

APPENDIX A

CLASSIFICATION OF LENGTH AFRL

AEROPLANE TYPE	REF CODE	AEROPLANE CHARACTERISTICS					
		ARFL (m)	Wing-span (m)	OMGWS (m)	Length (m)	MTOW (kg)	TP (kPa)
DHC2 Beaver	1A	381	14.6	3.3	10.3	2490	240
Beechcraft:							
58 (Baron)	1A	401	11.5	3.1	9.1	2449	392
100	1A	628	14.0	4.0	12.2	5352	-
Britten Norman Islander	1A	353	14.9	4.0	10.9	2850	228
Cessna:							
172	1A	272	10.9	2.7	8.2	1066	-
206	1A	274	10.9	2.6	8.6	1639	-
310	1A	518	11.3	3.7	9.7	2359	414
404	1A	721	14.1	4.3	12.1	3810	490
Partenavia P68	1A	230	12.0	2.6	9.4	1960	-
Piper:							
PA 31 (Navajo)	1A	639	12.4	4.3	9.9	2950	414
PA 34	1A	378	11.8	3.4	8.7	1814	-
Beechcraft 200	1B	592	16.6	5.6	13.3	5670	735
Cessna:							
208A (Caravan)	1B	296	15.9	3.7	11.5	3310	-
402C	1B	669	13.45	5.6	11.1	3107	490
441	1B	544	15.1	4.6	11.9	4468	665
DHC 6 Twin Otter	1B	695	19.8	4.1	15.8	5670	220
Dornier 228-200	1B	525	17.0	3.6	16.6	5700	-
DHC-7	1C	689	28.4	7.8	24.6	19505	620
DHC-5E	1D	290	29.3	10.2	24.1	22316	-
Lear Jet 28/29	2A	912	13.4	2.5	14.5	6804	793
Beechcraft 1900	2B	1098	16.6	5.8	17.6	7530	-
CASA C-212	2B	866	20.3	3.5	16.2	7700	392
Embraer EMB110	2B	1199	15.3	4.9	15.1	5670	586
Metro II	2B	800	14.1	5.4	18.1	5670	740
Metro III	2B	991	17.37	5.4	18.1	6577	740
ATR 42-200	2C	1010	24.6	4.9	22.7	16150	728
Cessna 550	2C	912	15.8	6.0	14.4	6033	700
DHC-8:							
100	2C	948	25.9	8.5	22.3	15650	805
300	2C	1122	27.4	8.5	25.7	18642	805
Lear Jet 55	3A	1292	13.4	2.5	16.8	9298	-
IAI Westwind 2	3A	1495	13.7	3.7	15.9	10660	1000
BAe 125-400	3B	1713	15.7	3.3	15.5	12480	1007
Canadair:							
CL600	3B	1737	18.9	4.0	20.9	18642	1140
CRJ-200	3B	1527	21.21	4.0	26.77	21523	1117

APPENDIX B

AEROPLANE TYPE	REF CODE	AEROPLANE CHARACTERISTICS					
		ARFL (m)	Wing- span (m)	OMGWS (m)	Length (m)	MTOW (kg)	TP (kPa)
Airbus A320-200	4C	2058	33.9	8.7	37.6	72000	1360
Boeing:							
B717-200	4C	2130	28.4	6.0	37.8	51710	-
B737-200	4C	2295	28.4	6.4	30.6	52390	1145
B737-300	4C	2749	28.9	6.4	30.5	61230	1344
B737-400	4C	2499	28.9	6.4	36.5	63083	1400
B737-800	4C	2256	35.8	6.4	39.5	70535	-
McDonnell Douglas:							
DC9-30	4C	2134	28.5	6.0	37.8	48988	-
DC9-80/MD80	4C	2553	32.9	6.2	45.1	72575	1390
Airbus:							
A300-600	4D	2332	44.8	10.9	54.1	165000	1260
A310-200	4D	1845	43.9	10.9	46.7	132000	1080
Boeing:							
B707-300	4D	3088	44.4	7.9	46.6	151315	1240
B757-200	4D	2057	38.0	8.7	47.3	108860	1172
B767-200ER	4D	2499	47.6	10.8	48.5	156500	1310
B767-300ER	4D	2743	47.6	10.8	54.9	172365	1310
McDonnell Douglas:							
DC8-63	4D	3179	45.2	7.6	57.1	158757	1365
DC10-30	4D	3170	50.4	12.6	55.4	251744	1276
Lockheed:							
L1011-100/200	4D	2469	47.3	12.8	54.2	211378	1207
McDonnell Douglas							
MD11	4D	2207	51.7	12.0	61.2	273289	1400
Tupolev TU154	4D	2160	37.6	12.4	48.0	90300	-
Airbus:							
A 330-200	4E	2713	60.3	12.0	59.0	230000	1400
A 330-300	4E	2560	60.3	12.0	63.6	230000	1400
A 340-300	4E	2200	60.3	12.0	63.7	253500	1400
Boeing:							
B747-SP	4E	2710	59.6	12.4	56.3	318420	1413
B747-300	4E	3292	59.6	12.4	70.4	377800	1323
B747-400	4E	3383	64.9	12.4	70.4	394625	1410
B777-200	4E	2500	60.9	12.8	63.73	287800	1400

