PART 1

Background Information

WHY GO UP?

Composers and arrangers are making ever increasing demands for the modern trumpet player to play higher and higher. These demands are put upon every area of trumpet playing: big band jazz, rock ensemble, symphony orchestra, television show orchestra, concert band, brass chamber music ensemble, and even solo recital. The stage band or lab band movement in the American high schools and colleges, lately, has added a new impetus for trumpet players to acquire upper register proficiency at an increasingly earlier stage of development. Seventh grade stage bands comprised of 12 year olds are not at all rare in good public school systems.

THE HIGH "C" SOUND BARRIER

High "C" (C6 written--sounding Bb5-932 cps) has been the sound barrier until the 20th century. There is one exception, during the short period of the late Baroque (1720-50) when upper register playing flourished. Several compositions of Bach, Torelli, Molter, etc. of this period were written fo specific high register artists in mind. These rare artists, incidentally, ha to perform con tently above high C6, often as high as G6 concert pitch. This type of scorin however, e that period was rare. The great trumpet study method of the nineteenth and twentieth cent *Arban Method,* contains no notes higher than the written high C6.

THE JAZZ INFLUENCE

In the earlier 1920's, jazz artists began improvising high nd higher "high C barrier". The jazz influence probably did mor to usher in a r playing than any other influence. The big band jazz mo ment of the this trend and made new demands for the trumpet playe to play higher symphonic composers, partly influenced by jazz an partly by the r began to score trumpet parts above the high C6.

PSYCHOLOGICAL READINESS FOR TH

Playing in the upper register requir a great deal ordinate many sets of muscles du ng the format embouchure, lip aperture, and mou hpiece pressu the coordination involved is thos of a test even a surgeon.

Mere confidence will not suffice. The of the mechanics involved, a great d all add up to produce confidence.

All along the way to succes experiences are reinforce though doubt will alwa greatest of them hav secret is that th not interfere w

THE MOUTHPIECE AND THE UPPER REGISTER

The mouthpiece usually has a direct effect on the production of the upper register. Of all the variables, (breath support, throat arch, embouchure, lip aperture, mouthpiece pressure, mouthpiece and instrument) the mouthpiece is easiest to manipulate and change. The search for the ultimate in a mouthpiece usually continues throughout the entire career of most trumpet performers. Careful listening, an understanding of the mechanical functions of each of the parts of the mouthpiece, and a willingness to intelligently experiment will enable the performer to find the right combination that will enable him to play up to the maximum of his potential. The following discussion on mouthpieces may provide some useful working generalizations:

INSIDE RIM DIAMETER In general, a larger than medium inside rim diameter (for instance larger than a Bach 7C) will aid most players in the upper register. The larger diameter enables the lips to move more freely, to close in on the lip aperture. An inside rim diameter that is too small inhibits lip movement and the player is left with the only option of mouthpiece pressure to close the lip aperture. As previously mentioned, excessive mouthpiece pressure causes fatigue. Also, the larger inside rim diameter usually aids in the production of a bigger tone, with more carrying power. It also affords less resistance than the smaller diameter. Of course, if the inside rim diameter is too large, the tone will spread, and the lips will get no aid from mouthpiece pressure in closing the lip aperture.

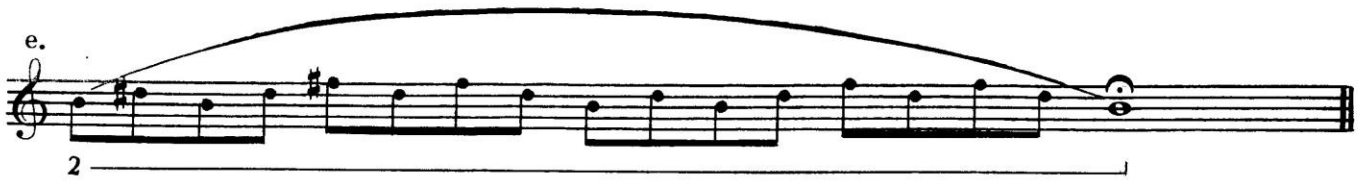
CUP DEPTH In general, the deeper the cup depth the warmer or darker the tone quality. Conversely the shallower the cup depth the brighter the tone quality. A player who uses the upper regi great deal should experiment with a mouthpiece that is a little more shallow than medium. since depth is closely related to cup volume, the player should consider the dynamic lev he needs to play. A mouthpiece that is too shallow will cut down on the dynamic int playing and his sound in the upper register will be thin. This type of playing, i be what is needed for the performance of chamber music and especially Baroque mu

