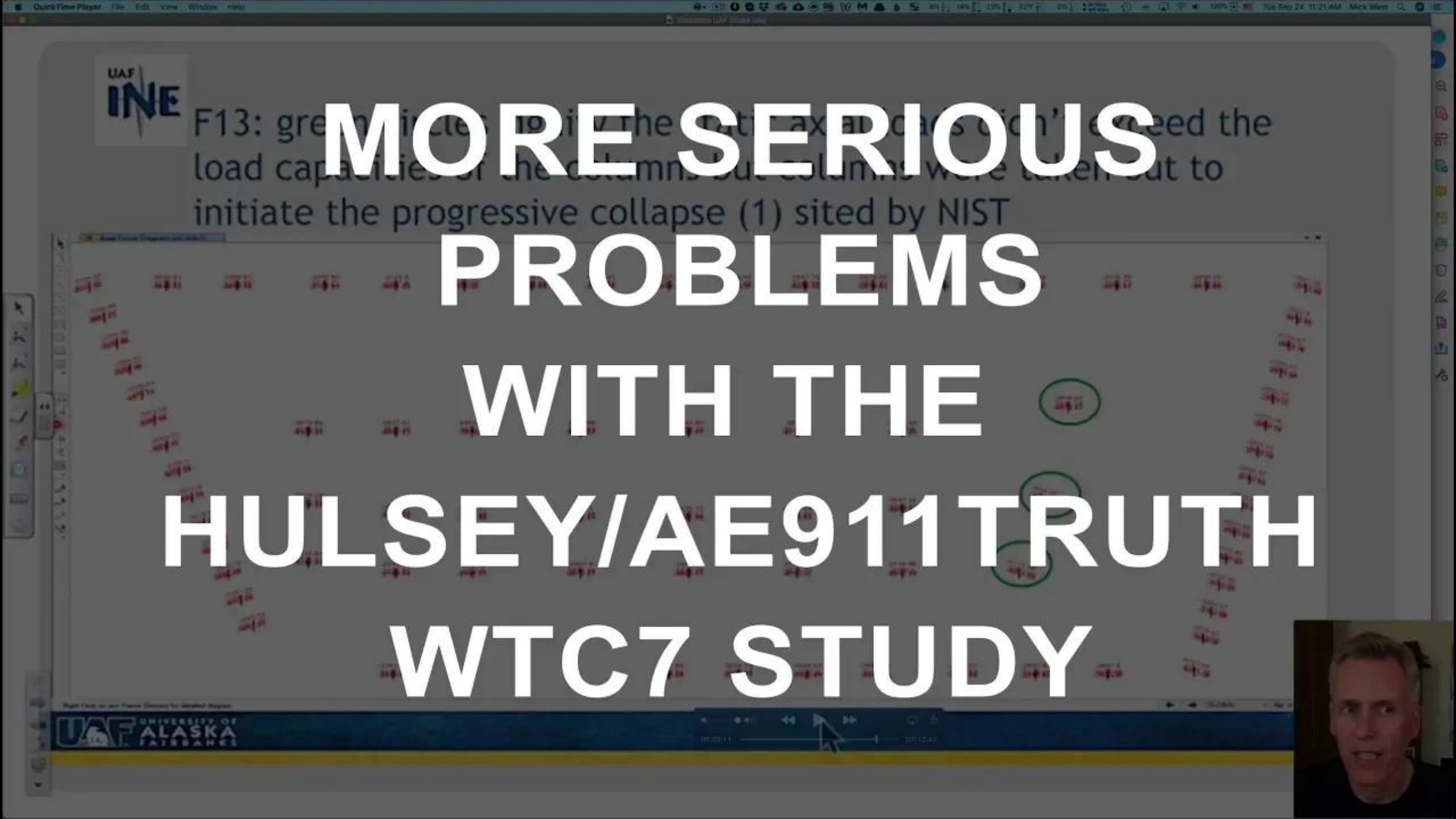
UAF INE
F13: gre
load ca
initiate the progressive collapse (1) sited by NIST
MORE SERIOUS
PROBLEMS
WITH THE
HULSEY/AE911TRUTH
WTC7 STUDY
UAF UNIVERSITY OF ALASKA FAIRBANKS

