# W6VIO CALLING AMSAT WESTER FRADIO CHISTOPHE CHISTOPHE

JANUARY 1988

## MAIL STOP

Jet Propulsion Laboratory W6VIO Calling M/S 264-419 Eileen McKinney - Editor 4800 Oak Grove Drive Pasadena, California 91109

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EDITOR: Eileen McKinney KA6DGV

Club Meetings: Second Wednesday of the month at 12 Noon in 301-271. Everyone is welcome - Bring your lunch!

Board Meetings: Fourth Wednesday of the month at 12 Noon in 301-271. Everyone is welcome - You don't have to be a Board member. Bring your lunch!

Newsletter Article Deadline: The 7th. day of each month. If the 7th. falls on a weekend, the following Monday will be the deadline.

Your articles, ads, photos, diagrams, instructions or Letters to the Editor should be submitted to the address above.

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# PRESIDENT'S MESSAGE by WALT MUSHAGIAN K6DNS

### PRESIDENT'S MESSAGE

I would like to pass along my special thanks to our Past President, Carl de Silveira KG6LG, for guiding the JPL ARC along for the past 18 months or so.

I would also like to thank Eileen McKinney KA6DGV for the great job she has been doing as Editor-In-Chief of W6VIO Calling. A big hug for you Eileen.

We have some exciting things going on at the JPL ARC. W6VIO is now on 2 meters with a digipeater, at the shack. Thank you Jon Adams NW6H for taking the TNC by the horns and putting our digipeater on the air. I would also like to thank the following people for assisting us in this endeavor: Skip Reymenn WA6PAJ, Rick McKinney KA6DAN, Larry Smith N6PBS, John Tallon N6OMB.

John Repar WA6LWD our Facilities Chief informs us that our antenna work party will be held on Saturday, February 6th. on the mesa. We will be installing our DJ2UT XP706 Multiband beam.

For further details contact John at X-47261.

Brian Stapleton KW6J informs me that there have been some good openings on 10 meter SSB, in the evening hours. See you on 10 meters!

73's Walt K6DNS

Pen Pals, Now Air Pals

Gil Yanow, K6TOS, of the JPL Educational Outreach is working with Bob Waller, WB6QNR, and others to make a broader based use of Ham radio in the elementary school curriculum. Bob teaches 5th grade at the Luther Burbank Elementary school in the ABC Unified District. Bob has been actively using ham radio to teach his classes for 18 years. Gil will work with the Glenoaks Elementary school here in Glendale to get two classes from different districts to know each other and learn together. The first contact will be via our "08" machine one Tuesday January 26th at 11:20 AM. The two classes are sending questions to each other via mail and will answer the questions over the air.

We will keep taking breaks for emergency traffic or for use of the patch. After the kids stop talking, we welcome any club members who might wish to say hello and wish the kids well.

As time goes on, the classes will use radio to study astronomy and other subjects together. We hope to call upon the club and JPL people to do some "career" lessons with the kids as time goes on. For additional information about this project or other of the Educational Outreach (including our Teaching Resource Center) contact Gil at 46916.



# DX NEWS by BOB POLANSKY N6ET

### DX NEWS

Well, Christmas and New Years "lazy times" are over and it's time to get back to work again. Don't forget to turn on the ole receiver and look for those elusive countries you still need. There are a few opportunities out there this month, as you can see by the following excerpts from the LIDX Bulletin. By the way, I had an unexpected QSO with OY7ML about two weeks ago on 20 cw at about 1530Z from the QRP rig in Big Bear. It is possible!

ASCENSION ISLAND - ZD8RP is frequently active on 14277 kHz from 2100Z.

CAPE VERDE ISLAND - D44BC operates on 28530 kHz at 1530Z. It may be a little early for the W6's, but it's worth a listen.

DESECHEO - NJ7D/KP4 and KP4HL will attempt a landing here starting 16 January. A five day operation is planned. If the attempt fails, another attempt will take place in a few weeks.

EQUATORIAL GUINEA - 3C3CR will be active through January on cw 5 to 15 kHz above the low ends of 10, 15, and 20 meters. Catch him if you can. There aren't too many operations from here.

MOLDAVIA - UO50Q frequents the W7PHO Family Hour, 14226 kHz from 1600Z.

