

QRM

May
1987



Newsletter of the Tasmanian Division
of the
Wireless Institute of Australia

(Insert in 'A.R.')

Postal Addresses:

Tasmanian Division: P.O.Box 1010, Launceston, 7250.
 Northern Branch: P.O. Box 275, Launceston, 7250.
 Northwest Branch: P.O. Box 194, Penguin, 7316.
 Southern Branch: P.O.Box 123, Sandy Bay, 7005.

WIA Divisional Council 1987/88:

President:	P. Frith	VK7PF	181, Punchbowl Road,	(W) 918288
			Launceston, 7250.	(H) 430152
Secretary:	R. Harwood	VK7RH	52, Connaught Cres.	319608
			W. Launceston, 7250	
Treasurer/	B. Dilworth	VK7BD	4, Anson Street,	(W) 321276
Membership			Waverley, 7250	(H) 391505
Broadcast	John Rogers	VK7JK	1, Darville Court	002 293402
Co-ordinator			Blackman's Bay 7152	
Federal	Joe Gelston	VK7JG	P.O.Box 1311,	003 272256
Councillor			Launceston, 7250	
Councillor	John Webster	VK7KDR	166 Bass Highway,	(W)004 301667
			East Penguin	(H)004 372112
Councillor	Noel John	VK7EG	30 Spencer Street	004 318490
			Burnie 7320	
Councillor	Bob Richards	VK7NRR	14 Kinross Road,	(W)003 319866
			Invermay, 7248	(H)003 262401
Councillor	M. Wilson	VK7ZWW	17, Pyrie Street,	002 281942
			Newtown, 7008	

Northern Branch Officers for 1987/88 are:

President: Graeme VK7ZGG. Vice-President: Mike VK7MA.
 Secretary: Rick, VK7ZZ. Treasurer: Bob VK7NRR.
 Broadcast co-ordinator:
 WICEN co-ordinator: Phil, VK7JJ.
 QSL co-ordinator: Col VK7LZ.
 Education Officer: Peter, VK7ZPM..

Next two Northern Branch meetings: May 8th. and June 12th.

Northwestern Branch officers for 1987/88 are:

President: John, VK7KDR. Vice-Pres: Greg, VK7ZBT.
 Secretary: Tony, VK7AH. Treasurer: Bruce, VK7MB.
 QSL's: Steve, VK7EQ. Activities: Greg, VK7ZBT.
 WICEN: John, VK7ZPT. Stores: Rob, VK7KAB.
 Repeater: Andrew, VK7ZAP. Broadcast: John, VK7KDR.

Next two N.W. Branch meetings: May 12th. and June 9th.

Southern Branch Officers for 1987/88 are:

President: Keven, VK7KV. Vice-Pres: Barry, VK7RS.
 Secretary: Stewart, VK7NXA. Treasurer: Phil, VK7BZ.
 Repeater co-ordinator: Anthony, VK7ZTA.
 WICEN: Alan, VK7CI. Stores: Mike, VK7ZBW.

Next Southern Branch meeting: May 6th. and June 3rd.

Radiotorial.

So quickly TARC has come and gone, it seems no time at all since we were in Penguin, enjoying the company of so many people we usually know only as voices. Your Ed. picked up a few bargains at the sale (and missed a few!), admired the ingenuity and hard work that had gone into the displays in the home-brew section, and listened avidly to all the technical discussions that went on around him, refreshed at intervals by the drinks laid on so efficiently by the ladies of the N.W.!

The A.G.M. went through with a well-oiled smoothness (knowing what some A.G.M.'s can be like), and the dinner, though slow to be served, gave ample opportunity for the social side, which must be surely one of the main reasons for TARC in any case.

The came the southern W.I.C.E.N. exercise, a paragraph on which appears "further down the log", followed by the preparation for the Sunday broadcast. It becomes clear that something is going to fall apart at the seams unless a fairish number of willing people are prepared to "stand up and be counted" in the organisation of such regular items as "QRM", broadcasts and activity centre programmes.

A letter has arrived, via our Federal Councillor, Joe VK7JG, giving a list of the deadline dates by which "QRM" must be in the hands of Automail for insertion in "A.R.". Perhaps these dates may be useful in planning ahead for articles, notices and other copy which has a time value. So here they are:

June issue: 20th. May.	July issue: 24th June.
August issue: 22nd. July.	September issue: 20th. August.
October issue: 23rd. September.	November issue: 21st. October.
December issue: 22nd. November.	