1
00:00:05,030 --> 00:00:03,230
hi this is Mick Western Medibank nog in

2
00:00:07,280 --> 00:00:05,040
a recent video this video here I

3
00:00:10,070 --> 00:00:07,290
identified some problems with the

4
00:00:11,870 --> 00:00:10,080
University of Alaska Fairbanks study

5
00:00:13,820 --> 00:00:11,880
which was carried out by Leroy Halsey

6
00:00:16,849 --> 00:00:13,830
and paid for by architects and engineers

7
00:00:18,859 --> 00:00:16,859
for 9/11 truth there were five issues

8
00:00:21,470 --> 00:00:18,869
that I raised and I found a few more but

9
00:00:24,500 --> 00:00:21,480
quickly let me go over the five that I

10
00:00:27,200 --> 00:00:24,510
found before so firstly was why does

11
00:00:29,000 --> 00:00:27,210
this bigger not show dynamic analysis

12
00:00:30,160 --> 00:00:29,010
why does it just instead share this kind

13
00:00:32,810 --> 00:00:30,170

of ridiculous

14
00:00:35,420 --> 00:00:32,820
tilting over to the side which is

15
00:00:38,330 --> 00:00:35,430
clearly not a dynamic analysis secondly

16
00:00:40,580 --> 00:00:38,340
what is the justification for using

17
00:00:42,200 --> 00:00:40,590
linear static analysis in this figure

18
00:00:45,920 --> 00:00:42,210
which is clearly showing something that

19
00:00:49,160 --> 00:00:45,930
is neither linear nor static then what

20
00:00:51,680 --> 00:00:49,170
is this animation derived from because

21
00:00:53,360 --> 00:00:51,690
it is not an actual dynamic analysis it

22
00:00:55,400 --> 00:00:53,370
appears just to be a kind of hand

23
00:00:57,470 --> 00:00:55,410
animation made with a bit of simple box

24
00:01:00,380 --> 00:00:57,480
physics put it in there so it's not a

25
00:01:02,270 --> 00:01:00,390
dynamic analysis but it claims to be one

26
00:01:04,850 --> 00:01:02,280
in the report then there's the issue of

27
00:01:06,800 --> 00:01:04,860
why are they focusing so much on this

28
00:01:09,170 --> 00:01:06,810
connection when NIST don't actually use

29
00:01:11,480 --> 00:01:09,180
it in their global collapse model

30
00:01:13,760 --> 00:01:11,490
although they use it as a initiating

31
00:01:15,289 --> 00:01:13,770
event hypothesis hypothesis is not

32
00:01:19,190 --> 00:01:15,299
actually used in the global collapse

33
00:01:21,800 --> 00:01:19,200
model and finally why is why did Hulsey

34
00:01:24,289 --> 00:01:21,810
say that this global model only modeled

35
00:01:27,469 --> 00:01:24,299
it partially when in fact miss global

36
00:01:28,999 --> 00:01:27,479
model was fine and they did a partial

37
00:01:31,520 --> 00:01:29,009
model for that and this model which is a

38
00:01:33,800 --> 00:01:31,530

different thing but let's get into the

39
00:01:35,539 --> 00:01:33,810
new issues I found some new problems

40
00:01:38,420 --> 00:01:35,549
with horses report which I think are

41
00:01:39,620 --> 00:01:38,430
pretty significant perhaps even more

42
00:01:42,440 --> 00:01:39,630
significant than the ones in the

43
00:01:42,950 --> 00:01:42,450
previous video so let's get right into

44
00:01:46,609 --> 00:01:42,960
it

45
00:01:49,280 --> 00:01:46,619
this is hostas report the draft report

46
00:01:54,010 --> 00:01:49,290
of his four year long study which was

47
00:01:57,740 --> 00:01:54,020
released on 9 3 2 1930 September 2019

48
00:01:59,679 --> 00:01:57,750
this is the result of static linear

49
00:02:02,359 --> 00:01:59,689
analysis where he's trying to simulate

50
00:02:04,399 --> 00:02:02,369
mists hypothesis that these three

51
00:02:07,039 --> 00:02:04,409
columns failed and that caused the

52
00:02:09,440 --> 00:02:07,049
collapse of the building this is a plan

53
00:02:13,460 --> 00:02:09,450
view so it's a view from above and it is

54
00:02:15,350 --> 00:02:13,470
floor 413 identified as floor 13

55
00:02:22,280 --> 00:02:15,360
in the slides which we'll come to later

56
00:02:23,990 --> 00:02:22,290
and it actually is showing this here

57
00:02:26,260 --> 00:02:24,000
this is building seven at the top of

58
00:02:29,660 --> 00:02:26,270
building seven we have the penthouse on

59
00:02:31,100 --> 00:02:29,670
one side and that would be underneath

60
00:02:33,080 --> 00:02:31,110
these columns and you know the penthouse

61
00:02:36,350 --> 00:02:33,090
collapses first so obviously these

62
00:02:37,310 --> 00:02:36,360
columns have to collapse first if things

63
00:02:40,430 --> 00:02:37,320

are to make any sense

64
00:02:42,680 --> 00:02:40,440
so what they did is they took the

65
00:02:44,510 --> 00:02:42,690
building itself and they stuck it in a

66
00:02:46,780 --> 00:02:44,520
linear static analysis and this

67
00:02:49,760 --> 00:02:46,790
calculates all the loads on the columns

68
00:02:50,870 --> 00:02:49,770
then they identify these through three

69
00:02:53,090 --> 00:02:50,880
columns that they're going to remove

70
00:02:55,670 --> 00:02:53,100
this this headline is a bit slightly

71
00:02:57,140 --> 00:02:55,680
wrong this is not the analysis of them

72
00:02:58,520 --> 00:02:57,150
