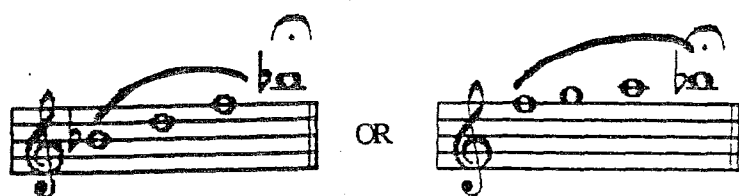


FLUTE

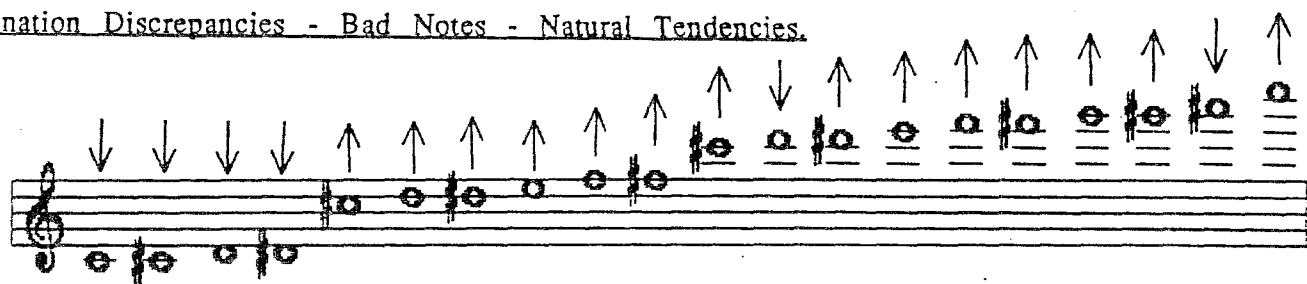
Tune The Instrument



Adjust with the head joint.

In most cases, the flute is proportioned so that it will play in tune when the head joint is pulled out about one eighth of an inch.

Intonation Discrepancies - Bad Notes - Natural Tendencies.



Causes and Remedies for "Bad Notes"

- Cork Adjustment - 17 millimeters from center of embouchure hole.
- If the cork is set closer to the hole the pitch will be raised slightly in the high register and lowered slightly in the lower register.
 - If the cork is set farther from the embouchure hole, it will lower the pitch somewhat in the top octave and raise it somewhat in the lower.
- Dynamics
- Crescendos have a tendency to blow sharp
 - To correct: as air velocity increases, direct more of the air stream into the hole.
 - Diminuendos may blow flat
 - To correct: As air velocity diminishes, direct more of the air stream across the hole.
- Playing Position
- If the embouchure plate is too high on the lip the pitch may become sharp.
 - If the embouchure plate is too low on the lip the pitch may become flat.
 - A slouched body position and/or poor breath support will probably cause flatness.
 - Tilting the head up or down may cause flatness or sharpness.

Embouchure & Correction

- Generally the flutist that plays flat is blowing down at too great an angle and is covering too much of the embouchure hole.
- Generally the flutist who is playing sharp is blowing too much across and covering too little of the hole.
- Pitch may be raised by adjusting the lips and/or jaw forward, allowing for directing more air across the hole.
- Pitch may be lowered by adjusting the lips and/or jaw backward, directing more air into the hole.
- Lip movement should be considered for smaller adjustments.
- Jaw movement should be considered for greater adjustments.

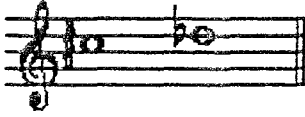
FLUTE

Possible Adjustments for Selected Pitch Tendencies

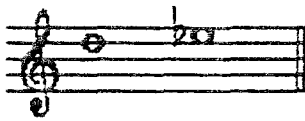
Before adjusting always check the head joint with a tuning rod so that the mark on the tuning rod is exactly in the center of the embouchure hole. Don't use too much left hand pressure as this causes flatness.



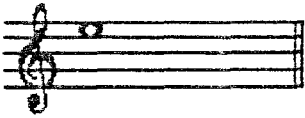
Usually flat - Be careful to keep the head up and listen carefully.



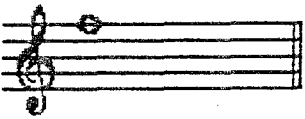
Extremely sharp - This note may be lowered by adding 2nd and 3rd fingers of each hand.



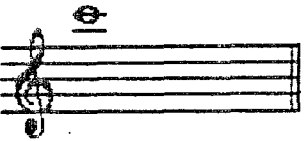
Flat - Both notes have a tendency to be flat - keep the head up and increase breath pressure. Relax the left hand so excessive pressure is not used. If necessary, add the 2nd trill key to raise the pitch.