APPENDIX C

AEROPLANE TYPE	REF CODE	AEROPLANE CHARACTERISTICS					
		ARFL	Wing- span	OMGWS	Length	MTOW	TP
		(m)	(m)	(m)	(m)	(kg)	(kPa)
Cessna 650	3B	1581	16.3	3.6	16.9	9979	1036
Dassault-Breguet: Falcon 900	3B	1515	19.3	5.3	20.2	20640	1300
Embraer EMB 145	3B	1500	20	4.8	29.9	19200	-
Fokker F28-2000	3B	1646	23.6	5.8	29.6	29480	689
Metro 23	3B	1341	17.4	5.4	18.1	7484	742
Shorts SD3-60	3B	1320	22.8	4.6	21.6	11793	758
Bae:							
Jetstream 31	3C	1440	15.9	6.2	14.4	6950	448
Jetstream 41	3C	1500	18.3	-	19.3	10433	-
146-200	3C	1615	26.3	5.5	26.2	42185	1138
146-300	3C	1615	26.3	5.5	31.0	44225	945
Bombardier Global Express	3C	1774	28.7	4.9	30.3	42410	-
Embraer EMB 120	3C	1420	19.8	7.3	20.0	11500	828
McDonnell Douglas:							
DC-3	3C	1204	28.8	5.8	19.6	14100	358
DC9-20	3C	1551	28.5	6.0	31.0	45360	972
Fokker:							
F27-500	3C	1670	29.0	7.9	25.1	20412	540
F28-4000	3C	1640	25.1	5.8	29.6	32205	779
F50	3C	1760	29.0	8.0	25.2	20820	552
F100	3C	1695	28.1	5.0	35.5	44450	920
SAAB SF-340	3C	1220	21.4	7.5	19.7	12371	655
Airbus A300 B2	3D	1676	44.8	10.9	53.6	142000	1241

