenna to the tower once the weather improves.

Adjourn: The meeting adjourned at 11:17 AM.

Respectfully Submitted,

Marc M. Dumont (KB1ODE), Secretary



VE Session Results

Three candidates passed exams on Saturday, February 2:

George Stephan, KB1ZHJ - Technician;

Ian Nigel Evans, KB1ZHK -
Technician & General;

Jason M Quilter, KD2DLH -
Technician & General.



Welcome to the hobby!

Need help getting on the air?

Ask any SEMARA member.

Club Numbers

GPS Coordinates:

Lat. N 41° 36.795' Long. W 070° 56.550'

Maidenhead Grid Coordinates: FN41mo

For FISTS Sprints: FISTS #10555

LOCAL NETS

Everyone is welcome to check in!

147.000+ (PL 67.0 Hz) (FM) — Massachusetts RAC-ES/ACS Drill (Region 2, Sector A) is held on the first Monday of the month at 7:30 PM.

50.200 MHz (USB) — Net is held Wednesdays at 8:30 PM. **Dick, K1AHA** (Dartmouth) is net control.

28.490 MHz (USB) — Net is held Tuesdays at 8:30 PM. **Dick, K1AHA** (Dartmouth) is net control.

3868 kHz (LSB) — SEMARA Morning Net is held weekdays from 7:30-8 AM ET.

LOCAL REPEATER DIRECTORIES

See <http://www.nerepeaters.com/se.htm>

144 (<http://www.nerepeaters.com/2m.htm>)

222 (<http://www.nerepeaters.com/222.htm>)

440 (<http://www.nerepeaters.com/440.htm>)

902 (<http://www.nerepeaters.com/902.htm>)

CLUB ACTIVITIES

BUSINESS MEETING

First THURSDAY of the month @ 7 PM

Sunday RAGCHEW 7-10 AM

Thursday COFFEE CROWD

Dunkin Donuts @ Bliss Corner, Dartmouth @ 1 PM

Friday LUNCH BUNCH

Leave for LUNCH at **12 noon**

Gather @ clubhouse before 12

You can phone ahead or

call on the repeater,

if you will be delayed

NEXT VE SESSION @ SEMARA

April 6, 2013

Clubhouse @ 10:30 AM

Contact: Larry Houbre-AA1FS

[exams\[at\]semara\[dot\]org](mailto:exams[at]semara[dot]org)

508-991-6055



SEMARA News

147.000 Repeater Upgrade

On Tuesday, January 22, 2013, I started work to upgrading the 147.000 repeater. I intended on simply upgrading the repeater controller to the latest S-COM 7330 in a one week project. But one thing leads to another and the extended task of overhauling the entire system has now begun. T



he repeater is temporarily running on its internal controller while equipment is being wired and tested. *Be aware that EchoIRLP is unavailable* and there is no courtesy tone. However the repeater is still operational.

Work is expected to be ongoing throughout the month of February.

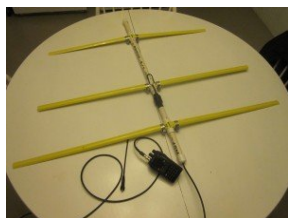
Some of the work being performed includes:

- ◆ Repeater Controller Upgrade (S-COM 7K to 7330)
- ◆ Repeater, Controller and EchoIRLP Re-wiring
- ◆ EchoIRLP Node Upgrade (PC to Embedded Raspberry Pi/PiRLP)
- ◆ Remounting of Duplexer, Repeater, Controller, etc. in new rack
- ◆ Port 3 Controller Wiring for 220/900 Repeater Cross-Linking & UHF Remote Base

Once 147.000 is finished and rackmounted, I will move on to the 220 and 900 repeaters. Thanks to everyone for their patience while this work is performed.

If you have any questions, concerns or would like to find out more about the upgrades, feel free to contact me!

Rick (W1RJG), SEMARA Repeater Committee



VHF 3EL Tape Measure Yagi

A part of next month's meeting will consist of a "Build A Beam" workshop where you can build a 3 element VHF Yagi that is made from PVC and measuring tape.

Notice from **Hampton County ARA**

[Seems like a neat project for SEMARA. What say? Ed.]

Coping with Interference*

Tim Smith, N1TI, spoke at the regularly scheduled *January 19, 2006* Tech Talk to about a dozen and a half hams who got to learn both about the nature of interference and how to cope with it.