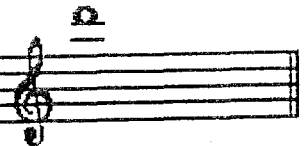
Flat - Add the 2nd trill key in the right hand just below the 2nd finger to raise this note.



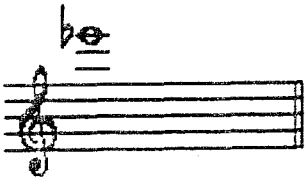
Flat - Add the 1st trill key in the right hand to raise this note.



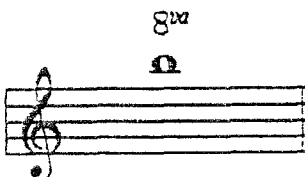
Sometimes flat and not secure - Finger a 4th space E and raise the left hand thumb for a secure note that will sound the upper C.



Usually flat - Keep the head up and listen carefully.

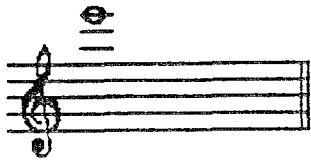


Very sharp - To lower the note the best sound is to roll the flute in. This pitch can be fingered the same as the 4th space Eb if the player is immature and you still get the note in tune. (Expert flute instructors would probably shudder at this fingering.)

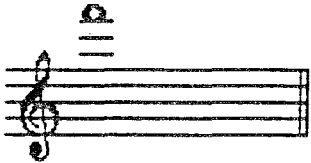


Sharp - Use thumb 1,3,6 and both trill keys

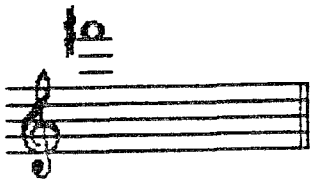
FLUTE (Continued)
Possible Adjustments for Selected Pitch Tendencies



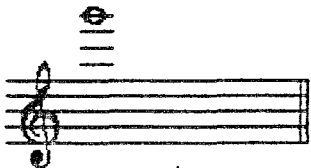
Sharp - Lower this note by not using the Eb key in the fingering.



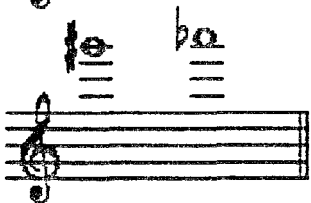
Sharp - Add the 3rd finger of the right hand to lower the pitch. Usually this adjustment is made only for full ensemble playing. If you want to lower the pitch, direct the air downward.



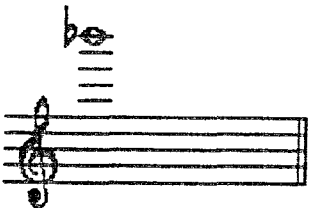
Sharp - Finger this note with the 2nd finger of the right hand rather than the 3rd finger.



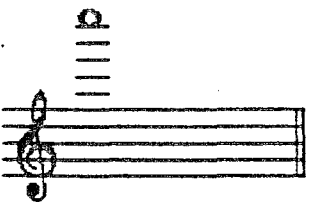
Sharp - Add the 2nd and 3rd finger of the right hand to lower the pitch.



Very sharp - Add 2nd and 3rd finger of the right hand to lower the pitch and give the note a better response.



Flat - Be sure the fingering is correct. Finger with left hand thumb but no 1st finger in left hand, and right hand 1st finger and 1st trill key but no Eb key.



Sharp - If you have a French model, you can half-hole the 5th finger or add the thumb.

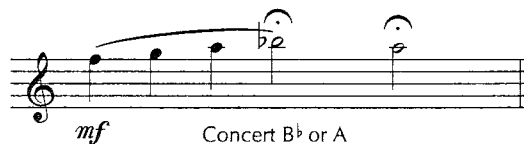
FLUTE/PICCOLO TUNING GUIDE

Procedures for Tuning the Instrument

1. Warm up thoroughly before tuning.
2. Tune at a mezzo-forte dynamic level and do not use vibrato.
3. Tune to a reliable frequency (electronic tuner, etc.) using the recommended tuning note(s) below.
4. Do not humor the tuning note; play it straight. Adjust the head joint if the pitch is sharp or flat.

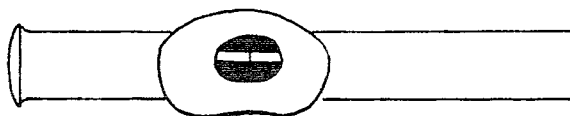
BASIC TUNING NOTE(S)

Tuning pitches are indicated with half notes; quarter note pitches are used to help "groove" the tuning note by approaching it from below.