being removed this is before they are

73
00:03:00,470 --> 00:02:58,530
removed so they removed and then we get

74
00:03:04,010 --> 00:03:00,480
to this situation here loads are

75
00:03:05,480 --> 00:03:04,020
redistributed then they identify three

76
00:03:06,770 --> 00:03:05,490
more columns that they're going to

77
00:03:08,120 --> 00:03:06,780
remove because it hasn't collapsed yet

78
00:03:09,500 --> 00:03:08,130
so they figure I will just take out

79
00:03:13,340 --> 00:03:09,510
three more columns and I'll make it

80
00:03:16,070 --> 00:03:13,350
collapse so on the next page we have the

81
00:03:19,880 --> 00:03:16,080
result of what happens after that these

82
00:03:21,229 --> 00:03:19,890
six columns are missing here so now all

83
00:03:24,470 --> 00:03:21,239
these columns down here are now

84
00:03:26,600 --> 00:03:24,480
overloaded and since they're overloaded

85
00:03:28,280 --> 00:03:26,610
they're removed and the simulation is

86
00:03:31,100 --> 00:03:28,290
run again this is what you do ecstatic

87
00:03:33,020 --> 00:03:31,110
simulations you you run it and then you

88
00:03:34,250 --> 00:03:33,030

see what the loads are on everything and

89
00:03:36,280 --> 00:03:34,260
then if something is failed you can

90
00:03:39,590 --> 00:03:36,290
remove it and then you can run it again

91
00:03:41,270 --> 00:03:39,600
so they ran it again and then with these

92
00:03:43,970 --> 00:03:41,280
columns removed and it shows that all

93
00:03:46,340 --> 00:03:43,980
these columns are now overloaded and so

94
00:03:47,930 --> 00:03:46,350
they obviously they can remove those in

95
00:03:50,270 --> 00:03:47,940
the next run of the simulation so they

96
00:03:52,100 --> 00:03:50,280
remove those now they say the building

97
00:03:52,699 --> 00:03:52,110
is tipping downwards so we get some of

98
00:03:53,990 --> 00:03:52,709
these columns

99
00:03:56,420 --> 00:03:54,000
the blue ones here are actually in

100
00:03:58,400 --> 00:03:56,430
tension they're being all up rather than

101
00:04:01,160 --> 00:03:58,410
being compressed down all these are

102
00:04:03,250 --> 00:04:01,170
overloaded so they're all gonna fail and

103
00:04:06,050 --> 00:04:03,260
then they write again and eventually

104
00:04:08,300 --> 00:04:06,060
everything has failed in the building

105
00:04:12,320 --> 00:04:08,310
falls down and they say that this

106
00:04:15,800 --> 00:04:12,330
results in what we see here this results

107
00:04:18,620 --> 00:04:15,810
in the building tipping over and now the

108
00:04:20,300 --> 00:04:18,630
problem is that whole see on the same

109
00:04:22,730 --> 00:04:20,310
day this report was released September

110
00:04:24,230 --> 00:04:22,740
3rd he did a presentation where he

111
00:04:26,930 --> 00:04:24,240
presented the findings of this result

112
00:04:28,880 --> 00:04:26,940
and he presented what you see here

113
00:04:30,590 --> 00:04:28,890

but the problem is he didn't actually

114
00:04:34,520 --> 00:04:30,600
present the same thing he presented a

115
00:04:36,830 --> 00:04:34,530
different model if we have a look at

116
00:04:39,230 --> 00:04:36,840
what he presented I was just gonna go

117
00:04:42,260 --> 00:04:39,240
through it and we'll all comment on what

118
00:04:44,150 --> 00:04:42,270
we what we see so here is a professor

119
00:04:45,590 --> 00:04:44,160
Halsey and it's gonna describe and

120
00:04:48,230 --> 00:04:45,600
what's going because it collapse

121
00:04:50,930 --> 00:04:48,240
simulation for NIST assumption now

122
00:04:53,480 --> 00:04:50,940
here's where we what we were doing was

123
00:04:57,740 --> 00:04:53,490
showing you what we found what I'm going

124
00:04:59,810 --> 00:04:57,750
to do is share with you what miss said

125
00:05:02,570 --> 00:04:59,820
had to happen and we're going to show

126
00:05:04,910 --> 00:05:02,580
you our the response computer response

127
00:05:07,340 --> 00:05:04,920
to that okay so this is healthy

128
00:05:09,350 --> 00:05:07,350
explaining what we just saw in these

129
00:05:12,740 --> 00:05:09,360
these slides you don't slice these

130
00:05:14,120 --> 00:05:12,750
figures in the report how they remove

131
00:05:15,950 --> 00:05:14,130
some columns and it caused the building

132
00:05:19,160 --> 00:05:15,960
to collapse so let's carry on and see

133
00:05:21,200 --> 00:05:19,170
what happens the simulation was based on

134
00:05:23,510 --> 00:05:21,210
this assumption that column 79 buckled

135
00:05:26,090 --> 00:05:23,520
at 413 which led to the global failure

136
00:05:27,680 --> 00:05:26,100
of the building the progressive collapse

137
00:05:30,200 --> 00:05:27,690
was simulated with the help of static

138
00:05:32,720 --> 00:05:30,210

analysis by progressively taking away

139
00:05:34,250 --> 00:05:32,730
those columns have failed okay so he

140
00:05:36,110 --> 00:05:34,260
says here they progressively take away

141
00:05:37,910 --> 00:05:36,120
the columns that failed which is you

142
00:05:39,590 --> 00:05:37,920
know what we see in the report they and