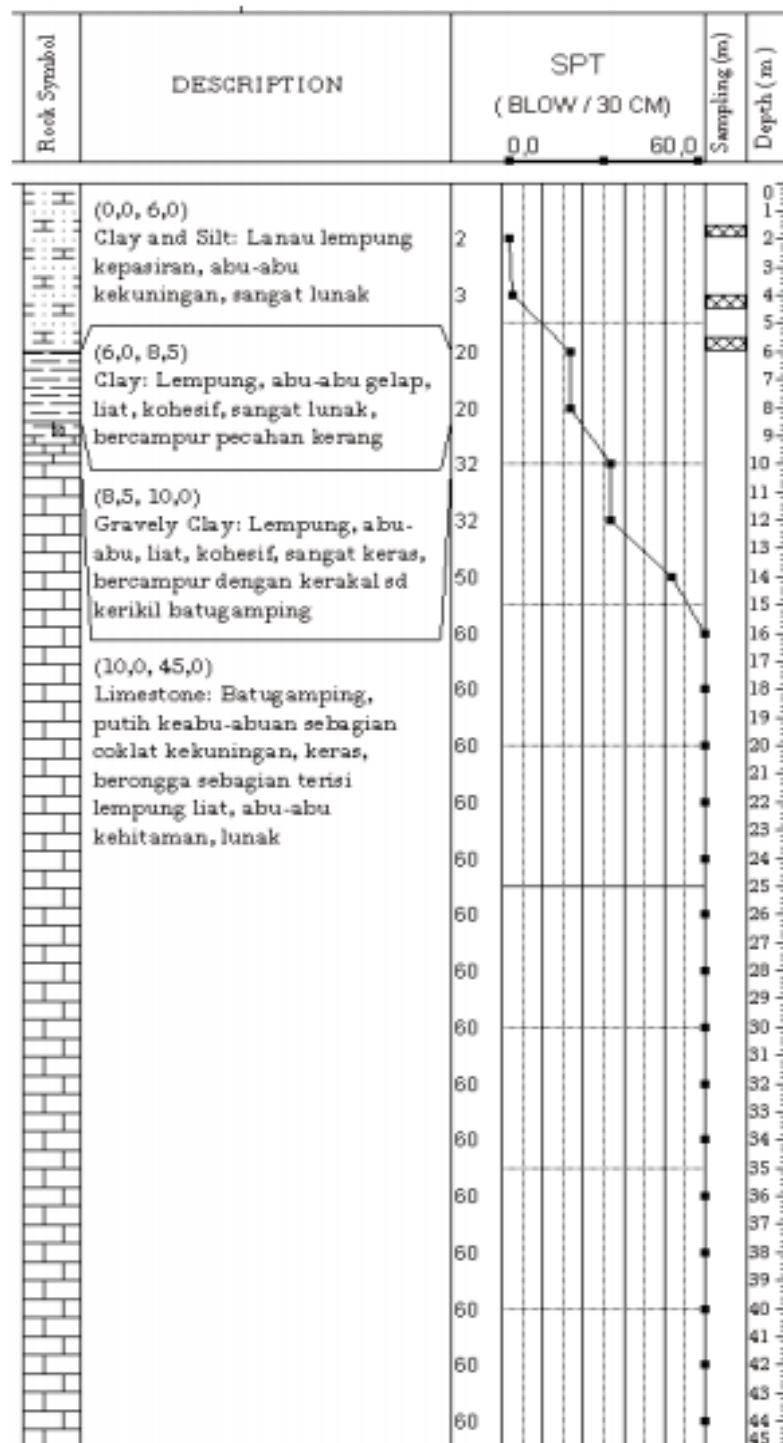
APPENDIX D

THE LIST OF DENSITY MATERIAL

Material Type	Specific Gravity
Steel	7.850 Kg/m ³
Natural stone	2.600 Kg/m ³
Cuts, cobble, mountain rock (heavy pile)	1.500 Kg/m ³
Rocks (heavy pile)	700 Kg/m ³
Broken stone	1.450 Kg/m ³
Cast iron	7.250 Kg/m ³
Concrete ⁽¹⁾	2.200 Kg/m ³
Reinforced concrete ⁽²⁾	2.400 Kg/m ³
Wood (class I) ⁽³⁾	1.000 Kg/m ³
Gravel, coral (dry air until moist, without sieving)	1.650 Kg/m ³
Couple red rocks	1.700 Kg/m ³
Couples of stone, round Stone, rock mountain	2.200 Kg/m ³
Paired stone prints	2.200 Kg/m ³
Couple rocks	1.450 Kg/m ³
Sand	1.600 Kg/m ³
Sand saturated water	1.800 Kg/m ³
Gravel sand, coral	1.850 Kg/m ³
Soil, clay, and silt	1700 Kg/m ³
Soil, clay and silt (wet)	2.000 Kg/m ³
Lead (lead)	11.400 Kg/m ³