Don't forget that we have to allow for the exigencies of Australia Post in getting the parcel over to Melbourne and for the normal production time schedule.

We have ^{had} several requests concerning articles for "QRM". The first one said, "Please, NO more articles on Nicad Chargers"! And another made a serious request for information and circuits for a good quality antenna tuner for H.F. Keep it in mind, all you boffins!



VK7JK

Broadcast Information.

Time of transmission: 09.00 local on Sundays.

Frequencies: 80m: 3.570 MHz. 40m: 7.13 MHz.
 2m: (FM) Repeaters, 2,3 and 8 linked.
 2m: (SSB) 144.1 MHz.
 6m: (SSB) 52.1 MHz.

News items or other copy for broadcasts should be sent to:

N.W. B'cast Officer: John, VK7KDR, 004-372112.

North " " :

South " " : John, VK7JK, 002-293402.

Special Council Meeting.

A special meeting was held at the conclusion of the Divisional A.G.M. Penguin High School, April 4th. 1987.

Present were VK7PF Peter Frith, VK7RH Robin Harwood, VK7EG Noel John, VK7KDR John Webster, VK7BD Byron Dilworth, VK7NRR Bob Richards and VK7JK John Rogers (Broadcast Co-ordinator). Observing were VK7RS Barry Riseley, and VK7JG Joe Gelston (Federal Councillor), as well as VK7ZRP Russ Pitman representing the South.

VK7PF was elected President, VK7RH became Secretary and VK7BD Treasurer/Membership Officer. Council also decided that the Northern Branch and Southern Branch Presidents should be appointed Divisional Vice-Presidents. Hence VK7ZGG Graeme Reardon and VK7KV Keven Davis are now elected to those posts.

The Broadcast Co-ordinator is to formulate guidelines for future VK7WI broadcasts in writing.

Last year's auditor is to be approached to ascertain whether he is still available.

It was decided that Council Meetings will be held on the third Saturdays of the month. The next scheduled meeting is to be on on the 23rd May at 1 p.m. at the residence of VK7RH, 52, Connaught Crescent, West Launceston, this being a tentative venue, to be confirmed later.

VK7 QSL Bureau.

Annual Report for the year to 31st. Dec. 1986.

Total cards handled for the year shows a further decrease and is the lowest since 1975 when the total was 4,362. On past figures, this should start to increase from now on. A large number are still being received for VK75A and as these have to be sent on to VK3, the total is higher than would normally be expected.

Comparative totals for the last three years are:

	<u>Inward</u>	<u>Outward</u>	<u>Total</u>
1986	7,907	5,950	13,857
1985	10,455	7,096	17,551
1984	11,015	7,672	18,687

Despite the usual increase in postage rates, the deficiency has been kept down to \$37.84 which is considered satisfactory under the circumstances.

Chas. Harrisson VK7CH
QSL Manager.

WANTED WANTED WANTED WANTED

VK7KBA Arthur is anxiously looking for a schematic for a Pioneer KP2500A. Hos phones are (B) 002.717707 and (H) oo2. 685261.

Current Broadcast Comment.

Following a resolution of the Divisional A.G.M. held at Penguin on April 4th., the VK7 Broadcast time will change to:

09.30 local time as from Sunday, 3rd. May 1987.

Relay operators on 40m have been finding that there is some interference from commercial stations on 7.13 MHz. It is therefore proposed to experiment with a move to 7.09 MHz from the same date as above. Listening on this frequency for a reasonable period of time has indicated that it is unused by any regular broadcast.

VK7JK whose contact details are shown elsewhere in this versatile and brilliant publication, is looking for anyone who would be able to join in relaying or originating on the Sunday broadcasts. He hopes to build up a team of about six originators in each area of the Division, and a parallel number of those to help with relays on 40m, 80m and VHF. If a goodly response is forthcoming, it would mean that each individual may be involved only on about two or three Sundays in a year.

As you will have seen in a different page, the co-ordinator is to compile in writing a scheme for the Division outlining the future of the Sunday broadcasts. Already this has begun, but if you have ideas to improve, or offers to join in (perhaps by writing a paragraph or two for the news items) there is still time to submit them.