143
00:05:41,420 --> 00:05:39,600
when a column failed like these columns

144
00:05:45,500 --> 00:05:41,430
that are circled in red here they take

145
00:05:47,870 --> 00:05:45,510
them away so when you take out some

146
00:05:49,640 --> 00:05:47,880
columns out the low it's still there

147
00:05:51,710 --> 00:05:49,650
it's got to be taken by something else

148
00:05:53,000 --> 00:05:51,720
right and so we progressively took them

149
00:05:55,040 --> 00:05:53,010
out and took them out and took them out

150
00:05:58,340 --> 00:05:55,050
to get a handle on what it looked like

151
00:06:00,290 --> 00:05:58,350
so okay just to reiterate what he said

152
00:06:01,550 --> 00:06:00,300
there when columns fail you take them

153
00:06:02,780 --> 00:06:01,560
out you progressive to take them out to

154
00:06:04,760 --> 00:06:02,790
take them out they come out and then the

155
00:06:06,290 --> 00:06:04,770
building eventually collapses he was

156
00:06:08,150 --> 00:06:06,300
taken taking these out and he takes all

157
00:06:11,390 --> 00:06:08,160
these out building collapses fair enough

158
00:06:14,270 --> 00:06:11,400
so he's explaining all of this then he

159
00:06:17,450 --> 00:06:14,280
shows started with the whole three

160
00:06:22,790 --> 00:06:17,460
dimensional building and here's what it

161
00:06:27,260 --> 00:06:22,800
started to happen by taking them out so

162
00:06:29,120 --> 00:06:27,270
it wasn't this is not the result of the

163
00:06:33,260 --> 00:06:29,130

analysis this is essentially an

164
00:06:35,020 --> 00:06:33,270
animation he set up to demonstrate what

165
00:06:37,340 --> 00:06:35,030
would happen if the building tipped over

166
00:06:38,330 --> 00:06:37,350
this is all its demonstrating it's not

167
00:06:39,950 --> 00:06:38,340
actually demonstrating anything

168
00:06:40,950 --> 00:06:39,960
physically it's just saying if the

169
00:06:42,629 --> 00:06:40,960
building tipped

170
00:06:44,700 --> 00:06:42,639
it would look like a building tipping

171
00:06:46,350 --> 00:06:44,710
over it's just a simple box it's put

172
00:06:47,879 --> 00:06:46,360
some a simple pivot in there somewhere

173
00:06:49,529 --> 00:06:47,889
and it's doing a little bit of physics

174
00:06:51,330 --> 00:06:49,539
to rotate the top box around the bottom

175
00:06:54,439 --> 00:06:51,340
box nothing else this is not the result

176
00:06:56,580 --> 00:06:54,449
of an analysis this is just a manual

177
00:06:58,409 --> 00:06:56,590
visualization of what's going on but

178
00:06:59,340 --> 00:06:58,419
it's gonna be an incongruous place to

179
00:07:01,620 --> 00:06:59,350
put it in here because we're actually

180
00:07:04,860 --> 00:07:01,630
talking about the static analysis so

181
00:07:07,159 --> 00:07:04,870
let's get back to the lab see it wasn't

182
00:07:10,499 --> 00:07:07,169
the collapse that they showed on there

183
00:07:12,900 --> 00:07:10,509
but this is what if you take the story

184
00:07:14,150 --> 00:07:12,910
and put it into the computer models this

185
00:07:17,610 --> 00:07:14,160
is what you're going to end up see

186
00:07:22,010 --> 00:07:17,620
tilting they said that wasn't a computer

187
00:07:25,710 --> 00:07:22,020
model that was a manually animated model

188
00:07:27,330 --> 00:07:25,720

which is what I was pretty confident I

189
00:07:29,010 --> 00:07:27,340
was gonna see when on the first day I

190
00:07:31,770 --> 00:07:29,020
started yes and looked at that centroid

191
00:07:35,029 --> 00:07:31,780
issue because I've done enough high-rise

192
00:07:38,760 --> 00:07:35,039
buildings to know that you know you

193
00:07:40,890 --> 00:07:38,770
they're not wanting to fail straight

194
00:07:43,499 --> 00:07:40,900
down unless they are uniformly

195
00:07:45,810 --> 00:07:43,509
distributed it's kind of an interesting

196
00:07:47,730 --> 00:07:45,820
statement high-rise buildings are not

197
00:07:51,480 --> 00:07:47,740
wanting to fail straight down unless

198
00:07:52,890 --> 00:07:51,490
they are uniformly distributed yeah well

199
00:07:57,540 --> 00:07:52,900
I'll have to take his word on that for

200
00:07:59,520 --> 00:07:57,550
now but let's just carry on yeah so the

201
00:08:02,820 --> 00:07:59,530
analysis was based on NIST assumption of

202
00:08:05,730 --> 00:08:02,830
column 79 buckling at 413 the static

203
00:08:08,730 --> 00:08:05,740
analysis started by failing column 79 80

204
00:08:10,620 --> 00:08:08,740
and 81 and even though through the

205
00:08:12,629 --> 00:08:10,630
amount an Alaia of forces and didn't

206
00:08:14,580 --> 00:08:12,639
exceed their design mode capacity you're

207
00:08:17,580 --> 00:08:14,590
going to see green circles what I'm

208
00:08:18,839 --> 00:08:17,590
getting right what he's getting at here

209
00:08:21,210 --> 00:08:18,849
is an interesting thing I listen to

210
00:08:23,010 --> 00:08:21,220
he'll see this is a key point in the

211
00:08:24,689 --> 00:08:23,020
conversation here and I think it

212
00:08:28,680 --> 00:08:24,699