A sad note here-Bill Bennett, W7PHO, became a silent key on the 23rd of December. He helped many radio operators world wide with new countries, zones, etc. Bill will be missed by many members of the Amateur Radio community.

SOMALIA - T5GG has activated this rare country and can be QSOed of 14183 kHz from 1900Z.

SOUTH GEORGIA - Look for VP8BPZ/S. Georgia from 15 to 30 January. All band operation on phone, cw, and RTTY is planned.

Enough for January. I wouldn't want to be responsible for wearing out those low noise transistors in the front ends of your receivers.

73's, Bob, N6ET

# AUTOPATCH UPDATE by JIM LUMSDEN WA6MYJ

AUTOPATCH AUTODIALER (Jim Lumsden WA6MYJ)

The AUTODIALER has been returned to the autopatch on WB6IEA. The precise cause of the failure of the dialer to respond to commands was not discovered, but a couple of contributing causes are known. The AUTODIALER still falses occasionally, but works properly most of the time.

It was discovered that a few of the stored numbers had been blanked out and at least one other changed in length, possibly due to the lightning activity recently in the vicinity of the machine. The blanked memory slots belonged to active users of the AUTODIALER. In addition, it was discovered that transients on the phone line could possibly put the DIALER into lockup, thereby rejecting all commands.

It was also discovered that the phone line has a significant level of noise on it. It is possible that this noise level occasionally confuses the command decoder in the DIALER and prevents it from operating properly. Work is in progress to clean up the phone line.

If your first attempt to autodial is rejected, recycle and try again. This may be required in about 10% of the attempts. It has been my experience that the second attempt will be successful.

For the information of all AUTOPATCH members, a list of emergency and convenience service codes for the AUTODIALER is being updated and will be distributed shortly. These services include TIME, AVIATION WEATHER, LOCAL WEATHER, and CHP HIGHWAY INFORMATION, as well as CHP, SHERIFF, and FIRE DEPT.

A reminder for all autopatch users: the universal emergency service 911 is available on the AUTOPATCH. Please be sure that the emergency situation being called in on 911 is truly a life or death (or nearly so) emergency. Also, be sure to identify yourself as an Amateur Radio Operator, that you are calling by radio, and that YOU ARE NOT AT THE LOCATION DISPLAYED ON THE CONSOLE. This information is vital in the event of garbled or lost connections.



### FROM THE EDITOR'S DESK by Eileen McKinney KA6DGV



I've always been sentimental to a fault Our neighbors today I realized I'm practical too. an invitation to their just came by with funeral. Their plans include a near-by mortuary internment, a cemetery plot ordered and their dog is in "cold" storage until the "big" day two weeks from now. I was in shock when I was handed an RSVP with a piece of "Killer's" attached as a souvenir. The casket will be bone shaped and the handles will resemble large chunky kibbles. It will be lined with the traditional satin which has been scotchguarded in remembrance of Killer's former life.

Killer will enter the big doghouse in the sky in style all right. He'll be wearing a gold plated collar studded with synthetic milkbones and will wear a sweater with the words I HATE CATS.

We're sending a dogwood tree as our gift and a miniature fire hydrant. We're also sending a pair of the mailman's slacks because most times the dog mistook the mailman FOR the fire hydrant.

It will be a memorable day. All the dogs in the neighborhood have been invited. The affair will be catered by Alpo and leftovers will be sent home in personalized doggie bags. Music will be provided by the Doggone Goods.

This whole thing strikes a chord in my heart as our own Barney Beagle (16 yrs.) is approaching paws-up time. And after seeing all of the fantastic things Killer will be getting it makes me kind of sad. My plans for Barney are a Hefty bag with a drawstring and the old heave-ho into the dumpster.

# NOTES by SID JOHNSON WB6VWH

1. The December board meeting was cancelled due to the holidays

2.In the Nov. issue of W6VIO calling I listed Carl Busse as KI6IV. The correct call is KI6VI.

3.Bill Fesler, KA6TCL got his extra class ticket 12-5-87

4.Larry Ruple has a new call. KB6JSD is now N6QZI.

5.Joel Mosher, KB6RXE is now on the air with brand new ATV equipment. The new gear and a home brewed quad antenna survived the Rose Parade.