First he asked us "Who are we and what can we do?" His talk focused on local man-made, intentional interference, not RFI. He suggested that this situation calls for group observation. We need to be mindful of our own conduct on the air as well. Do we display 'passive intelligence' or 'ignorant aggression?' Above all, we must keep our own house in order.

After reviewing the Communications Act of 1982, which effectively says that the Amateur Radio Service is self policing and that the Amateur Auxiliary/Official Observer has full legal standing, We learned that our nearest OO is K1LJN who lives in Chelmsford, north of Boston. An OO tries to help us in two areas: good Amateur Practice, e.g., operating legally; and good Engineering Practice, e.g., equipment functioning properly. See the FCC Rules and Regulations, Part 97 for references to both areas.

Tim mentioned that we need to set up a Local Interference Committee, an excellent opportunity for public service. This committee can become the de facto expert when anyone has problems with 'voices' on their cell phones, their stereo systems, and other kinds of interference. This committee essentially gathers evidence. They listen a lot. As far as Part 15 violations, they and the OO/AA are not enforcers. They act more like an "Elmer" and try to help by getting all parties to work together.

Interference on our local repeaters:

- 443.800 most prevalent
- 145.490 intermittent, Wx Net
- 147.000 occurs in waves

Why does this happen? Usually it is a personal grudge against someone. There may be three distinct hams involved. On 443.800, the aim seems to be to cause the link to go down. The interference on 147.000 occurs mainly during driving hours.

So what have you heard? Pay attention to the background noise. Observe the presence of hum, alternator whine, and that sort of thing. Watch for a pattern in what is targeted by the interference. Is it an individual, a group, or an event? Your help is needed so we can all preserve my optimism about, and enjoyment of, this great hobby.

In the meantime, let's be mindful of our own operating conduct. In a contact that is intentionally interfered with try to ignore it, keep your cool, exercise patience – look, listen & learn, listen on the input frequency, log time, date, band

(Continued on page 7)

SEMARA News (cont.)



BSA Amateur Radio Operator Rating Strip

The Boy Scouts of America (BSA) has approved an Amateur Radio Operator rating strip for Scouts and Scouters to wear on their uniforms. The strip recognizes the Scout or Scouter's availability as an Amateur Radio operator for communication services for events and activities, as well as emergencies. All registered youth members and adult leaders who also *hold a valid FCC-issued Amateur Radio license* of any class are eligible to wear the rating strip.



BSA Morse Code Interpreter Strip

Scouts and Scouters can earn the new Morse code interpreter strip by completing all three requirements: Carrying on a five minute conversation in Morse code at a speed of at least *five words per minute*, correctly copying a two minute message sent in Morse code at a minimum of *five words per minute* (copying means writing the message down as it is received) and sending a 25 word written document in Morse code at a minimum of *five words per minute*.

Eastern Massachusetts Hospital Net First Saturday of the Month

Net Control for February's Eastern MA Hospital Net will be the Falmouth Hospital ARES group. They will be running the net from the Falmouth Hospital. The net will commence at the usual time of 10 AM using the following repeaters in the order listed.

W. Bridgewater 146.775 dpl 244

Plymouth 146.685 tone 82.5

Dartmouth 147.000 tone 67.0

Falmouth 147.375 tone 110.9

Simplex 147.42

Returning to W. Bridgewater 146.775 dpl 244 for final comments and net closing.

NET Protocol: When asked to check in by Net Control please use the standard net check in procedure which is: Here is., un-key, wait 3 seconds to check for doubling, then give your facility's call sign, facility name, your first Name. Alternatively If your facility does not have it's own call sign, Your call sign, Your Name, and the facility you are located at or facility/group represented.

If you unable to reach a specific repeater please monitor the next system in the rotation and wait for the net to arrive. If you lose contact with the rotation and are not sure where the net is currently located, South Shore Hospital will continue to monitor the Plymouth Repeater during the Net. You can check with us (W1SSH) on Plymouth and ask where the Net is currently located.

If any group or organization would like to run the Net from their facility as Net Control please let us know. We would like to rotate the Net Control duty among as many

facilities as possible. We would like to extend an invitation to the EOC of any city or town that is served by one of our participating hospitals to join the Net. During an event it is quite likely that these locations will be activated, and the need to communicate with health care facilities via amateur radio may become a real possibility.