indicates he doesn't really understand

213
00:08:31,560 --> 00:08:28,690

what's going on with his own slides do

214
00:08:33,839 --> 00:08:31,570
share with you green circles mean it

215
00:08:36,269 --> 00:08:33,849
didn't exceed the capacity red circles

216
00:08:39,089 --> 00:08:36,279
means the columns exceeded their design

217
00:08:41,579 --> 00:08:39,099
load capacitors okay so he said that the

218
00:08:43,920 --> 00:08:41,589
green circles mean that the column did

219
00:08:46,380 --> 00:08:43,930
not exceed his capacity and red circles

220
00:08:48,840 --> 00:08:46,390
means that they did exceed their

221
00:08:49,949 --> 00:08:48,850
capacity and you will notice here

222
00:08:51,510 --> 00:08:49,959
there's only three columns that are

223
00:08:53,760 --> 00:08:51,520
marked in green and the rest are not

224
00:08:54,750 --> 00:08:53,770
large at all so obviously that's not

225
00:08:56,400 --> 00:08:54,760
quite right

226
00:08:58,139 --> 00:08:56,410
this is just three combs that have been

227
00:09:00,120 --> 00:08:58,149
indicated none of the columns here are

228
00:09:01,769 --> 00:09:00,130
receding their design capacity yet but

229
00:09:04,769 --> 00:09:01,779
he's marked three columns as not

230
00:09:08,000 --> 00:09:04,779
exceeding their capacity well here we go

231
00:09:11,850 --> 00:09:08,010
there's three columns that get what

232
00:09:15,900 --> 00:09:11,860
exceeded or did not exceed so here LC is

233
00:09:17,790 --> 00:09:15,910
kind of slipping into his lecturing role

234
00:09:19,769 --> 00:09:17,800
here is trying to teach students did

235
00:09:21,420 --> 00:09:19,779
they exceed or not exceed nothing here

236
00:09:22,920 --> 00:09:21,430
is exceeding their design capacity but

237
00:09:25,139 --> 00:09:22,930
he's drawn three green circles around

238
00:09:26,490 --> 00:09:25,149

these columns for some reason well the

239
00:09:31,139 --> 00:09:26,500
reason is that they're going to be

240
00:09:33,509 --> 00:09:31,149
removed did not right so we don't see

241
00:09:38,280 --> 00:09:33,519
anything happening yet yes true still

242
00:09:41,579 --> 00:09:38,290
here is again nothing failed at column

243
00:09:43,110 --> 00:09:41,589
79 80 81 were removed but column 76 77

244
00:09:46,199 --> 00:09:43,120
and 80 were removed to initiate

245
00:09:49,590 --> 00:09:46,209
progressive collapse okay so these

246
00:09:52,650 --> 00:09:49,600
columns here the ones you can't see 79

247
00:09:57,120 --> 00:09:52,660
1881 will be here these are the columns

248
00:09:58,949 --> 00:09:57,130
marked in green columns 76 77 78 so to

249
00:10:00,900 --> 00:09:58,959
move those to initiate the progressive

250
00:10:04,079 --> 00:10:00,910
collapse not sure what this two refers

251
00:10:07,110 --> 00:10:04,089
to we took them out anyway all right

252
00:10:08,699 --> 00:10:07,120
here's a look at the floor system if you

253
00:10:10,710 --> 00:10:08,709
look at it from the side this actually

254
00:10:12,329 --> 00:10:10,720
would be kind of interesting Oh be good

255
00:10:13,860 --> 00:10:12,339
to see this animation and look at all

256
00:10:15,269 --> 00:10:13,870
this detail we have down here why don't

257
00:10:19,650 --> 00:10:15,279
we see animations of this type of thing

258
00:10:21,540 --> 00:10:19,660
going on here we say after columns 76

259
00:10:23,900 --> 00:10:21,550
301 removed some of the columns started

260
00:10:26,129 --> 00:10:23,910
to fail so these red ones have failed

261
00:10:27,540 --> 00:10:26,139
these green ones have not failed in fact

262
00:10:29,040 --> 00:10:27,550
none of these ones over here a failed

263
00:10:32,850 --> 00:10:29,050

either but he's marked these green ones

264
00:10:35,340 --> 00:10:32,860
and it says here the green circles again

265
00:10:37,650 --> 00:10:35,350
signify the axleload didn't exceed the

266
00:10:38,939 --> 00:10:37,660
column load capacity but would fail just

267
00:10:42,090 --> 00:10:38,949
to keep the progressive collapse

268
00:10:46,259 --> 00:10:42,100
proceeding this means they manually

269
00:10:47,730 --> 00:10:46,269
removed these columns these columns that

270
00:10:49,860 --> 00:10:47,740
did not actually fail in their

271
00:10:51,689 --> 00:10:49,870
simulation but they manually remove them

272
00:10:53,910 --> 00:10:51,699
anyway this column here did not fail

273
00:10:58,439 --> 00:10:53,920
they manually removed it anyway these

274
00:10:59,879 --> 00:10:58,449
out as you move move forward so some of

275
00:11:02,880 --> 00:10:59,889
the columns started to fail and were

276
00:11:05,550 --> 00:11:02,890
significantly signified by the red and

277
00:11:06,929 --> 00:11:05,560
then the green circles again signified

278
00:11:08,600 --> 00:11:06,939
the extra load that didn't exceed the

279
00:11:12,750 --> 00:11:08,610
column looked past

280
00:11:14,670 --> 00:11:12,760
see there he completely neglected to

281
00:11:16,200 --> 00:11:14,680
point out that the green ones didn't

282
