BYU Organ Workshop 2016
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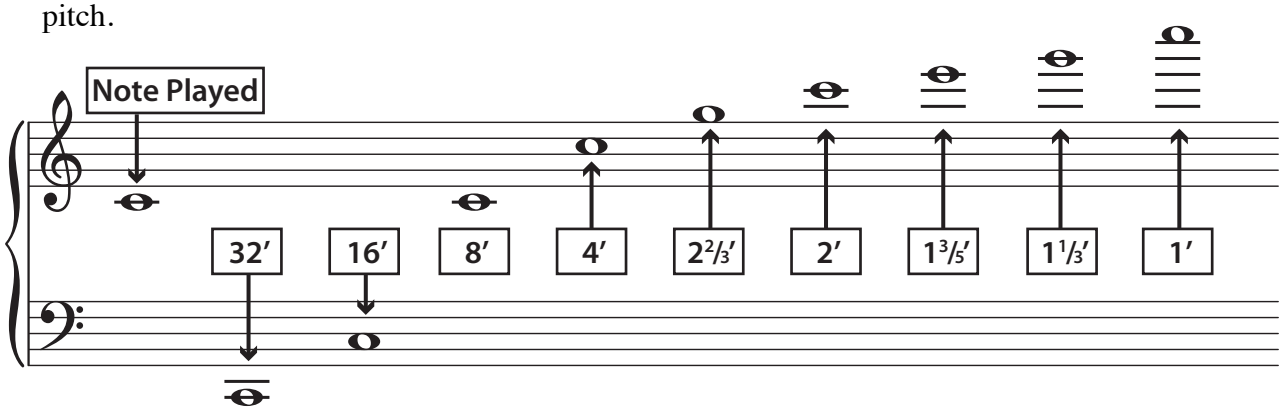
Registration Basics

Families of Organ Tone

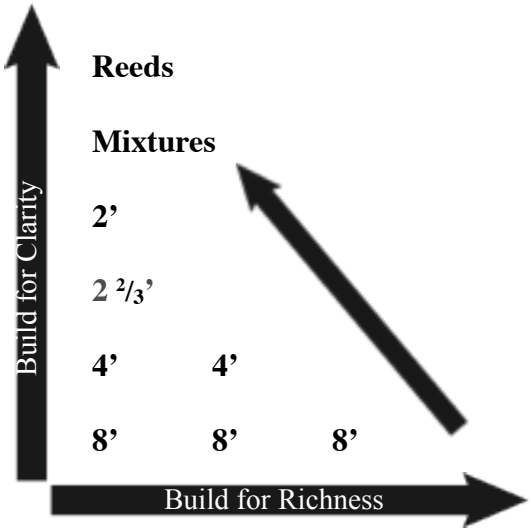
Flue Pipes			Reed Pipes
Principal Family	String Family	Flute Family	Reed Family
Principal (16', 8', 4') Diapason (16', 8') Montre (16', 8') Dulciana (8') Prestant (8', 4') Octave (4') Quint (2 $^{2}/_{3}$') Twelfth (2 $^{2}/_{3}$') Fifteenth (2') Super Octave (2') Doublette (2') Tierce (1 $^{3}/_{5}$') Seventeenth (1 $^{3}/_{5}$')	Violone (16', 8') Gamba (8') Salicional (8') Viola (8') Viola da gamba (8') Viola celeste (8') Voix celeste (8') Unda maris (8')	Subbass (16') Quintatön (16') Bourdon (16', 8') Gedackt (16', 8') Pommer (16', 8') Rohrflöte (8') Chimney Flute (8') Cor de nuit (8') Clarabella (8') Stopped Diapason (8') Copula (8', 4') Tibia (8', 4') Nachthorn (4') Nazard (2 $^{2}/_{3}$') Octavin (2') Blockflöte (2') Tierce (1 $^{3}/_{5}$') Larigot (1 $^{1}/_{3}$') Sifflöte (1')	Chorus Reeds Bombarde (32', 16') Posaune (32', 16') Fagott (32', 16') Basson (32', 16') Dulzian (16') Trumpet (16', 8') Trompette (16', 8') Tromba (16', 8') Hautbois (8') Oboe (8') Clarion (4') Solo Reeds Cromorne (8') Krummhorn (8') Clarinet (8') French Horn (8') Regal (8') Schalmei (8') Tuba (8') Festival Trumpet (8')
Hybrids Gemshorn (8', 4'), Spitzflöte (8'), Erzähler (8'), Geigen Principal (8')			

