

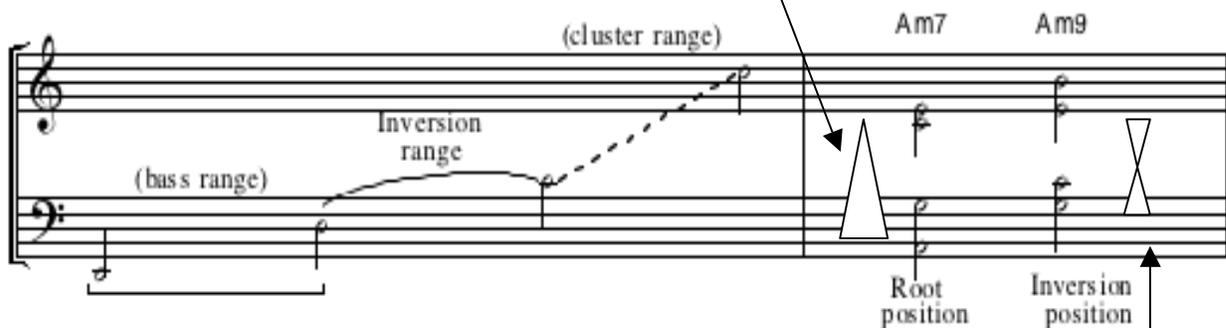
## ACE Review 3 – Saxs and Density

### The Scoring Ranges

**Large density** voicings are found throughout the entire range of a large jazz ensemble. When they are most effective, they tend to conform to a **system of ranges** based on acoustic realities – low sounds are perceived as being large, higher sound perceived as being small. Large sounds cannot move as quickly as smaller sounds. (compare the orchestral sound of contrabass, compared to the higher woodwinds.)

- **Bass Range** When the lowest note of any voicing falls between these two “D” notes, the voicing is written in the root position, with its lowest note agreeing with the chord symbol, whether the root of a chord, or the assigned bass note. Example - if a Cmaj7, the C; and if a D/G the G.

Root position voicings should have the shape of a **pyramid**, with larger intervals at the bottom, smaller on top. *A root position chord is always open-voiced and is not built to run quickly but to be longer and supportive.*



- **Inversion Range** When the lowest note of a voicing falls between mid-line D and middle C, the voicing is in the inversion range. If open-voiced, its lowest note should be the 3rd or 7th of the chord, with the voicing itself shaped like an hourglass – smaller interval in the middle, larger intervals top and bottom.

The inversion voicing can be voiced open (as in the example) or close. When open, it is more agile than the root position, by far, but less so than the close position, which moves more freely. If the root of the chord is on the bottom of one of these, it's not the end of the world. The music sounds more *authentic*, though, when the guideline can be followed.

- **Cluster Range** In the octave from middle C upward, clustering occurs most naturally in chords, and does not raise the shock level, just the perception of color and jazz-worthiness. When the clusters are used in fast moving music, the intensity level is extreme; when used in slower music the jazz-worthiness becomes apparent and the intensity level is kept under control.

**Harmonic Density** – the term that tells how many different notes are present in a voicing.

**Density-4 and density-5** are both used in scoring the sax section. When five saxes play in density-4, the sound is older, e.g. the Basie style. When density-5 is used, the chords have a higher harmonic content – the effect tends to typify music written more recently. Writers with limited experience are wise to conquer Density-4 before proceeding to Density-5, even when five saxes are present.

**Density-4** Four different notes, typically forming chords that could otherwise default to stacked thirds. This example is for density-4 voicings playable by 4 instruments.

AM7 A13 AM11 AΔ/C# C/D CM11 AM9 A13 AM11 F#M9 D9(b9) CM11

Root Position Inversion position

- Note that root position chords are built atop the chord symbols bass note, whether it's the root of the chord (Bb for a Bbmaj7) or a changed bass (Bb for an Amaj7/Bb)
- Note that root position voicings have a pyramid shape (larger intervals at the bottom) while inversion voicings have an hourglass shape (smaller intervals in the middle).

**Density-4 again, same chords as above**, but playable by five instruments. See “Drop-two”, following.

AM7 A13 AM11 AΔ/C# C/D CM11 AM9 A13 AM11 F#M9 D9(b9) CM11

Root position again Inversion position again

- When five saxes are scored in Density-4, the lead note is generally doubled, whether the voicings are closein position (block writing) or open (drop-two). Doubling notes other than the lead usually results in sounds that are not idiomatic to the big band sound.

**Density-5** Five different notes, of course. The example below features the same chords as used in examples of density-4, except that they are more colorful. To create a density-5 voicing, the common practice is to add an extension or an alteration to an effective density-4 chord.