00:11:17,700 --> 00:11:16,210
actually just mean that the green ones

283
00:11:20,430 --> 00:11:17,710
were indicating the ones that they are

284
00:11:21,690 --> 00:11:20,440
manually removed then manually removed

285
00:11:23,820 --> 00:11:21,700
on columns and at this point I think

286
00:11:27,389 --> 00:11:23,830
it's worth going back to the report and

287
00:11:30,150 --> 00:11:27,399
if we look here why do we see we see red

288
00:11:32,579 --> 00:11:30,160

columns we see no green columns in this

289
00:11:35,420 --> 00:11:32,589
simulation they did not manually remove

290
00:11:38,610 --> 00:11:35,430
any of the columns notice this is

291
00:11:41,519 --> 00:11:38,620
directly after 76 or 81 were removed we

292
00:11:42,690 --> 00:11:41,529
get the same columns failing we get the

293
00:11:45,510 --> 00:11:42,700
same columns not failing

294
00:11:47,400 --> 00:11:45,520
however in holsters presentation this

295
00:11:53,370 --> 00:11:47,410
column and these three columns have been

296
00:11:54,930 --> 00:11:53,380
manually removed whereas here they have

297
00:11:58,170 --> 00:11:54,940
not been manually removed they actually

298
00:12:00,720 --> 00:11:58,180
fail later in the sequence by themselves

299
00:12:03,480 --> 00:12:00,730
noting manual is needed why is there

300
00:12:07,889 --> 00:12:03,490
this big difference let's carry on he's

301
00:12:09,360 --> 00:12:07,899
out as you move move forward so some of

302
00:12:12,360 --> 00:12:09,370
the columns started to fail and were

303
00:12:15,030 --> 00:12:12,370
significantly signified by the red and

304
00:12:16,380 --> 00:12:15,040
then the green circles again signified

305
00:12:19,260 --> 00:12:16,390
the extra loads that didn't exceed the

306
00:12:21,930 --> 00:12:19,270
column load capacity we keep taking them

307
00:12:23,519 --> 00:12:21,940
out taking them out now there's a very

308
00:12:28,230 --> 00:12:23,529
quickly slipped over that last slide

309
00:12:32,070 --> 00:12:28,240
there that's care about to it so again

310
00:12:33,720 --> 00:12:32,080
all these columns fail but for some

311
00:12:35,460 --> 00:12:33,730
reason they also had to remove these

312
00:12:37,079 --> 00:12:35,470
columns why did they have to remove

313
00:12:39,600 --> 00:12:37,089

these columns and surely the building is

314
00:12:41,579 --> 00:12:39,610
going to collapse if you let's let these

315
00:12:43,949 --> 00:12:41,589
columns alone but they manually went in

316
00:12:46,500 --> 00:12:43,959
and they manually remove these columns

317
00:12:51,180 --> 00:12:46,510
for some reason perhaps they remove them

318
00:12:53,250 --> 00:12:51,190
to get the results that they wanted we

319
00:12:55,530 --> 00:12:53,260
keep taking them out taking them out now

320
00:12:58,230 --> 00:12:55,540
there's no columns left and there's

321
00:13:00,660 --> 00:12:58,240
nothing there to carry the load and here

322
00:13:02,880 --> 00:13:00,670
by and eventually close we get to a

323
00:13:04,079 --> 00:13:02,890
state where pretty much every column has

324
00:13:06,630 --> 00:13:04,089
failed and so they don't have to worry

325
00:13:09,780 --> 00:13:06,640
about having to manually remove some

326
00:13:11,130 --> 00:13:09,790
additional columns so you can say the

327
00:13:13,230 --> 00:13:11,140
order they did things in they kind of

328
00:13:14,430 --> 00:13:13,240
removed these columns down here then

329
00:13:16,040 --> 00:13:14,440
they remove the ones in the middle and

330
00:13:17,970 --> 00:13:16,050
then they can remove the ones over here

331
00:13:21,569 --> 00:13:17,980
which would tend to make the building

332
00:13:22,260 --> 00:13:21,579
tip over in this direction so they were

333
00:13:25,139 --> 00:13:22,270
five

334
00:13:28,650 --> 00:13:25,149
see that it does not match the video so

335
00:13:31,560 --> 00:13:28,660
here the building is tipping southeast

336
00:13:32,880 --> 00:13:31,570
this is a very interesting diagram now

337
00:13:36,079 --> 00:13:32,890
you might have noticed in the report

338
00:13:38,760 --> 00:13:36,089

that we have the same the same diagram

339
00:13:41,810 --> 00:13:38,770
here it is this is a similar type of

340
00:13:44,750 --> 00:13:41,820
diagram let me just bring this in here

341
00:13:45,870 --> 00:13:44,760
so this is the presentation over here

342
00:13:55,410 --> 00:13:45,880
purple

343
00:13:58,079 --> 00:13:55,420
throughout the entire model it's also

344
00:14:01,590 --> 00:13:58,089
this this model has three more floors in

345
00:14:03,300 --> 00:14:01,600
it than the model in the reports which

346
00:14:05,970 --> 00:14:03,310
again is rather curious is giving a

347
00:14:07,380 --> 00:14:05,980
report a presentation on a report and

348
00:14:10,320 --> 00:14:07,390
yet is showing a completely different

349
00:14:12,990 --> 00:14:10,330
model another thing you'll notice about

350
00:14:15,900 --> 00:14:13,000
this model is that it has these weird

351
00:14:17,880 --> 00:14:15,910
glitches here this one here and this one

