

Instrumentation for Amature Radio

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Instrumentation Topics

- DMM
 - DMM Digital Multi Meter
 - VTVM Vacuum Tube Volt Meter
 - VOM Volt ohm meter
- Counter
 - Direct counting
 - -Reciprocal counting
- Oscilloscope
 - Analog type
 - Digital type
- Spectrum Analyzer
 - Basic functions

DMM

- What to look for in a DMM
 - Specifications
 - Measurement accuracy
 - Basic resolution
 - Features
 - Types of measurements done
 - Computer controlled or stand alone

HP 34411A dual display



Counter

- What to look for in a Frequency Counter
 - Specifications
 - Frequency range
 - Types of frequency measurements
 - Features
 - Types of frequency and time measurements
 - Computer control

HP 5316A frequency mode



HP 5316A frequency mode



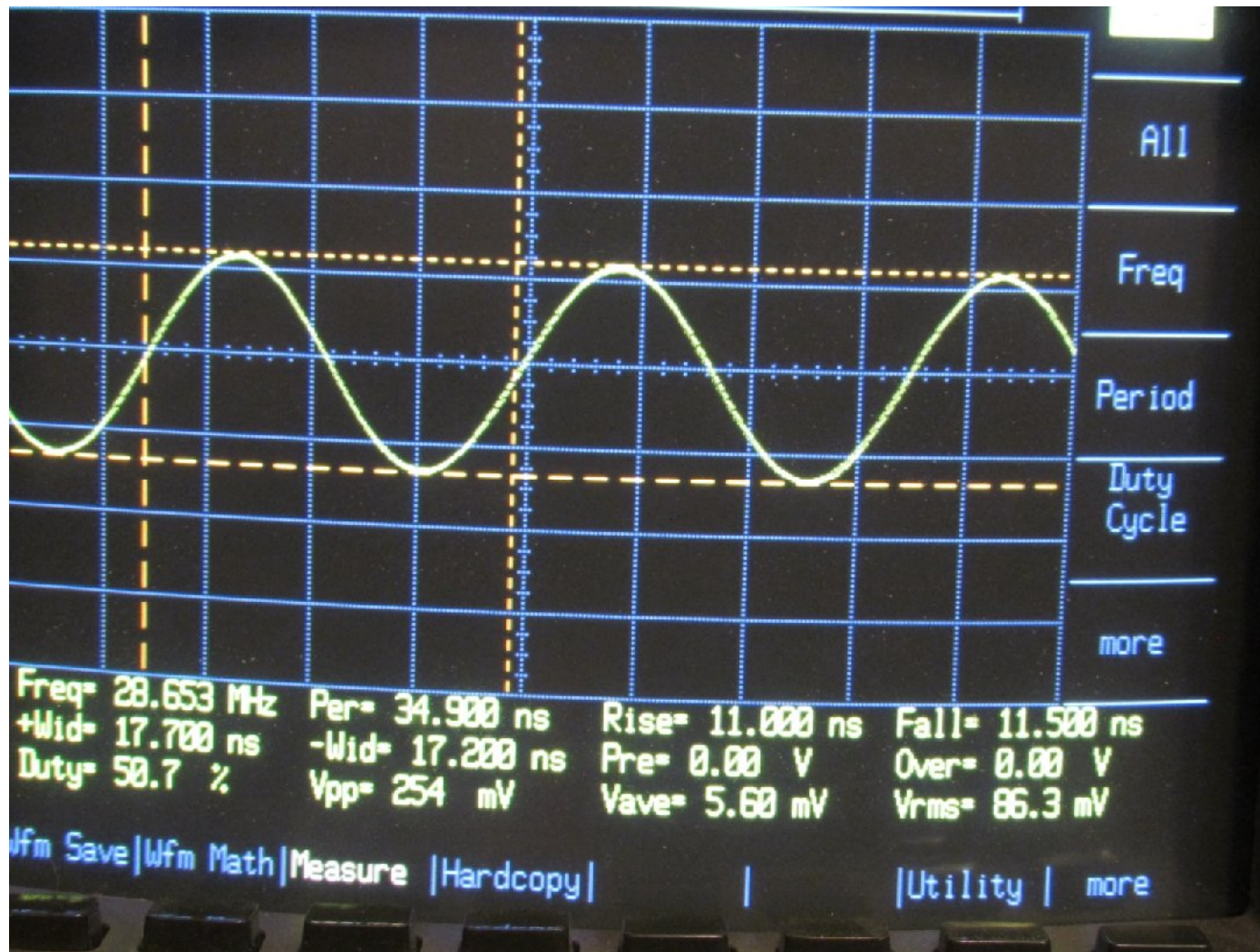
HP 5316A frequency mode



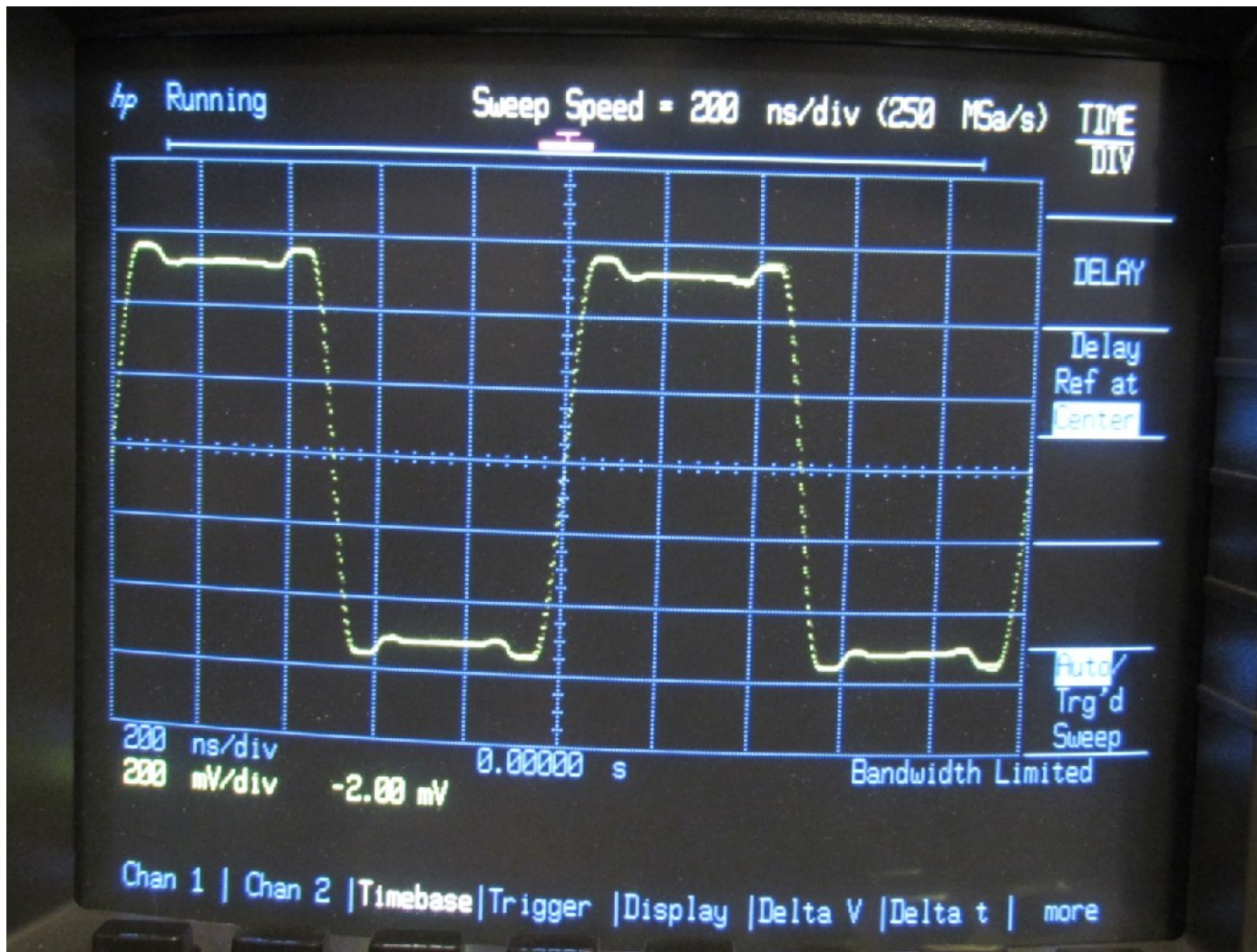
Oscilloscope

- What to look for in a Oscilloscope
 - Specifications
 - Bandwidth at 3db point
 - Number of channels
 - Features
 - Beyond time, other types of measurements
 - Computer control