Devil Net Award Report.

During 1986, only 15 awards were issued, with one each to ZL, ZS, JH and W6. At the same time, upgrade stickers were also issued, with one to a ZL SWL and the rest to VK's. The majority were for 100 VK7 contacts, with 4 for 150 contacts and one for 300! Due to the continuing poor propagation on the higher HF bands, the Tuesday night 80m net has been consistently well supported during the year. Over 90 VK7's checked into the net with one station being outstanding. I refer to VK7NNN Grace who recorded no less than 49 Tuesdays and she took the trouble to apologise for the other three! She certainly sets an example to many OM's.

The Tourist Information Service provided by Greg VK7NGH is still appreciated by those with the intention of visiting Tasmania and I have received many expressions of gratitude for this - some of them personally when visiting mainland amateurs have called on me. It is a great public relations exercise both for tourism and for amateur radio. It is also very well backed up by VK7OL Owen at Devonport, our official handshaker at the ferry terminal. Owen and his wife have greeted dozens of visitors, taken them home for a cuppa, given them advice on their tour and sent them on their way rejoicing!

For obvious reasons, I would recommend that the cost of the award be increased to \$3.00 and that a charge of \$1.00 be made for

each upgrade sticker. Remission of the extra dollar presents no problem since two 50 cent stamps may be used as part postage on the awards. I consider that the awards should be self-supporting and one day we shall have to reprint the certificates.

We are looking forward to a happy and successful 1987.

Bob Jackson VK7NBF.

Letters to the Editor.

From Bill Perleberg, Fern Tree, 7101, who thinks that those who are avid short wave listeners like himself, would be interested in the following snippets of information:

Radio Beijing English Language Service: Daily, 18.30 - 19.30 and 19.30 - 20.30 E.S.T. on 9.700, 11.755 and 15.440 MHz.

Radio Japan English Schedule: 09.00 - 10.00 U.T.C. on 11.875 MHz and 15.235 MHz, daily.

Radio Espana (from Toledo, Spain) English programme: Every Monday, 00.30, 01.30 and 05.30 U.T.C. on 6.125 MHz.

Radio Deutsche, Germany: Daily, from 09.00 - 09.50 U.T.C. on 6.160 MHz.

(Thanks for the schedules, Bill and for your letters and good wishes. - Ed.)

From John, VK7KDR, East Penguin.

(These are extracts from a much longer letter, for which many thanks, John. - Ed.)

The N.W. Branch worked very hard to make TARC a success and were pleased to meet 72 VK calls who signed in on the Saturday. We think about 200 people may have come through during the day. The "crew" responded very well to the demands made upon them, especially after the pressures of Camp Quality which immediately preceded the TARC itself.

I am very interested in trying to ensure that the standard of our news broadcasts is kept up, and perhaps improved, and use the Amstrad CPC 464 computer with Amsword to help compile the scripts. One of the problems of the broadcast seems to be that of keeping levels right - a tape with poor or variable levels is a pain.

I believe the idea has been floated of a news broadcast of State News followed by a drop off to the Branches for local news, but I am not sure this would be a success as I cannot see three 80m relays. In any case which one would pick up the 40m relay? We have re-instated the 40m relay in the last few weeks and are starting to get a good response. Last weekend, a group of listeners in NSW through a common source rang VK7WJ in Devonport and reported their thanks for this re-instatement. The next job is to get the news: from Federal reps., local reps., our satellite man, HF and VHF enthusiasts, WICEN reps., and what about views from our Pres once a month? Last Sunday, we had a total North North West call-back of 50 stations, plus a NSW phone call. Callbacks in the South would be extra to these, but we do not get to know about that.

Perhaps it would be possible to get together on 80m after the callback?

73 from John, VK7KDR.

The Ed. replies: There are many points in your letter which will be of great value in working out the future system for the broadcasts. I agree wholeheartedly that if we do go to a centralised broadcasting setup, we must be very careful to ensure that Branch news doesn't get left out. As you say, we are split enough as it is. Your callback total is very encouraging - makes the broadcast more worthwhile and shows that we can get news round the state by this method. I also agree that an exchange of information on 80m following each broadcast would be of value - there's nothing worse than not knowing if you've succeeded in getting out throughout the State!