6.Russ Dow, formerly WA6JCK, got a new call-KJ6BS. All that know Russ agree the new call is appropriate.

7.If you didn't send in your ECT volunteer questionnaire form (it was in the Dec W6VIO) DO IT! Even if you answer no to everything it will be of value to the steering committee.

8.At least two of the recent novice class students have received their novice tickets. Barbara Bastas call is KB6VGV Jerry Nelsons call is KB6VGT. There may be more that I am not aware of If so let me know.

9.As of 1/7/88 the JPL ARC has a fully operational 2-meter Packet station on the air. The station is located in the club trailer and runs 24 hrs/day. If you want to work it from home the frequency is 145.010 MHz. The call sign is W6VIO. If you don't have packet and you want to work packet from the lab, hop down to the trailer and go to it.

10. Bill White N6RBW Just got his general ticket. Bill went out and bought a new HT only to have it stolen the next day along with his car. He got the car back but the all important radio wasn't in it anymore. Bill has since bought a new HT and carries it with him. I don't advise anyone to touch said radio without Bill's full consent as you may lose your hand up to your armpit.

11. for those who havn't been to the club trailer for awhile, JPL facilities did a marvelous job of leveling and reshoring. You can now open and close the door with one hand instead of both hands, one foot, three knees and your hip. They also dug out the dirt from the rear of the trailer and installed a sturdy retaining wall.

12. For those who missed it, the Jan-88 club meeting was well attended as all enjoyed a presentation of the SUPER COMSHACK 64 in full duplex and Dolby RF. I'm kidding about the Dolby, but not the duplex. Those who attended were:

Joel Mosher KB6RXE Larry Duffy WB6OKN Bill Fesler KA6TCL Richard Grumm W6KWH Ken Bollinger KB6VGS Scott Nolte N6CUV Jan Tarsala WB6VRN John Tallon N6OMB Mark Schaffer WB6CIA Jerry Hawkes W6WXL Don Lawson WA6SQF Albert Kuchler KI6IE Gil Yanow K6TOS Larry Smith N6PBS Phil Smith WB6LQP Ed Jones N6KCB Barbara Basta KB6VGV **Booth Hartley N6BH** Courtney Duncan N5BF Rick McKinney KA6DAN Jerry Nelson KB6VGT Bob Dean N5DPU Skip Reymann W6PAJ Norm Chalfin K6PGX(the guy with the camera) Walt Mushagian K6DNS Sid Johnson WB6VWH Vic Lubecke Alan DeVault Chris Meisl Vlaidimir Flapdoodle URZDUM/ZNO

I didn't see Vladimir at the meeting but he signed the attendance sheet so he must have been there.

It was great seeing you all. 73's till next month.

Sid, WB6VWH

# COMMUNICATING by COURTNEY DUNCAN N5BF

### Communicating

Starting with this issue of the "W6VIO Calling" I'm going to be presenting information on the amateur satellite service, particularly information that is relevant locally. To give you fair warning now, I'm a real enthusiast for this end of The Hobby to the point of bending Rule Five:

". . .Radio is his hobby. He never allows it to interfere with any of the duties he owes to [whatever] . . ."

Some of my effort here will be spent convincing you that, no matter what your interest in amateur radio is, DX, emergency communication, public service, nets, advanced technology, research and experimentation, construction, education, clubs, portable - mobile, rag chewing, digital modes, ATV or SSTV, antennas, schedules or whatever, you are needed and encouraged to bring this interest into the amateur satellite service at some level. Satellites and related technologies are one of the major mediums of communication, amateur and otherwise, in the present and the future. Whatever you are doing in amateur radio is probably either being done or is being planned for the satellite service and your involvement will help move amateur radio into this area where it needs to be thoroughly entrenched. It will also keep your ham radio activity at 'state of the art' levels, according to Rule Three:

". . . He keeps his station abreast of science. It is well built and efficient. ."

Space based communications will eventually be as ubiquitous in the amateur service as the ionosphere and troposphere are now. One day, we hope soon, satellite communications will not be just a special mode, just another chapter in the Handbook, but one of the main media through which all ham activity transpires.

Future columns will contain information on hearing and working the satellites, and on how easy it can be even if you don't have a standard 'Oscar Station.' W6VIO does have a standard 'Oscar Station' and we'll also be talking about what can be done there and how to do it.