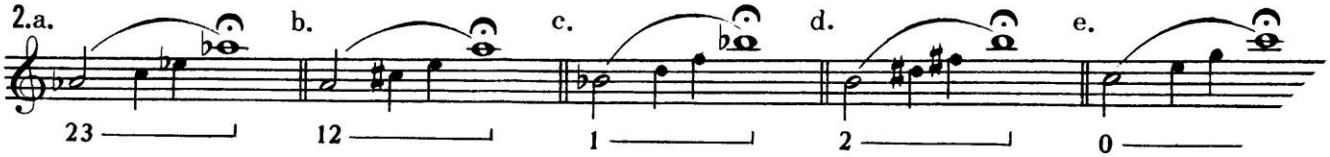
Many professionals use screw rim mouthpieces to which they attach different the type of playing they are to do. For light chamber music they use a large ensemble performance with upper register parts, they use a slight course, remains the same.

CUP VOLUME The cup volume is dependent on the combination of t *depth*. In general, the larger the cup volume the louder and volume the softer and thinner the tone. Cup volume also see instrument. Extremes of either too large or too small a make clear articulation difficult. Make sure the mou types of articulation and dynamic intensity before

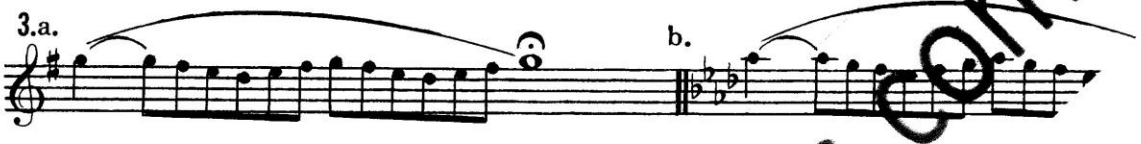
THE THROAT The throat is the hol rough the size. Every serious trumpet play should r these drill bits he can mea re the throat a throat is too small, your playing will quality will be thin, and the upper re not enough resistance will be met an in sustaining long phrases, endur

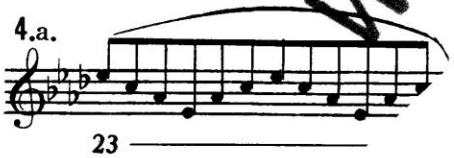
Most professional mouthpie a player finds that one opening it up with a manufacturer and ha posely produced w Professionals c reamer and a pieces, he playing and o

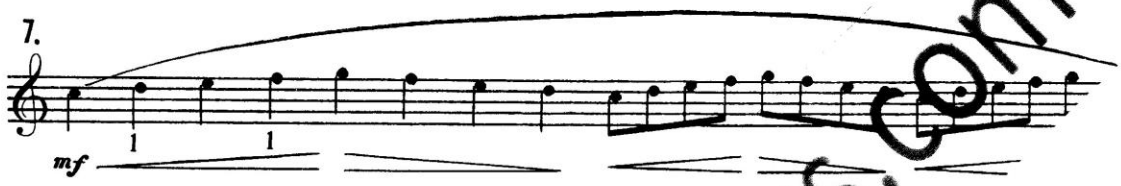




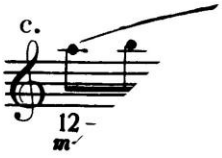
Note: Do not start with a tone that is too large and spread--keep it centered!