Tuning Mechanism: Head Joint. Pull out the head joint if the pitch is sharp; push it in if the pitch is flat.

Note: The head joint has an adjustable tuning plug at the closed end. The exact location of this plug is critical for good tuning and intonation. To check the placement of the plug, carefully insert the bottom end of the cleaning rod into the open end of the head joint until it touches the stopper. The etched line on the cleaning rod should appear exactly in the center of the tone hole.

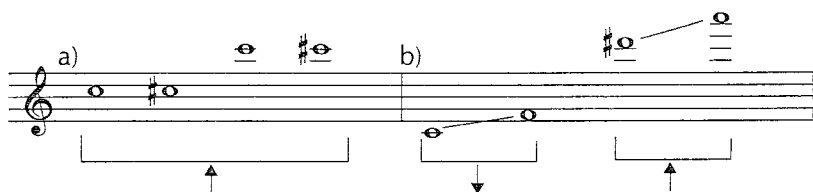


If the plug needs to be moved outward (away from the open end), tighten down on the threaded cap. To move the plug toward the open end, loosen the cap and push in. It is best to seek professional guidance when adjusting the tuning plug. Once the plug is properly adjusted, it should not be moved.

Techniques for Adjusting Pitches While Playing

1. Rolling the Tone Hole
2. Alternate Fingerings
3. Combinations of the Above

INHERENT INTONATION FLAWS*



- a) These notes are usually sharp, especially the C sharps. Roll the tone hole inward to lower the pitches.
- b) The low register tends to be flat and the high register tends to be sharp. For the low notes roll the tone hole outward to counteract the tendency to play flat. For the high notes try alternate fingerings or roll the tone hole inward.

The primary causes of poor intonation in extreme register playing on flute and piccolo are inadequate breath support, a poorly formed embouchure, and poor listening habits.

**Arrows pointing up indicate that the notes tend to be sharp; arrows pointing down indicate that the notes tend to be flat.*

Pitch Tendencies & Adjustments

Flute

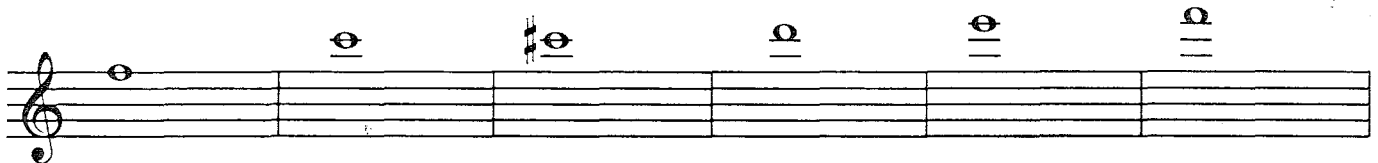
(Notes not addressed are generally acceptable)

S = sharp
F = flat
V = very
1/2H = half-hole

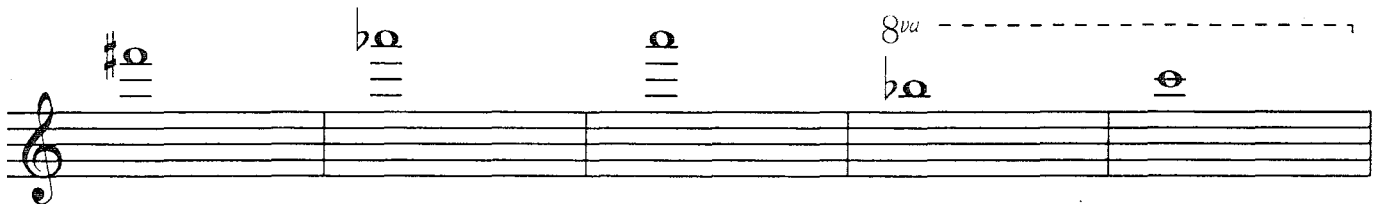


Pitch

Tendency	F	S	VS	F	F	F
Adjustment	Direct air flow upwards	Add 3rd finger of left hand and direct air down	Add all 3 fingers of right hand or use low C# fingering, Direct air down	Add top right hand trill key 1/2 open RT1	1/2H 3rd finger of right hand	Add lower right hand trill key RT2



Tendency	F	S	VS	F	S	F
Adjustment	1/2H right hand 1st finger	Add 3rd finger of left hand Direct air down	Add all 3 fingers of right hand, Direct air down	1/2H left hand 3rd finger	Do not use Eb key RP1	Use low C# (RP2) in place of Eb (RP1)