### Events

Starting on or about March 1, 1988, the Soviets and Canadians will be skiing and walking across the arctic ice cap from the U. S. S. R. to Canada. The trip is expected to take 90 or 100 days, and amateur radio will be used for navigation and communications. UA3CR, one of the foremost amateurs in the U. S. S. R. and a proponent of the Soviet amateur space program will be operating from one of the base camps.

There may be HF, satellite, and packet operation by the explorers. Packet radio may be made legal in the U. S. S. R. as a result of this expedition; it is already allowed for participants on a trial basis for this event.

Of particular interest here is one of the techniques used for navigation. Team members will be carrying emergency locator transmitters and COSPAS/SARSAT satellites, which are designed to receive and locate emergency transmissions, will be used to locate the party. This information will then be transmitted to the University of Surrey in England where it will be uploaded to the digitalker on either UOSAT 9 or UOSAT 11. The Nordski team will then be able to hear their location transmitted (in English with a British accent) from the UOSAT on each pass over the pole. Because the UOSAT orbits are polar, such passes will occur every 90 minutes. ICOM has donated micro 2-ATs to the expedition for this reception.

The transmissions will be continuous and we will be able to hear them on 145.825 FM whenever the UOSAT is overhead here. UOSAT passes occur two or three times in the morning and two or three times in the evening at moderate and equatorial latitudes.

The UOSATs often break the squelch on hand helds or scanners set to 145.825 MHz. Try listening for a day sometime and see if you hear anything.

Nordski Comm is being promoted as an educational event. Put up a map of the polar region in your classroom and get together with an amateur that has a two meter rig capable of tuning 145.825 MHz FM. Every week, or even every day, listen to the coordinates transmitted by the digitalker and put pins in the map. I intend to do this at home myself!

There will be more coverage of this event in a couple of months, but if you are interested in or know someone who is interested in going into classrooms for these demonstrations, I have the introductory material and contacts. Educator packets are to be mailed around February 1st.

For more information, contact me at the number or mail stop given below.

### From Project OSCAR

The annual meeting of Project OSCAR will be held on Saturday, January 23, 1988, at the Electronics Museum at Foothill Community College in Los Altos Hills. Meeting begins at 10:00 AM and the talk-in frequency is 147.15 MHz (+600).

If you would like to attend, please drop a note to WB6GFJ, c/o Project OSCAR, P. O. Box 1136, Los Altos, CA 94023-1123. You can also send a note to WB6GFJ @ N6IIU-1.

We look forward to seeing you at the next Project OSCAR meeting.

73, Ross (WB6GFJ)

I won't be attending the Project OSCAR meeting this year, but would be interested in hearing a report from anyone who does. Incidentally, the Electronics Museum at Foothill Community College is in the process of collecting the archives of Project Oscar and AMSAT. If you have or know of anyone who has something that might be of historical interest in the amateur satellite program, I'm sure they would like to hear from you.

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### Schedules

There has been some complaining lately that the new Oscar from Japan, Fuji Oscar 12, has not kept an operating schedule worth following. Since October. when I got my satellite station back on the air, not only found the published operating schedules to be quite exact, but have found FO-12 to be the best satellite currently available for 'analog' (SSB and CW) communications. Here is the current schedule, useful mostly for OSCAR operators who already know about operating 'mode J.' others who can listen between 435.790 and 435.920 and would like to just try to hear FO-12, I'll make future schedules a little more friendly.

Mode JD refers to mode J (145.8 MHz up and 435.9 MHz down) 'digital.' Use of the digital or packet mode requires special modems on standard TNCs. Mode JA refers to mode J 'analog' where standard linear translation of amateur communications (SSB, CW, SSTV, etc.) occurs.

The times given below are when the satellite is commanded on or off from Tokyo. Passes over our area that occur when the satellite is on are available for operation.