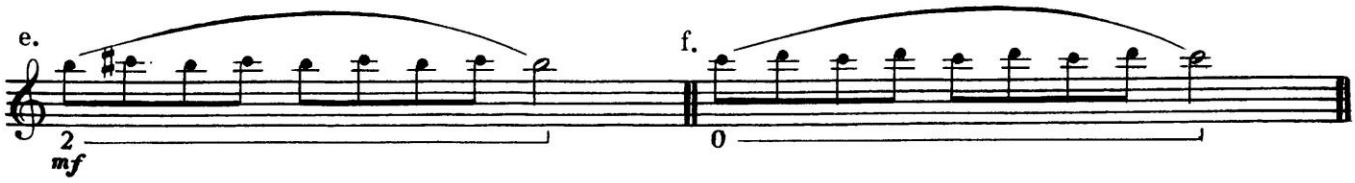




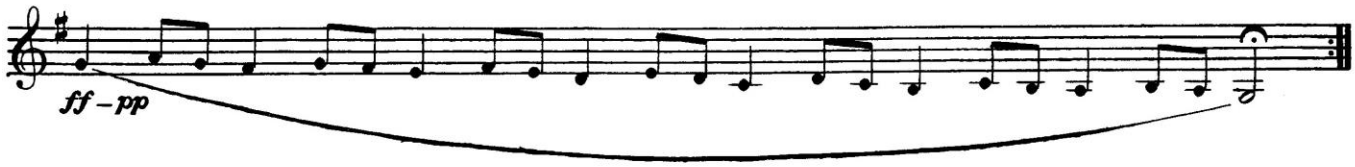


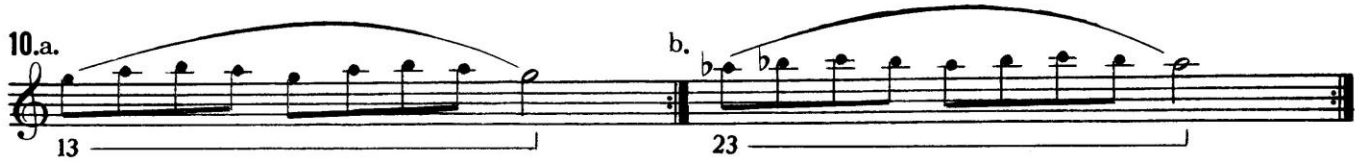
Note: 1. The back of the tongue moves from "ah" t
2. Slightly more mouthpi[illegible]ressure is
3. Close lip aperture [illegible] muscles are

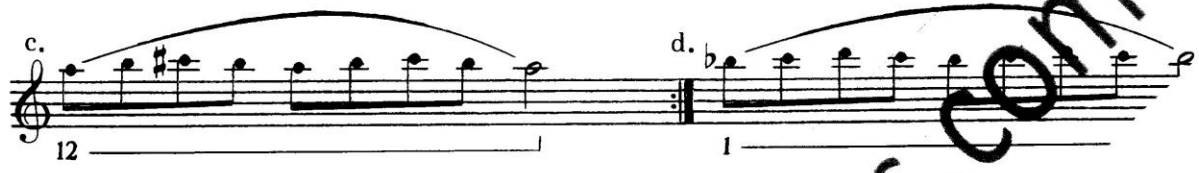


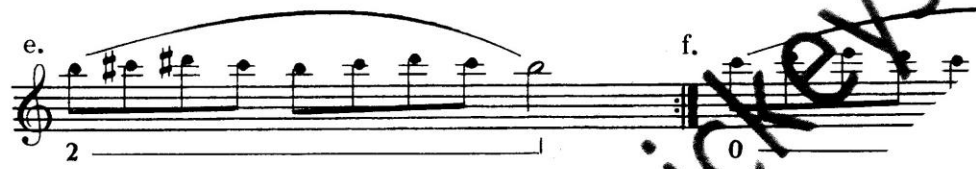


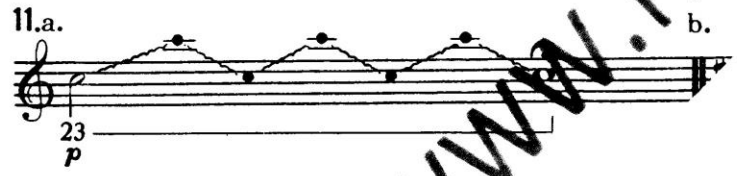
RELAXER (Always play after high notes, then rest for several minutes.)