APPENDIX D

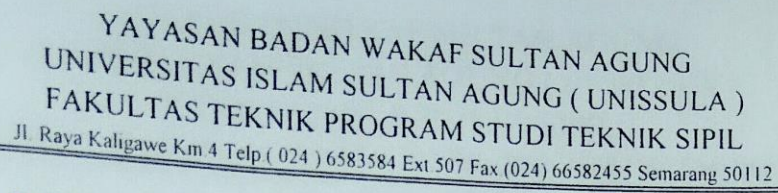
THE VALUE OF N-SPT



APPENDIX F

LOAD COEFFICIENT OF SLAB TO THE BEAM

No.	Jenis Kasus	M	Koef	Ly/Lx							
				1	1,2	1,4	1,6	1,8	2	2,5	3
I		Mlx	0,001 wu lx ² X	41	54	67	79	87	97	110	117
		Mly	0,001 wu lx ² X	41	35	31	28	26	25	24	23
		Mtx	-	-	-	-	-	-	-	-	-
		Mty	-	-	-	-	-	-	-	-	-
		Mtix	1/2 mlx	20,5	27	33,5	39,5	43,5	48,5	55	58,5
		Mtiy	1/2 mly	20,5	17,5	15,5	14	13	12,5	12	11,5
II		Mlx	0,001 wu lx ² X	25	34	42	49	53	58	62	65
		Mly	0,001 wu lx ² X	25	22	18	15	15	15	14	14
		Mtx	0,001 wu lx ² X	51	63	72	78	81	82	83	83
		Mty	0,001 wu lx ² X	51	54	55	54	54	53	51	49
		Mtix	-	-	-	-	-	-	-	-	-
		Mtiy	-	-	-	-	-	-	-	-	-
III		Mlx	0,001 wu lx ² X	30	41	52	61	67	72	80	83
		Mly	0,001 wu lx ² X	30	27	23	22	20	19	19	19
		Mtx	0,001 wu lx ² X	68	84	97	106	113	117	122	124
		Mty	0,001 wu lx ² X	68	74	77	77	77	76	73	71
		Mtix	1/2 mlx	15	20,5	26	30,5	33,5	36	40	41,5
		Mtiy	1/2 mly	15	13,5	11,5	11	10	9,5	9,5	9,5
Iva		Mlx	0,001 wu lx ² X	24	36	49	63	74	85	103	113
		Mly	0,001 wu lx ² X	33	33	32	29	27	24	21	20
		Mtx	-	-	-	-	-	-	-	-	-
		Mty	0,001 wu lx ² X	69	85	97	105	110	112	112	112
		Mtix	1/2 mlx	12	18	24,5	31,5	37	42,5	51,5	56,5
		Mtiy	-	-	-	-	-	-	-	-	-
Ivb		Mlx	0,001 wu lx ² X	33	40	47	52	55	58	62	65
		Mly	0,001 wu lx ² X	24	20	18	17	17	17	16	16
		Mtx	0,001 wu lx ² X	69	76	80	82	83	83	83	83
		Mty	-	-	-	-	-	-	-	-	-
		Mtix	-	-	-	-	-	-	-	-	-
		Mtiy	1/2 mly	12	10	9	8,5	8,5	8,5	8	8
Va		Mlx	0,001 wu lx ² X	31	45	58	71	81	91	106	115
		Mly	0,001 wu lx ² X	39	37	34	30	27	25	24	23
		Mtx	-	-	-	-	-	-	-	-	-
		Mty	0,001 wu lx ² X	91	102	108	111	113	114	114	114
		Mtix	1/2 mlx	15,5	22,5	29	35,5	40,5	45,5	53	57,5
		Mtiy	1/2 mly	19,5	18,5	17	15	13,5	12,5	12	11,5
Vb		Mlx	0,001 wu lx ² X	39	47	57	64	70	75	81	84
		Mly	0,001 wu lx ² X	31	25	23	21	20	19	19	19
		Mtx	0,001 wu lx ² X	91	98	107	113	118	120	124	124
		Mty	-	-	-	-	-	-	-	-	-
		Mtix	1/2 mlx	19,5	23,5	28,5	32	35	37,5	40,5	42
		Mtiy	1/2 mly	15,5	12,5	11,5	10,5	10	9,5	9,5	9,5
Via		Mlx	0,001 wu lx ² X	25	36	47	57	64	70	79	84
		Mly	0,001 wu lx ² X	28	27	23	20	18	17	16	16
		Mtx	0,001 wu lx ² X	54	72	88	100	108	114	121	124
		Mty	0,001 wu lx ² X	60	69	74	76	76	76	73	71
		Mtix	1/2 mlx	12,5	18	23,5	28,5	32	35	39,5	41,5
		Mtiy	-	-	-	-	-	-	-	-	-
VIIb		Mlx	0,001 wu lx ² X	28	37	45	50	54	58	62	65
		Mly	0,001 wu lx ² X	25	21	19	18	17	17	16	16
		Mtx	0,001 wu lx ² X	60	70	76	80	82	83	83	83
		Mty	0,001 wu lx ² X	54	55	55	54	53	53	51	49
		Mtix	-	-	-	-	-	-	-	-	-
		Mtiy	1/2 mly	12,5	10,5	9,5	9	8,5	8,5	8	8