From Arthur VK2AV:

Thanks for "QRM" in Deewhy. Had a great time in Tassie but was sorry to miss TARC - we were booked on the "Abel Tasman" on April 2nd. We enjoyed the rodeo at Gowrie Park and the picnic races at "Blendair" near Brighton. On our return, had a letter from G4KEM (ex VK6ARB) to say he'd left a temperature of +40° in W.A. to find snow in Gerrard's Cross London and -15° - he mentioned throwing logs on the fire not knowing we were doing the same thing in Ringarooma! The Royal Signals A.R.S. holds its AGM at Catterick (Yorkshire) on 27th June, but I shan't be there - wait till next year, though! It's quite a thought to have some international connections.

Tasmania is an unpredictable place for radio propagation. Last year I had 2m and 70cm contacts with VK3 stations, and this year with VK3KAV (both mobile) while between Scottsdale and Ringarooma. V_k3KAV's signal just cut out as I came to the turn off to Cuckoo! Is there a moral in that, d'you think?? It may be worth monitoring the F.M. b/c band for unusual propagation. On Saturday 21st March, 8.30 to 9.30 a.m. 4DDD(Darling Downs) on 102.7 MHz and ABC FM Maryborough 92.5 MHz were booming in. No other F.M. stations were heard from Queensland, so the sigs. must have been coming only from that particular area. Tassie seems to be well located for this sort of occurrence.

Would be interested to know how Barry Riseley is getting on with the Max Loveless Museum. Hope the Carphone conversions are going well. Will be back in VK7 next year. 73.

Arthur, VK2AV.

WANTED WANTED WANTED WANTED

Wanted to buy - an FRG7 communications receiver or similar.
Please phone Keith Brown on 002.727707.

N.B. Copy for the June edition of "QRM" must be in the Editor's hands by, at the latest, May 14th. Please do it now!!

A.T.V. in the NORTH.

The Northern Tasmanian A.T.V. Group has recently been formed. All enquiries should be sent, if you are interested in finding out more about this topic, to Bob, VK7NRR (ex NAI).

Some of the aims and objects of the group are: To further promote interest and activity in Amateur Radio; provide a forum for discussion, instruction and training in amateur radio; conduct educational and instructional broadcasts; encourage outdoor activities for persons with video cameras; provide assistance to organisations and individuals requiring video taping; conduct broadcasts on a regular basis.

If you live in the Northern part of the State, and are into A.T.V. whether slow-scan or fast-scan, or are merely interested in the mode, perhaps you would like to be part of the group. If so, please contact Bob for more information. Registration forms are available from Bob on request at the next monthly meeting of the Northern Branch, or you can come along to our next meeting.

BOB RICHARDS.

W.I.C.E.N. Exercise.

A W.I.C.E.N. exercise was held over the weekend of April 11th and 12th. with a simulated emergency in the Arve Forest/Hartz Mountains area. Fifteen members were scheduled to take part in passing information and requests for assistance back through from mobile units via satellite portable units to a simulated H.Q. in Lenah Valley. A total of 130 messages were listed, mainly initiated by the mobiles at the "fire front" and requiring reaction from the "H.Q.Staff". The 24-hour exercise was designed to investigate possible problems and a full report will be made available after a de-briefing conference attended by all the participants.

Alan VK7CI (W.I.C.E.N. Co-ordinator)

THE G3BRD 'SPECIAL' 14MHz DX AERIAL



The 1987 Expedition of the "Dick Smith Explorer"
from Sydney to Port Davey and return.

The "Dick Smith Explorer" is owned and operated by the Oceanic Research Foundation. Dick Smith financed the purchase of the vessel and she was named in recognition of his help and continuing involvement in the Foundation and its work.

The philosophy of the Foundation is "learning by adventure" in the fields of botany, marine biology, charting and sounding, geology and ecology. Many of their exploits have been recorded in the Australian Geographic and National Geographic magazines.

The "D.S.E." is a three-masted steel sailing vessel, some 20 metres in length, 4.6 metres beam and 2.8 metres draft, with bunks for 12 and she normally sails with a full crew. She has made three trips to Antarctica, including twelve months down there from early winter 1983. Whales have been studied off the NSW coast, climbing expeditions to "Ball's Pyramid" to the S.E. of Lord Howe Island carried out and trips made to Torres Strait.