Any hospital not part of the net is welcome to join. If you are unable to join due to a lack of equipment or personal please contact us or **Carl Aveni** at [caave\[at\]peoplepc \[dot\] com](mailto:caave[at]peoplepc[dot]com) for assistance in getting your location on the air.

The following repeaters are available for us to use to conduct the Nets. Only a few systems are used each month with the selection of those used made by Net Control for that month.

Attleboro 147.195 tone 127.3

Bridgewater 147.180 tone 67.0

Danvers 145.47 tone 136.5

Dartmouth 147.000 tone 67.0

Fairhaven 145.490 tone 67.0

Falmouth 147.375 tone 110.9

Norwell 145.390 tone 67.0

Norwood 147.210 tone 100.00

Plymouth 146.685 tone 82.5

Salem 146.88 tone 118.8

Sharon 146.865 tone 103.5

W. Bridgewater 146.775 dpl 244

Wrentham 147.09 tone 146.2

We look forward to hearing you all on the Net.

73, **John O'Neill - K1JRO** (W1SSH)

SEMARA News (cont.)

FLEAMARKET 2013



Saturday, May 11, 2013
9 AM to 2 PM Rain or Shine

GENERAL ADMISSION ONLY \$2.00!

30+ YEARS OF FLEAMARKETS!

**Admission Includes
One Raffle Ticket!**

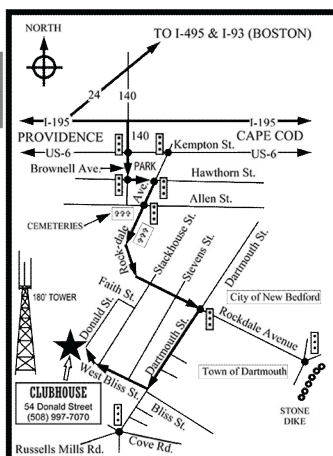
- **FREE ADMISSION** for SEMARA members and children under 12.
- **VENDORS \$10.00** admission fee. Setup begins at 8 AM.

Talk-in on W1AEC Repeaters:

- 147.000 + PL 67.0 ←
- 224.800 - PL 67.0 ←

54 DONALD STREET
DARTMOUTH, MA 02748

More Information: **SEMARA.ORG**
Call Eric, N1WCO at (508) 295-2468
or email flea@semara.org



Annual SEMARA Tailgate Fleamarket

Saturday, May 11, 2013

The Annual SEMARA Tailgate Flea Market
will happen this spring!

Set-Up at 8:00 AM

Open 9:00 AM - 2:00 PM

Admissions are as follows:

- ⇒ Vendors: \$10.00 for a table
 - ⇒ General Admission: \$2.00
- [Club Members and Children under 12 free.]

If there is sufficient participation, there will also be door prizes and a raffle. This will be announced.

Talk-In on SEMARA repeaters:

147.000 (PL 67.0) and 224.800 (PL 67.0)

For more information, contact

Eric-N1WCO at [n1wco@ aol \[dot\] com](mailto:n1wco@aol.com).

73 de **Eric-N1WCO***

* *Eric posted this on the Southeastern Massachusetts Amateur Radio Association's facebook page.*

Kids Day 2013: Sunday, January 6

Twice a year, ARRL offers an event designed to promote Amateur Radio to our youth. You can share the excitement with your kids or grandkids or the general public!

Here's a note from **Wayne, K1NBA**:

"Just want to let you know my grandson did **Kids Day** and he loved it. He had 1 QSO SSB on 20 mtrs with 2 kids in IOWA. I went online to QRZ.com and both kids were there with pictures and info on their setup, both are early teens with a ticket as well. I sent both a QSL card and they sent one in return, *attn* for **Tyler Cardinal**, my grandson. I made copies of their info and did one of my QSL cards along with their QSL to give to Tyler. I'm sure he will keep that forever. Thanks to your SEMARA note for making it happened. He is looking forward to the next **Kids Day** on Saturday, June 15."

(Tech Talk, continued from page 5)

conditions, and signal strength at your location. Discuss pieces of the puzzle only off the air. Do not confront an interference suspect (he knows more about you than you do about him/her).

We need to be vigilant and keep a clean house. Help safeguard our hobby. Remember to identify your station at the beginning and end of each contact and every 10 minutes or less during the contact.