Pitches of Organ Stops

- Organ stops feature a "pitch designation," which indicates the length (and therefore, the speaking pitch) of the longest pipe (the lowest C on the keyboard) in a particular rank.
- 8' stops sound at normal or "concert" pitch.
- Doubling the length of a pipe results in the lowering of the pitch by one octave. Likewise, halving the length of a pipe results in the raising of the pitch by one octave. Therefore, a 16' stop sounds one octave below concert pitch, and a 4' stop sounds one octave concert pitch.
- Non-unison sounding stops are referred to as "mutations." The most common mutations are $2^{2}/_{3}$' and $1^{3}/_{5}$'. $2^{2}/_{3}$' stops sound one octave and a perfect fifth (or seven half-steps) above concert pitch. $1^{3}/_{5}$' stops sound two octaves and a major third (or four half-steps) above concert pitch.



Chorus Registration
(All upper parts are played on a single manual, plus a pedal part in balance)



- Build the manual chorus on an 8' foundation.
- Build the pedal chorus on a 16' foundation.
- Avoid "gaps."
- To build for clarity, use only one stop at each pitch level.
- To build for richness, use multiple stops at each pitch level (particularly 8').

Solo and Accompaniment Registration
(One part is played on a solo sound on one manual, with an accompaniment played on a chorus-type registration on another manual, and the pedal is balanced with the accompaniment)

- Build both the solo and accompaniment on an 8' foundation (though 4' and 16' solos can occasionally be effective).
- Build the pedal on a 16' foundation.
- First choose an appropriate solo, then construct a balanced accompaniment registration on a different manual.
- The solo voice must be more prominent than the accompaniment.
- Contrast between solo and accompaniment can be achieved through either volume or timbre.
- Register the accompaniment (and pedal) according to the principles of chorus registration.

Trio/Duo Registration
(Two parts are played on different manuals and a third part appears in the pedal)

- Build the manual parts on an 8' foundation.
- Build the pedal on a 16' foundation (though 8' is a possibility in some cases).
- Clarity and independence of individual voices is of greatest importance.
- Contrast between voices is also important.
- Voices must be of relatively equal volume, but contrasting tonal quality.
- Using various combinations of the cornet pitches (8', 4', $2\,^2/_3$', 2', $1\,^3/_5$') can be an effective means of creating contrast between voices.

	Allen LD-34 (Madsen Recital Hall)																								
Great	Violone 16																								
	Diapason 8																								
	Gemshorn 8																								
	Harmonic Flute 8																								
	Erzähler Celeste II 8 (or Flute Cel. II 8)																								
	Octave 4																								
	Spitzflöte 4																								
	Fifteenth 2																								
	Mixture IV																								
	Tromba 8 (or Solo Tuba 8)																								
	Krummhorn 8 (or Clarinet 8)																								
	Chimes																								
	Tremulant																								
	Swell to Great																								
Swell	Lieblich Gedeckt 16																								
	Gedeckt 8																								
	Viola 8																								
	Viola Celeste 8																								
	Octave 4																								
	Nachthorn 4 (or Viola Cel. II 4)																								
	Nasard 2-2/3 (or French Horn 8)																								
	Piccolo 2 (or Solo Tuba 8)																								
	Tierce 1-3/5 (or English Horn 8)																								
	Fourniture IV																								
	Waldhorn 16																								
	French Trumpet 8																								
	Oboe 8 (or Clairon 4)																								
	Tremulant																								
Pedal	Contre Bourdon 32																								
	Diapason 16 (or Violone 16)																								
	Bourdon 16																								
	Lieblich Gedeckt 16 (SW)																								
	Octave 8																								
	Flute 8 (or Gemshorn 8)																								
	Choralbass 4 (or Flute 4)																								
	Mixture III																								
	Contre Posaune 32																								
	Posaune 16																								
	Waldhorn 16 (SW)																								
	Trumpet 8																								
	Clairon 4																								
	Great to Pedal																								
	Swell to Pedal																								