Her skipper on many of these trips has been Don Richards, VK2BXM. Her radio equipment consists of a Kenwood TS430S H.F. transceiver, a Kenwood TR7730 2m FM rig, two marine H.F. transceivers, marine VHF, satnav and radar.

On this, her second trip to the south coast of Tasmania, she left Sydney on Saturday, 31st January, her main means of communication being through the medium of amateur radio. Throughout the trip, skeds were maintained on 80m with VK7FB, VK7BP and VK7EB at 20.00 local time and on at least two occasions it proved invaluable.

While well out to sea off the mainland coast, the port side steering cable broke. After some six hours of rolling about, during which time part of the internal lining had to be removed to gain access to the cable, a very successful repair job was completed and they were southward bound again. We were given the required details of a replacement cable, and by the time the ship reached Kettering, the cable was waiting for them.

The sked on the night of Wednesday 4th February took on a serious note when medical assistance was sought for a female crew member. The advantage of a telephone next to the gear was clearly shown, as I sat here with a local G.P. in one ear and the "D.S.E." in the other! We arranged an extra sked for the next morning, just in case, but by then the patient was very much improved. Our G.P., by the way, was quite intrigued to have been able to render advice by means of amateur radio, and there was no thought of charging for the consultations.

After some frustrations with fickle winds, the "D.S.E." arrived in Kettering at 10.30 on Saturday, 7th. February. I went down to satisfy myself that the cable had safely arrived. Don and the crew sailed at 12.00 the next day and arrived in Port Davey at 17.00 on the Monday. For the next 9 or 10 days, skeds were maintained each evening, and later when VK7FB had to work for his living, in the mornings. When food supplies ran a little low, a shopping list was radio'd through and the goodies taken to Cambridge to be flown down on one of the charter flights to Melaleuca Inlet. (To be cont.)

The world's first direct broadcast satellite now operational

NHK's experimental satellite service for individual viewers

Japan leads the world in the field of satellite broadcasting and since May 1984 NHK has been conducting trials using the world's first broadcasting satellite for practical use. Its main feature is that anyone can enjoy clear TV images and sound via satellite using a commercially available TV set. This type of telecasting is also planned by several other countries but has not yet reached the practical stage.

NHK embarked on research and development on satellite broadcasting in 1966 and launched the world's first practical broadcasting satellite, the BS-2a, in January 1984. Satellite broadcasting is aimed primarily at solving the problem of poor reception on remote islands and in mountainous regions. Japan consists of some 4,000 islands including the four major ones, and about two-thirds of its total land area is mountainous. These natural conditions pose difficulties for anyone who wants to broadcast nationwide. The Broadcast Law of Japan, however, obliges NHK to

try to ensure that its broadcasts reach all parts of the country. NHK has satisfied this requirement, with the exception of a few areas where reception is poor because of unfavorable geographical conditions. Recently, however, it has been noted that, apart from remote districts, poor reception is presenting problems in some urban areas where signal propagation is obstructed by many high-rise buildings. Satellite broadcasting can effectively eliminate all these problems, facilitating the nationwide transmission of sharp television images and high-quality sound.

TV signals sent from the NHK Broadcasting Center in Tokyo to a satellite orbiting at 36,000 kilometers (about 22,370 miles) above the equator are retransmitted to all parts of Japan. These signals can be received individually or jointly by viewers anywhere in the country. It is also possible for regional broadcasting stations to receive signals for re-transmission to local audiences.

A special receiver and a dish-shaped

parabolic antenna are needed to pick up satellite broadcasts.