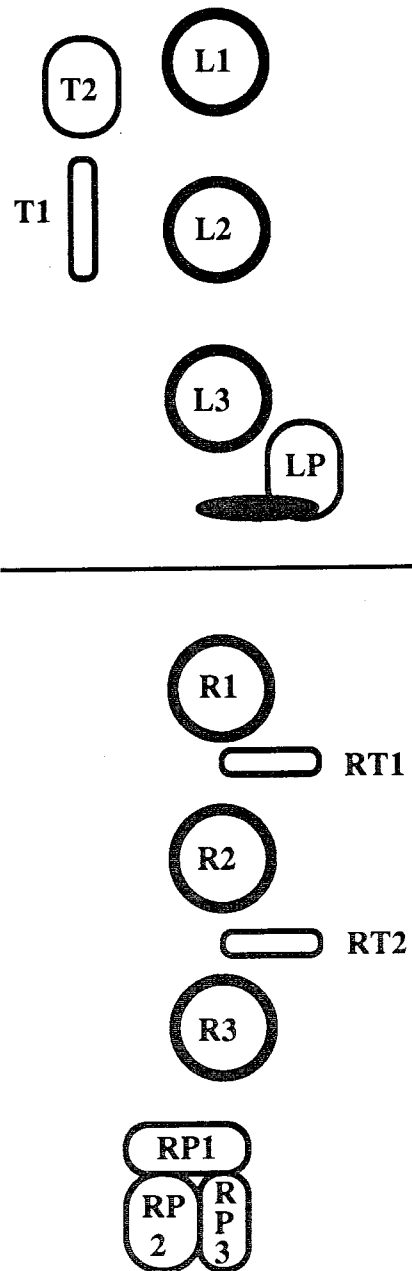
Note: Could be high or low depending on instrument

Note: Could be high or low depending on instrument.

Tendency	S	F	S	F	S	S	F
Adjustment	Use right hand 2nd finger to replace right hand 3rd	Use low C# (RP2) in place of Eb (RP1)	Add 2nd & 3rd finger of right hand	Add right hand 3rd finger and use low C# (RP2) to replace Eb (RP1)	Use thumb, L1 and L3 of left hand, RT1, RT2 and RP1 of right hand. Many alternates exist. Experiment on your instrument.	Use all 4 fingers of left hand, 1st & half right hand	Use all 4 of left, 1 3 and C key of right.

(No thumb for either)

Flute



FLUTE/PICCOLO INTONATION CHART

Name _____ Date _____

Instrument Make and Model _____

Carefully follow the procedures outlined in the Tuning Guide for your instrument before beginning to chart your intonation with a friend. Your teacher should provide an Intonation Charting Guidesheet with instructions on how to use an electronic tuner. Mark intonation discrepancies for lower octave scales below the staff.

Tuning Notes

Flute/Piccolo *mf* Concert B^b or A Check Octaves

The staff shows a sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5. The notes B4 and C5 are marked with a flat and a sharp respectively, and are connected by a slur. A dynamic marking *mf* is placed below the first few notes. A double bar line is placed after G4. The notes B4 and C5 are marked with a flat and a sharp respectively, and are connected by a slur. The text 'Check Octaves' is placed below the final notes.

Chromatic Scale

The staff shows a chromatic scale from C4 to C5. The notes are: C4, C#4, D4, D#4, E4, E#4, F4, F#4, G4, G#4, A4, A#4, B4, B#4, C5. The notes are grouped into pairs of eighth notes. A dynamic marking *mf* is placed below the first few notes. A double bar line is placed after G4. The notes B4 and C5 are marked with a flat and a sharp respectively, and are connected by a slur. The text '(b♭)' is placed below the final notes.

Major Scales

Harmonic Minor Scales

The staff shows four major scales and four harmonic minor scales. The major scales are: C major, G major, D major, and A major. The harmonic minor scales are: C harmonic minor, G harmonic minor, D harmonic minor, and A harmonic minor. The notes are grouped into pairs of eighth notes. A dynamic marking *mf* is placed below the first few notes. A double bar line is placed after G4. The notes B4 and C5 are marked with a flat and a sharp respectively, and are connected by a slur. The text '(b♭)' is placed below the final notes.

Pitch Tendencies of Dynamics

The staff shows a sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5. The notes are grouped into pairs of eighth notes. A dynamic marking *mf* is placed below the first few notes. A dynamic marking *pp* is placed below the notes G4 and A4. A dynamic marking *ff* is placed below the notes B4 and C5. A double bar line is placed after G4. The notes B4 and C5 are marked with a flat and a sharp respectively, and are connected by a slur. The text '(b♭)' is placed below the final notes.