352
00:14:20,810 --> 00:14:17,890
over here now this glitch down here this

353
00:14:24,240 --> 00:14:20,820
kind of long kind of tail type thing

354
00:14:26,400 --> 00:14:24,250
down here is actually the reason it's

355
00:14:27,660 --> 00:14:26,410
all purple if you look at this scale

356
00:14:29,220 --> 00:14:27,670
over here this is showing the

357
00:14:31,260 --> 00:14:29,230
displacement of everything in the

358
00:14:33,750 --> 00:14:31,270
building in inches like how far it has

359
00:14:36,569 --> 00:14:33,760
moved and if we go back to the report

360
00:14:38,130 --> 00:14:36,579
itself we can see here this says a plus

361
00:14:40,530 --> 00:14:38,140
three which means it's n to the power of

362
00:14:42,329 --> 00:14:40,540
three or times a thousand and then these

363
00:14:44,040 --> 00:14:42,339

are numbers this is a two point one so

364
00:14:47,639 --> 00:14:44,050
this the one that's moves furthest is

365
00:14:48,960 --> 00:14:47,649
this green here which is about say 1.2

366
00:14:53,670 --> 00:14:48,970
times 10 to the 3

367
00:14:55,590 --> 00:14:53,680
so about 1,200 inches which is about a

368
00:14:57,960 --> 00:14:55,600
hundred feet which means that this green

369
00:14:59,730 --> 00:14:57,970
has moved about a hundred feet from its

370
00:15:00,000 --> 00:14:59,740
original position which seems about

371
00:15:03,300 --> 00:15:00,010
right

372
00:15:04,860 --> 00:15:03,310
based on the angle that we see here it's

373
00:15:06,210 --> 00:15:04,870
saying I don't know about twenty thirty

374
00:15:08,310 --> 00:15:06,220
degrees something like that but yeah

375
00:15:09,630 --> 00:15:08,320
this seems very consistent so this this

376
00:15:14,370 --> 00:15:09,640
is definitely measuring the displacement

377
00:15:19,400 --> 00:15:14,380
in inches of of this building but if we

378
00:15:23,699 --> 00:15:19,410
go back to this the slide show from

379
00:15:25,680 --> 00:15:23,709
houses presentation is all purple and if

380
00:15:28,380 --> 00:15:25,690
we look over here it's kind of hard to

381
00:15:31,350 --> 00:15:28,390
see but it actually seems to say e plus

382
00:15:33,840 --> 00:15:31,360
twelve which is considerably more than

383
00:15:34,740 --> 00:15:33,850
III is actually a billion times bigger

384
00:15:38,100 --> 00:15:34,750
and

385
00:15:41,280 --> 00:15:38,110
as here go all the way up to like 23

386
00:15:44,400 --> 00:15:41,290
times 10 to the 12 so 23 trillion inches

387
00:15:45,780 --> 00:15:44,410
and mostly buildings purple because most

388
00:15:48,180 --> 00:15:45,790

of the building really hasn't moved much

389
00:15:49,650 --> 00:15:48,190
more than you know something less than 1

390
00:15:52,650 --> 00:15:49,660
trillion inches so everything is less

391
00:15:56,190 --> 00:15:52,660
than 1 trillion inches range so what's

392
00:15:58,860 --> 00:15:56,200
actually happened is this bit here and

393
00:16:02,780 --> 00:15:58,870
this bit here have actually been offset

394
00:16:05,970 --> 00:16:02,790
by a very large amount thousands

395
00:16:07,410 --> 00:16:05,980
literally many thousands of feet if not

396
00:16:09,000 --> 00:16:07,420
millions of fees so there's some kind of

397
00:16:10,770 --> 00:16:09,010
weird glitch here it's all stretched out

398
00:16:12,090 --> 00:16:10,780
it's broken the basic that the model is

399
00:16:13,500 --> 00:16:12,100
broken it's no good you shouldn't be

400
00:16:16,380 --> 00:16:13,510
using a model like this because the

401
00:16:18,690 --> 00:16:16,390
geometry is all messed up carry on it's

402
00:16:22,230 --> 00:16:18,700
got like another view the same like in a

403
00:16:23,820 --> 00:16:22,240
chip mode and you can see it even more

404
00:16:25,020 --> 00:16:23,830
dramatically here this very long thing

405
00:16:26,700 --> 00:16:25,030
that's going down shooting off to

406
00:16:28,080 --> 00:16:26,710
somewhere those miles down below it's

407
00:16:30,210 --> 00:16:28,090
something else shooting off 2 miles down

408
00:16:32,130 --> 00:16:30,220
below it and then the scale here

409
00:16:33,870 --> 00:16:32,140
everything's down in the purple a little

410
00:16:37,680 --> 00:16:33,880
bit of red there so but definitely

411
00:16:39,750 --> 00:16:37,690
things are way off from what is real so

412
00:16:41,340 --> 00:16:39,760
you know that doesn't match any kind of

413
00:16:44,400 --> 00:16:41,350

reality so this is obviously some kind

414
00:16:47,100 --> 00:16:44,410
of broken model that he's using and we

415
00:16:48,840 --> 00:16:47,110
know it's a broken model because of this

416
00:16:50,520 --> 00:16:48,850
because of these glitches but also

417
00:16:52,980 --> 00:16:50,530
because they had to do all these these

418
00:16:56,010 --> 00:16:52,990
strange Colin removals they had to

419
00:16:58,770 --> 00:16:56,020
actually go in and manually remove the

420
00:17:01,140 --> 00:16:58,780
columns to make this model actually work

421
00:17:04,050 --> 00:17:01,150
to make it actually collapse but later