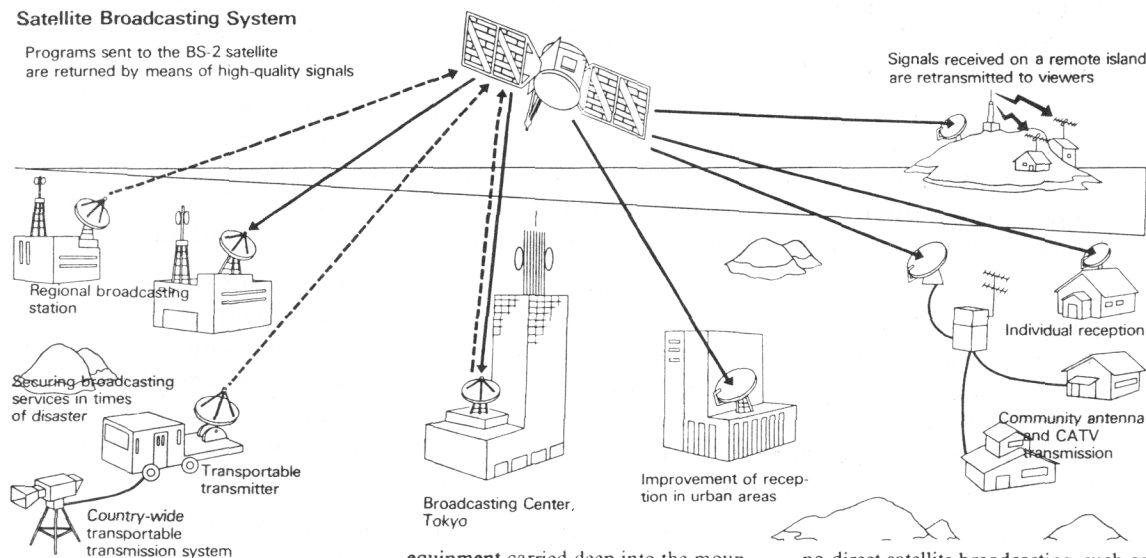
In Honshu island, where large cities such as Tokyo and Osaka are located, a dish antenna with a diameter of 75 centimeters will suffice. In the southern island of Okinawa, far from the heart of Japan, parabolic antennas 1.6 meters (about 63 inches) in diameter are necessary. The approximate price of a receiver and an antenna is about 200,000 yen (about 1,300 U.S. dollars). This rather high cost is attributable to the fact that production of the equipment is still quite limited. According to manufacturers, about 20,000 sets have so far been marketed. They expect the price to come down as more sets become available on the market.

A survey has revealed that the number of households receiving NHK's satellite broadcast service was 103,500 as of June 1986. Although satellite broadcasting is still in the experimental stage, it has made it possible for people in the remo-

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Satellite Broadcasting System

Programs sent to the BS-2 satellite are returned by means of high-quality signals



test corners of the Japanese islands to receive NHK's General TV Service at an early date.

At present NHK broadcasts 17 hours of TV programs via satellite daily. Ninety percent of the programs are the same as those on the General Service channel, the remaining 10% being exclusively for satellite broadcast audiences.

TV images via satellite broadcasting are extremely clear, without any of the "ghosting" that is associated with land-based transmitters. A remarkable improvement in sound quality is also guaranteed.

Besides being used for direct transmission, the broadcast satellite has various other applications. It is, for example, possible to send signals from a transportable transmitter mounted on a vehicle to a key station via satellite. This means that live satellite relays are possible from any site. When a JAL jet crashed into a mountain north of Tokyo in August 1985, mobile transmitting

equipment carried deep into the mountains played a vital role in live satellite telecasts direct from the scene of the disaster.

After midnight, when the day's broadcasting is over, the broadcast satellite can be used for various technical experiments such as high definition television ("Hi-Vision"), which is a revolutionary system featuring extremely clear images. The nocturnal experiments also include the transmission of a new type of stereo broadcasting characterized by superb sound quality even better than the state-of-the-art compact disc system.

Several countries besides Japan have also been engaged in research and development on satellite broadcasting. West Germany and France will probably launch satellites in 1987. In the United States, many people have set up their own parabolic antennas at home to enjoy TV broadcasts via satellite. However, these people are intercepting signals transmitted from a key station to local program distributors. In America,

no direct satellite broadcasting, such as NHK's, is as yet available to a general audience, although several broadcasters have come up with plans.

Japan's second broadcast satellite, the BS-2b, was launched in February 1986. This is expected to become operational in November this year after the necessary technical adjustments have been completed. Various technical experiments will then be conducted using this new satellite. Meanwhile, NHK has been doing its best to present attractive programs on its satellite TV channel. Some programs are broadcast via satellite before they are aired over the conventional "land-based" system. There are also plans to import popular programs from overseas for airing exclusively on the satellite channel. It will not be long before the Japanese satellite TV audience will be able to enjoy programs such as the popular American soap opera "Dynasty" in both English and Japanese.