Operating schedule for the FUJI/FO-12

### January

Mode	F	From (UTC)			То	
JD	2	03:11		3	02	:17
JA	5	02:30		6	01	:36
JA	7	00:42	-	8	01	:50
JA	10	00:02		11	0	1:09
JD**	14	15:23		14	1	7:20
JD	14	19:29		15	13	2:29
JD	16	13:35	-	17	12	2:42
JD	19	12:55		20	12	2:01
JD	21	13:08		22	12	2:14
JD	23	11:21	-	24	1:	2:28
JA	26	12:41	-	27	1	1:47
JA	28	10:53		29	1:	2:01
JA	30	11:07		2/1	09	9:19
JA	30	11:07		2/1	09	9:19

### February

Mo	de Fi	From (UTC)			0 (	(UTC	
JD	2/3	09:32		4	08:3	9	
JD		08:52		7	07:5	8	
JD	8	09:05		9	08:1	1	

The transponders will be off at other time. The schedule may be changed at any time due to unexpected power situations.

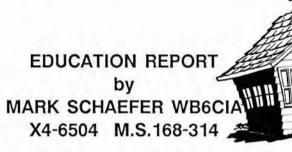
\*\* Transmission every 2 seconds instead of every minute. No mailbox functions will be available during this period but this may be changed at any time due to unexpected power situations.

The digipeater will be operational. Received telemetry reports would be appreciated. Please send them to JARL(JJ1ZUT) via the FO-12 mailbox.

For those of you who speak 'mean anomaly counts,' here is the latest for Oscar 10. In the future, I'll make these more friendly and talk about the meaning and reasoning behind the AO-10 limitations. This information is available from W1AW transmissions or any packet BBS but the source for this is the "Amateur Satellite Report" number 166 which seems to be more up to date than the latest W1AW satellite bulletins.

Jan 4 thru 17 MA 0 thru 159 and MA 221 thru 255. Jan 18 thru 31 MA 0 thru 169 and MA 231 thru 255. Feb 1 thru 14 MA 0 thru 179 and MA 241 thru 255. Feb 15 thru 28 MA 0 thru 189.

Courtney Duncan, N5BF 238-600 354-8336



At the beginning of December we finished another successful Novice Class. As a result we now have FIVE new novices with a few more close behind. Congratulations to Barbra Basta, Dorthy Billitti, Ken Bollinger, Bill Morris, and Jerry Nelson. is amazing how fast they picked up the code and theory in two short months. These new Hams come from different backgrounds and should, with the help of the club and the one year free membership, find and excel at their own little nitch in soon our hobby. They may even get interested in areas that they never knew existed before the course. With any luck they will get their ticket in time for the Novice Roundup. The Novice Roundup is a great way to get an introduction to operating contests or just to improve your operating skills. The Novice Roundup starts at 0001 UTC on January 30 and ends 2359 UTC February 7 (that's 4 PM the day before in PST). Anyone can participate but each QSO must be in the Novice band using the Novice restrictions and the contact must be made with or by a Novice or Technician. A valid contact requires a two way exchange of calls, RST's, and ARRL You can talk to as many different Hams sections. as possible, once on phone and once on CW, in a maximum of 30 hours within the week. Keep a log of your contacts and send in the proper entry forms to the ARRL. See the December issue of QST magazine for full details. If you enter you get a fancy certificate and you get your score published in QST. If you just operate you have a lot of fun! youre a contest pro, get /e the newcomers a hand on how an experienced operator operates. As always if anyone out there needs some help with getting their ticket or upgrading, I'm available with all the We have code tapes and computer programs. We can give you a Novice Exam on lab or tell you where to go for upgrading.

Once again I enjoyed playing Elmer and hope everyone has a GREAT 88.

Thanks to all of you who've contributed your cherished holiday traditions and recipes over the years. Here are three that arrived after the issue went to press. 88's Eileen

Eileen--received our Christmas issue of W6VIO Calling yesterday (it probably arrived while Richard was on vacation). Again, you have done a superb job, and your poem on the front page was especially touching. This issue seemed to top the rest, and will go into my file of items I MUST save. I really appreciate the inputs from the other members, their ideas and recipes as well.

DECEMBER, 1987

Dear Ones--near and far;

It's been another busy year. In October, 1986 Ken (19) decided to join a Ham radio class. He was the only one at home without a radio. The class was 8 weeks into their studies, but with some extra perseverance he managed to catch up with the rest of the class and by February he had his FCC Technician Class license--and Dad had to fulfill the promise made four years ago of a new radio to whomever got his FCC license!!

