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Title	**802.16a Errata – Pilot sequences in OFDM**
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Re:	
Abstract	The description of pilot modulation in STC mode is not clear. A clarification is proposed
Purpose	
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Pilot Modulation in STC

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1. Problem statement and proposed solution.

The description of pilot modulation in OFDM-STC mode (section 8.4.6.2) is ambiguous . The text reads:

"STC is applied independently on each carrier with respect to pilot modulation".

The text implies that pilot symbols are treated the same way as data symbols. However the pilot symbol are modulated in *time* by the sequence w_k, given in 8.4.3.4.2. It is not clear how to apply the w_k sequence on the STC pilots. Should the pilots have the same index 'k' for the two OFDM symbols of the STC block? Should they the same index on the two antennas?

2. Proposed solution

The simplest approach is to 'freeze' the index *k* for the STC block. Thus if $p=w_k$ is the pilot symbol used for the block then the transmitted pilot sub-carriers are:

	Antenna 0	Antenna 1
1st OFDM symbol	p	p
2nd OFDM symbol	-p*	p*

3. Proposed text

Add in 8.4.6.2 line 58:

"On a given subcarrier, the same pilot symbol is used for the STC block. If *p* is the pilot symbol then the pilot modulation is given in table xxx. Note that the pilot symbols are real values so $p^*=p$. The index sequence modulating the pilot symbols in time, w_k, (see 8.4.3.4.2) is advanced every 2nd OFDM symbol"

Table XXX

	Antenna 0	Antenna 1
1st OFDM symbol	p	p
2nd OFDM symbol	-p*	p*

Add in 8.4.3.4.2 pg 150 line 9:

"When STC is employed (see 8.4.6.2) the index k in w_k is advanced after every STC block, namely after every two consecutive symbols."