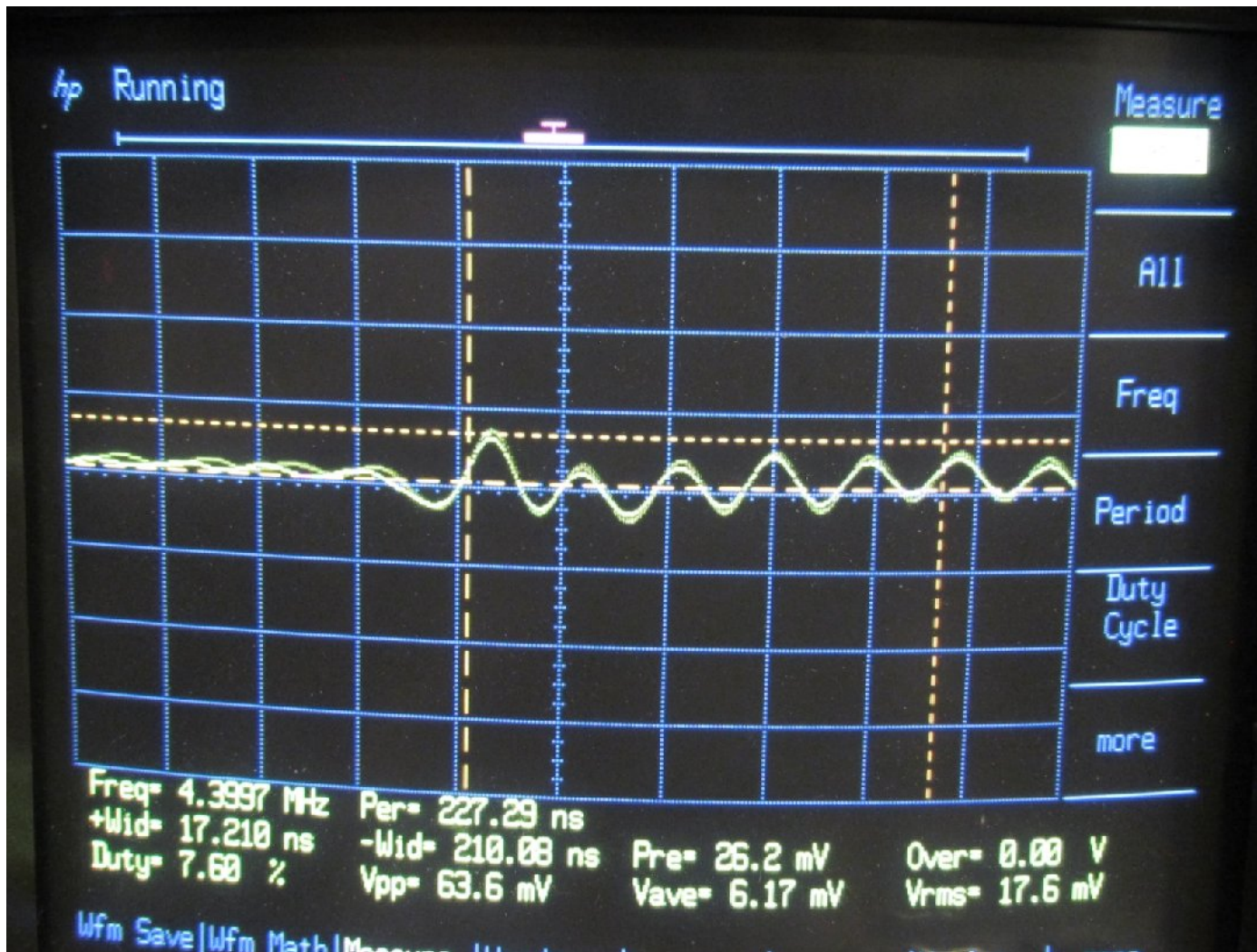
HP 54111D Scope



HP 54111D Scope



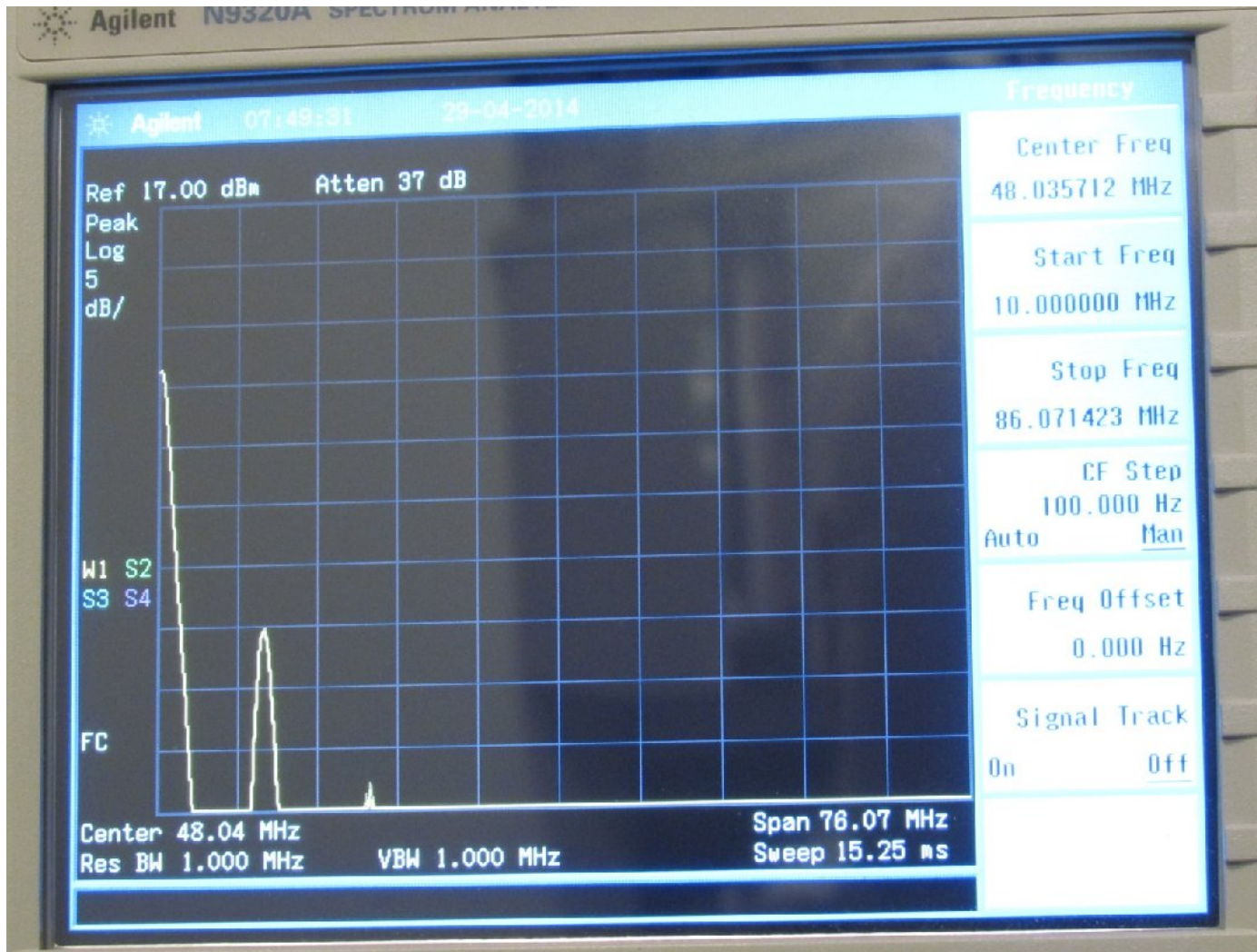
HP 54111D Scope



Spectrum Analyzer

- What to look for in a Spectrum analyzer
 - Specifications
 - Bandwidth
 - Functions other than basic
 - Features
 - Types of measurements that can be made
 - Computer control