Tim is recording the outputs of the three repeaters 24/7 complete with a synchronized time signal. By applying some special-purpose software, the "fingerprint" of each transmitter can be obtained. This can give proof that a particular transmitter was used at a certain time. This kind of forensic evidence can be used by the OO, and eventually the FCC, to identify the source of the interference.

* *This is reprise of a Tech Talk given in 2006. Ed.*

New 160 Meter Net

1.875 MHz at 7 PM on Fridays

Dave Dean, K1JGV announces his 160 m net.

Some Radio Events

<http://www.arrl.org/contest-calendar>

ARRL International CW DX Contest	CW
Feb 16, 0000Z to Feb 17, 2400Z	1.8-28
North American QSO Party RTTY	Digital
Feb 23, 1800Z to Feb 24, 0600Z	3.5-28
NAQCC Monthly QRP Sprint	CW
Feb 13, 0130Z to Feb 13, 0330Z	3.5-14
CWops Monthly Mini-CWT Test	CW
Feb 13, 1300Z to Feb 7, 0400Z	1.8-28
PODXS Valentine Sprint	Digital
Feb 14, 8 PM to Feb 15, 2 AM	1.8-7
Russian WW PSK Contest	Digital
Feb 15, 2100Z to Feb 16, 2100Z	1.8-28
Feld-Hell Annual WAS Sprint	Digital
Feb 16, 2000Z to Feb 16, 2200Z	1.8-28
Run For the Bacon	CW
Feb 18, 0200Z to Feb 18, 0400Z	1.8-28
Semi-Automatic Key Evening	CW
Feb 20, 1900Z to Feb 20, 2030Z	3.5
CQ WW 160 Meter SSB	Phone
Feb 22, 2200Z to Feb 24, 2200Z	1.8
REF Contest	Phone
Feb 23, 0600Z to Feb 24, 1800Z	3.5-28
UBA Contest	CW
Feb 23, 1300Z to Feb 24, 1300Z	3.5-28
Mississippi QSO Party	Phone,CW,Digital
Feb 23, 1500Z to Feb 24, 0300Z	3.5-28, 50-432
North Carolina QSO Party	Phone,CW
Feb 24, 1500Z to Feb 25, 0059Z	3.5-28, 50, 144
CQC Winter QSO Party	Phone,CW
Feb 25, 0100Z to Feb 25, 0259Z	3.5-14
Mississippi QSO Party	Phone,CW,Digital
Feb 23, 1500Z to Feb 24, 0300Z	3.5-28, 50-432
North Carolina QSO Party	Phone,CW
Feb 24, 1500Z to Feb 25, 0059Z	3.5-28, 50, 144

Local VE Sessions

<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

Walk-ins permitted unless otherwise noted.

SEMARA – 10:30 AM Feb 2nd

Larry Houbre-AA1FS
exams [at] semara [dot] org
 508-991-6055



Falmouth, MA – 9:00 AM Feb 9th

W. Ben Fleck-K2LYE
BenFleck [at] verizon [dot] net
 508-540-2583

Coming FLEAS & FESTS

www.arrl.org/hamfests/search

9 Feb	Springfield VT	<i>CVFMA</i> Dave K1ZS 603-446-7312
16 Feb	Marlboro MA	<i>AARC</i> Timothy KA1OS 508-919-6136
17 Feb	Westford MA	<i>NEARC Radio XLIV</i> Bruce 603-772-7516
23 Feb	S Burlington VT	<i>HAM-CON</i> Mitch W1SJ 802-879-6589
2 Mar	Feeding Hills MA	<i>MtTARA</i> Mary KB1ME 413-222-1990
10 Mar	Henniker NH	<i>CVRC</i> Donald N1ZIH 603-651-8000
16 Mar	Dayville CT	<i>ECARA 8A</i> Paul KE1LI 860-928-5147
16 Mar	N Conway NH	<i>WMARC</i> Greg KB1EZJ 603-759-6671
29,30 Mar	Lewiston ME	<i>AARC ME Conv</i> Ivan N1OXA 207-784-0350
7 April	Southington CT	<i>SARA</i> Norm W3IZ 860-584-1403
7 April	Framingham MA	<i>FARA</i> Steve KB1NIV 508-872-9336
20 April	Gales Ferry CT	<i>RASON Auction</i> Gary WT1SND 860-884-4218
20 April	Portland ME	<i>PAWA</i> John W1JLB 207-776-2288
21 April	Cambridge MA	<i>FLEA @ MIT</i> Nick 617-253-3776