422
00:17:06,569 --> 00:17:04,060
on in the report they've got a model

423
00:17:09,270 --> 00:17:06,579
which they magically do not need to do

424
00:17:10,500 --> 00:17:09,280
this somehow they figured it all out and

425
00:17:12,090 --> 00:17:10,510
they've got a model that actually

426
00:17:15,150 --> 00:17:12,100
collapses by themselves so that means

427
00:17:18,569 --> 00:17:15,160
during the course of their study they

428
00:17:21,600 --> 00:17:18,579
had at least two models one of which

429
00:17:23,730 --> 00:17:21,610
Hulsey presents in his presentation one

430
00:17:25,559 --> 00:17:23,740
of which they put in their report if

431
00:17:26,939 --> 00:17:25,569
you've got two different models giving

432
00:17:28,860 --> 00:17:26,949
two completely different sets of results

433
00:17:33,750 --> 00:17:28,870
how do you know which is the correct

434
00:17:35,130 --> 00:17:33,760
model and that's why I say this is

435
00:17:37,230 --> 00:17:35,140
actually a bigger problem than the

436
00:17:38,850 --> 00:17:37,240
previous problems before it's actually

437
00:17:40,800 --> 00:17:38,860
showing that they don't actually have a

438
00:17:43,440 --> 00:17:40,810

valid model because if they've got two

439
00:17:45,270 --> 00:17:43,450
models which one's valid Hulsey gave an

440
00:17:47,250 --> 00:17:45,280
entire presentation with this messed up

441
00:17:48,270 --> 00:17:47,260
model is this the right model probably

442
00:17:51,750 --> 00:17:48,280
not

443
00:17:53,340 --> 00:17:51,760
the model in the in the report the right

444
00:17:54,840 --> 00:17:53,350
model well it's the model that gives

445
00:17:56,010 --> 00:17:54,850
better looking results so they've

446
00:17:59,220 --> 00:17:56,020
obviously tweaked it so it gives better

447
00:18:02,450 --> 00:17:59,230
looking results but is it right so let's

448
00:18:04,020 --> 00:18:02,460
sum up the problems with horses report

449
00:18:07,170 --> 00:18:04,030
boiled down to

450
00:18:10,070 --> 00:18:07,180
he's using static analysis this is

451
00:18:12,330 --> 00:18:10,080
static analysis for a dynamic situation

452
00:18:14,820 --> 00:18:12,340
building tipping over isn't something

453
00:18:16,410 --> 00:18:14,830
that you would use static analysis for

454
00:18:18,360 --> 00:18:16,420
because static means that the building

455
00:18:20,040 --> 00:18:18,370
isn't moving and when something's moving

456
00:18:22,920 --> 00:18:20,050
it's colliding with itself as all kinds

457
00:18:25,830 --> 00:18:22,930
of defamation defamation means nonlinear

458
00:18:28,020 --> 00:18:25,840
response and this is a linear static

459
00:18:30,780 --> 00:18:28,030
analysis for a situation which is

460
00:18:33,420 --> 00:18:30,790
dynamic and nonlinear you should not

461
00:18:35,910 --> 00:18:33,430
have used that to simulate this far into

462
00:18:37,590 --> 00:18:35,920
the simulation is fine to remove one

463
00:18:39,180 --> 00:18:37,600

column and then see how the load gets

464
00:18:40,470 --> 00:18:39,190
transferred to the other columns but you

465
00:18:44,280 --> 00:18:40,480
can't you were building tipping over

466
00:18:47,460 --> 00:18:44,290
because of this the next problem is that

467
00:18:50,190 --> 00:18:47,470
he doesn't have a dynamic analysis

468
00:18:52,650 --> 00:18:50,200
there's no dynamic analysis he says he

469
00:18:53,130 --> 00:18:52,660
has a dynamic analysis it says so right

470
00:18:56,430 --> 00:18:53,140
here

471
00:18:58,500 --> 00:18:56,440
dynamic analysis results he says this is

472
00:19:02,280 --> 00:18:58,510
the dynamic analysis results but it's

473
00:19:05,730 --> 00:19:02,290
not it is not dynamic analysis result

474
00:19:09,450 --> 00:19:05,740
this is one box rotating above another

475
00:19:13,910 --> 00:19:09,460
box probably set up very simply in in

476
00:19:16,350 --> 00:19:13,920
sap2000 with a pivot point and some mass

477
00:19:18,420 --> 00:19:16,360
system and then a little bit of gravity

478
00:19:20,220 --> 00:19:18,430
and it just rotates by itself it's not a

479
00:19:22,260 --> 00:19:20,230
dynamic analysis of the building it's a

480
00:19:24,480 --> 00:19:22,270
dynamic analysis of two boxes it's a

481
00:19:26,280 --> 00:19:24,490
dynamic analysis of this top box

482
00:19:29,270 --> 00:19:26,290
rotating around the bottom box it's not

483
00:19:32,190 --> 00:19:29,280
the result of a proper dynamic analysis

484
00:19:34,020 --> 00:19:32,200
so they've got a broken static analysis

485
00:19:36,060 --> 00:19:34,030
model that they're using inappropriately

486
00:19:37,620 --> 00:19:36,070
that has multiple versions that they've

487
00:19:39,270 --> 00:19:37,630
tweaked wonder which they had to hand

488
00:19:42,630 --> 00:19:39,280

you in to get it to do what they wanted

489
00:19:44,990 --> 00:19:42,640
to do and they don't have any proper

490
00:19:47,640 --> 00:19:45,000
dynamic analysis so I think this really

491
00:19:49,890 --> 00:19:47,650
raises some serious questions about the