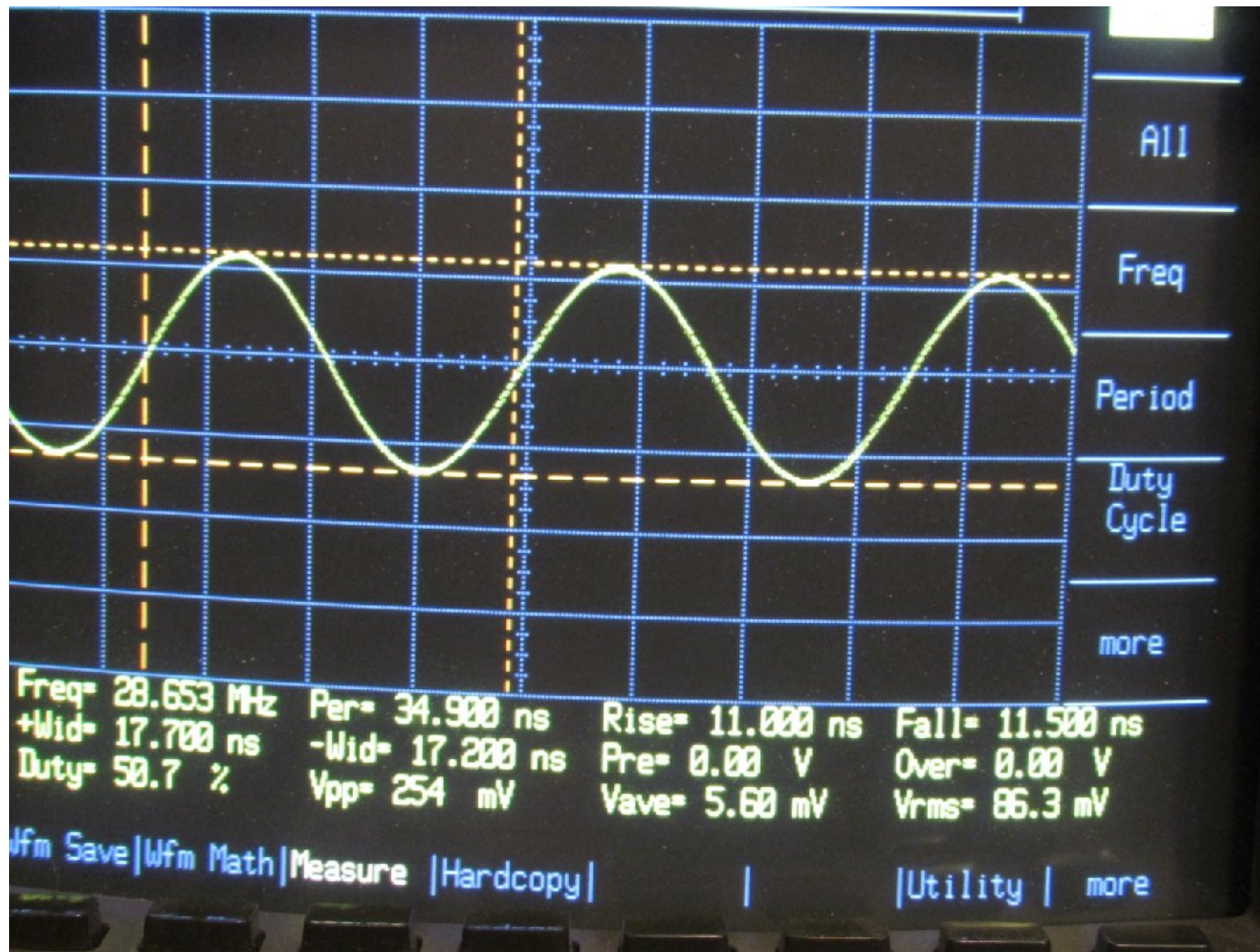
Agilent N9320A SpecAn



Tips and hints

- How to combine processes in one instruments
 - Instruments becoming multi-functional
 - Control options
- Price and where to find instruments
 - Where to find service and operating manuals
 - Where to find instruments
 - E-bay
 - Used equipment dealers (RTR)

HP 54111D Scope



Questions

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Questions on today's information.