Summer came and the boys went to California and in June, Dick spent a month in Ft. Hood, Texas, and of course, while the three men in her life were out of town, Nancy's car had cardiac arrest and required a major over-haul. Grateful for her radio and wonderful Ham friends, she was rescued on several occasions stranded 35+ miles from home before the repairs were accomplished.

In the middle of July, Nancy, Dick and Becky headed for California and Deb's wedding August 1 to Christopher Stocks in the L. A. Temple. They are now living in Provo and being lured into Ham radio via packet communications.

Well, we just had time to return to Denver in midAugust for Dick to pack up and drive back to
California in September for two months, returning
to Denver just in time for Thanksgiving. But those
two months were busy.
Nancy achieved her long
awaited "General Class" FCC license, so a nightly
schedule was set up on the airways to talk to Dick
at W6VIO.

Then we heard that Walt-K6DNS (and a silent ham with whom we didn't talk and have forgotten his call--sorry!) were driving to Boulder with a mobile radio. When we learned we could talk to them enroute to Denver and at the same time to the JPL hams around LA, Michael (17) was inspired to put up three new antennas--10 meters, 80-meters and an all-band vertical on loan from a neighboring ham. One day Nancy mentioned on two meters that we were putting up antennas, and 3 hams offered FREE WIRE! They are a great group!

Becky (15) started a teen net on the Ham radio-Young Amateurs of Colorado--shortened to YAC-Net. They have a weekly gathering and discuss things of importance to teens and plan field trips. Cheyenne Mountain (NORAD) and Bureau of Standards are on their list of planned trips for the coming year. And, she has been busy on Packet radio, and assists local bulletin board communicators in distributing messages to greater Denver residents who may or may not be Hams. Michael spends his packet time ROM-hopping directly to bulletin boards in Utah, LAX and Ridgecrest where he leaves messages and visits packeteers long distance!

Also during the past year, Ken, Mike and Becky became involved with Karate. All have advanced quickly to the middle levels of the art. Recently while attending a tournament, a wild, uncontrolled kick hit Ken too solidly in his jaw. He fought two more rounds, accepted his third place trophy and doesn't remember any of it as a result of a mild concussion and temporarily dislocated jaw. We all marvel at how well a trained body functions when the conscious mind doesn't!

Now Christmas has arrived again and we send our love and wishes--grateful for your love and friendship, and with a warm invitation for you to call and/or stop by if you are near enough. May the Lord Bless you this coming year and he has us in the past.

## THE MALM MODULATION MONITORS

By the way, someone mentioned that there is a packeteer in the group. We have quite taken to this new phase of Ham radio, and are ROM-hopping to LA, and have discovered the West.Net. Would have sent this via packet, but we never got the call and Net Rom for the JPL station, or the Ham who is into these activities. Perhaps you could do a little detective work and have them respond to us. We each receive mail at WA6ERB thru Boulder. We can furnish a path both ways if they want to make a direct contact-time- consuming, tricky, but fascinating and lots of fun.

Thanks again,

Nancy, et al MALMs in Denver.
KB6IGN, KF6FK-Dick, KB6IGE-Mike, KB6LSX-Becky,
KA0ZKZ-Ken

P.S. If there are any teen hams you know of, there are some 15-16-17 y/o's here who would like to make DX contact.

NORM CHALFIN K6PGX

A Channukah Delicacy - LAXDIP

One of the tasty items we make for a Channukah spread I have dubbed LAXDIP.

LAX is smoked salmon usually available from Jewish or Scandinavian delicatessen shops.

The recipe is simple. Chop or dice several slices of LAX into a package of cream cheese. Add chives or onions, or use chive or onion cream cheese mixes. Try it! You'll like it! Especially on Bagels.

Mimi and Brian Stapleton

## MIMI'S SALAD

1 small pkgs. lemon jello
1 lb. 4 oz. can crushed pineapple in heavy syrup
1 8-oz. pkg. cream cheese
1/4 cup finely diced penentos
3/4 cup finely diced celery
1/2 cup chopped pecans
1/2 pint whipping cream - whipped
1/8 tsp. salt

Strain juice from pineapple into large pot. Heat.

Mix in jello to dissolve. (No water) Thoroughly
mix in cream cheese. Add pimentos, celery, pecans.

Fold in whipped cream. Mix in salt last. Pour
into 8"x8"x2" serving dish. Chill. Tastes
good with everything!