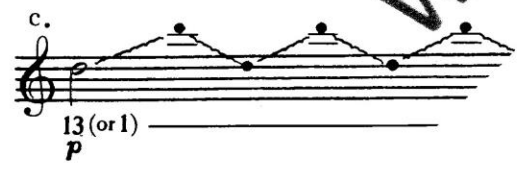


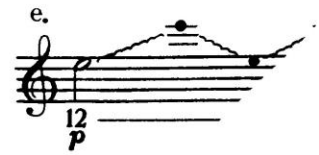






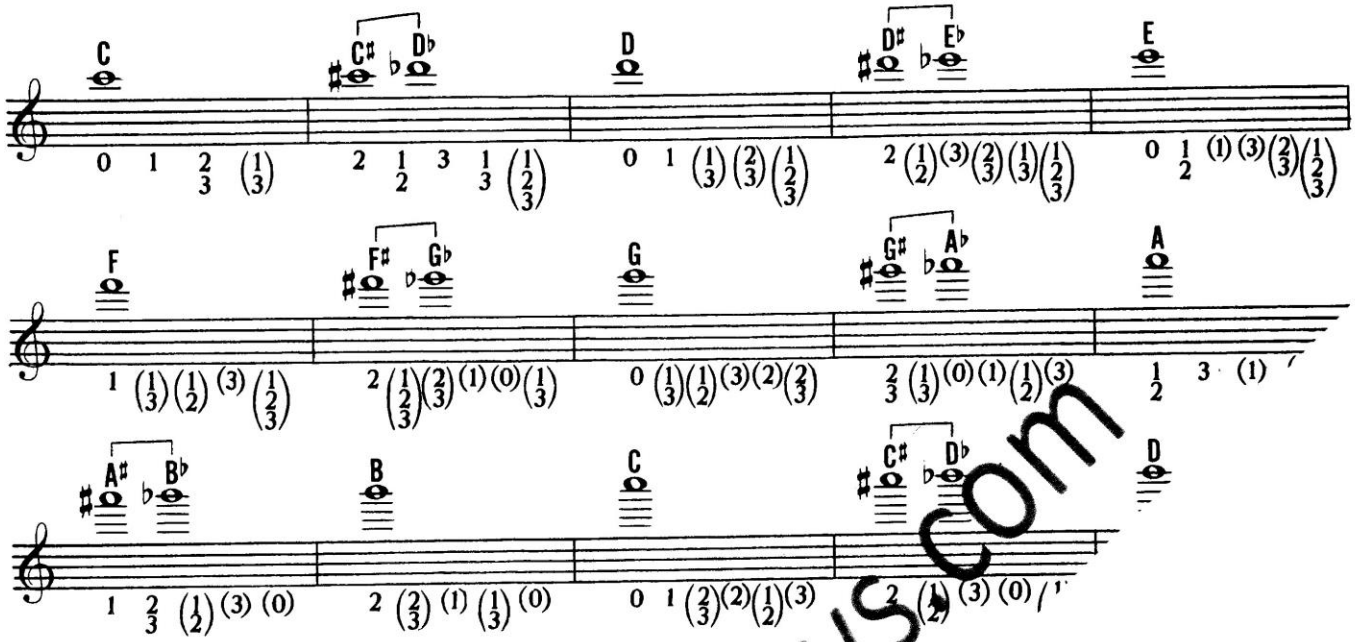






PART 2

*UPPER REGISTER FINGERING CHART**



*Best fingerings are indicated first. Fingerings in parentheses are possible but are pitch and quality--they can be used in glissandi, trills, passing tones or other orn fingerings are available, but unnecessary to include here.

E X E R C I S E S