*Voicings in the inversion range (especially when close voiced) a variety of chord symbols Identify the chord equally well. With this in mind, the following symbols are just as correct for the chords below as those immediately above the voicings.*

Am9 A13 Amaj9 A±9/C# D9<sup>sus4</sup> Cmaj9

D9<sup>sus4</sup> Eb+7 B13<sup>sus</sup> F#m9 Am7(4) ??

Am9 A13 F#m9 B9<sup>sus4</sup> D9<sup>sus4</sup> Cmaj9

Root Position Inversion position

In the first five chords, the adding of a B causes the voicing to become density-5. That B-note is equally effective where you see it, and also an octave higher. *Try it at the piano!*

When in inversion range, density-5 voicings frequently have close intervals and clustering. The 3rd chord was an Amaj9 earlier.\* No good density-5 version could be found, so it was subbed to become an F#m9. *Just as good!*

- Both of the Cmaj9 chords remain ineffective for much the same reasons. The first one sounds old; the second still has the wrong shape for the range. They bought tickets to stay in the lineup, though.

*The use of Density-5 chords can be a problem until the writer first succeeds with the use of Density-4. There is just too much information to deal with. In the pages that follow, **block** and **drop-two** voicings offer the most sensible way for a writer to start with large densities.*

### **Block and Drop-two Voicings (most commonly found in music for saxophones)**

**Block voicings** are close position density-4 chords that have their lead doubled one octave below. They are tight, and can move quickly! Though the sound is on the older side, this voicing is a must for learning to handle saxes, and through them, conquering the issue of voice leading!

**Block Voicings - Density-four voicings played by five instruments, doubled at the octave.**

Chord symbols above the staff: C6, FΔ7, Cmaj7, E♭Δ7, A♭maj7, E♭7, B♭7, Fmaj7, G13, Am(♯7), Csus4, C°7

Chord symbols below the staff: Am7, Dm9, Am9, Cm9, Fm9, A7(b9,b5), G9, Dm9

(symbols above are good)

Close position chords in the middle range (inversion) can always be described with multiple chord symbols, as shown above.

**Drop-two** voicings are formed by dropping the second note from top in a block voicing by one octave. (This is the origin of its label – *drop-two!*). Drop-two is valuable in that block chords don't sound very good when the range is too high. Drop-two is the solution, and travels just as easily as the block voicing.

When scoring music that moves *quickly and by step*, the same chord cannot be used to harmonize two notes adjacent to each other. Voice leading is impossible, and the sound is naïve. Instead, we use **compatible chords**, which serve the same purposes. Compatible chords are those chords that all come from the same scale.

*All of these chords come from F major, and therefore are compatible to the Gm7 chord.. See Scoring Procedures-2*

## Scoring Procedure for Sax Soli

Good voice leading is an essential trademark of effective writing. This means that everyone playing in density has a line that feels both compatible to and supportive of the lead line.

Note: good voice leading does not mean that it's necessary even practical to give everyone the exact same interval movement as the lead -- that's called "planing."

### Write in a 3-line concert format. (Don't rush!)

- Altos are together in treble clef, written exactly as they would sound.
- Tenors are together on the middle staff, with an octave clef. (This clef assignment positions their music almost identically to the transposed sketch or score, and greatly reduces the time required for learning to read transposed scores!)
- Baritone sax is on the bottom line, in bass clef, which positions the music on the same lines and spaces as in the transposition (treble clef). Only three of the accidentals will be different.

*The change from block to drop-two is easiest when there is a leap in the lead.*

The image shows a three-staff musical score. The top staff is in treble clef, the middle staff is in middle C clef (with an octave sign), and the bottom staff is in bass clef. The music is in 4/4 time. The first measure has a  $B\flat$  major 7 chord, the second a G minor 9 chord, the third an E $\flat$  9 sus4 chord, and the fourth an E $\flat$  9 chord. An arrow points to the lead line in the second measure, which has a leap. Below the staves, two horizontal lines with arrows indicate the transition from 'block voicings' to 'drop-two' voicings.

**Voice leading** is checked most easily in the concert version of a 3-line sketch. Remember, voiceleading is considered "good" when lines below the lead can easily play with the same feeling as the lead. When the lead is moving stepwise, only rarely will an inner part not move also.

The three-line sketch can be either in concert (treble-8ve-bass) or transposed (all treble). When transposed (above) the tenor parts will appear almost the same as when in concert; that's an advantage of sketching tenors in 8ve clef. The baritone sax will appear almost identical, except for a few accidentals here and there.

**And finally**, the six-line score. Include your bass line, so that where specific notes should be written (rather than just chord symbols) you have a place to do this.

- Note: Soon enough, you will combine steps 5 and 6. Don't rush!*