Pada hari ini, Senin Tanggal Dua Puluh Tujuh Bulan Agustus Tahun Dua Ribu Delapan Belas telah dilaksanakan Seminar Tugas Akhir, dengan peserta sebagai berikut :

1	Nama	Fikri Khoiril Reza	30201403779
2	Nama	Esa Putra Haris Hamam	30201403758

Judul TA Design Of Floating Runway

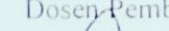
Dengan Hasil

A. ferina Dreyer
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Demikian Berita Acara Seminar Tugas Akhir ini dibuat untuk diketahui dan penggunaan seperlunya.

Dosen Pembimbing I

Dosen Pembimbing I



Ir. Gatot Rusbintardjo, MSc, Ph.D

Dosen Pembimbing II

Ir. H. Djoko Susilo Adhy, MT

Dosen Pembimbing

Ari Sentani, ST,MSc

Mengetahui ,
Ketua Program Studi Teknik Sipil

Ari Sentani, ST, MSc



YAYASAN BADAN WAKAF SULTAN AGUNG
UNIVERSITAS ISLAM SULTAN AGUNG (UNISSULA)
FAKULTAS TEKNIK JURUSAN SIPIL

Jl. Raya Kaligawe Km.4 Telp.(024) 6583584 Ext.507 Fax.(024) 66582455 Semarang 50112

LEMBAR KOREKSI
SEMINAR TUGAS AKHIR

Nama Mahasiswa / NIM : Esa Putra HANS H (30201403758) / Fikri khorini R (30201403779)
Hari / Tanggal : Senin / 27 Agustus 2018
Judul TA : DESIGN OF FLOATING RUNWAY

NO	
1	judul & tambal, batu offshore " DESIGN OF OFFSHORE FLOATING R.W)
2	
3	telah & perbaiki
4	$\frac{6}{9}$ 10.
5	

DOSEN PENGUJI

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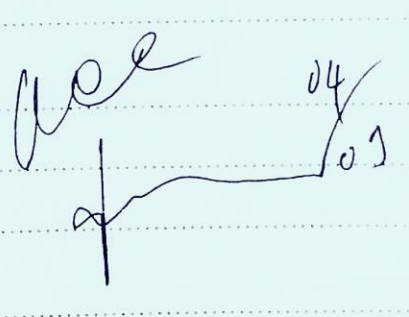


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LEMBAR KOREKSI
SEMINAR TUGAS AKHIR

Nama Mahasiswa / NIM : Esa Putra Harris - H (30201403788)
Fikri Khoiril Reza (30201403779)
Hari / Tanggal : Senin / 27 Agustus 2018
Judul TA : DESIGN OF FLOATING RUNWAY

NO	
1	Perbaiki penulisan ya & perbaiki
2	perbaiki penulisan ya & salah Runway
3	Perbaiki arah pesawat ya isabelah Tra- minal
4	 2018
5	

DOSEN PENGUJI





LEMBAR KOREKSI
SEMINAR TUGAS AKHIR

Nama Mahasiswa / NIM : Esa Putra Harris-H (30201403758)
Fikri khoiril RB2a (30201403779)
Hari / Tanggal : Senin / 27 Agustus 2018
Judul TA : DESIGN OF FLOATING
RUNWAY

NO	
1	Tentukan lokasi dan pengambilan data primer
2	Coba penggunaan perhitungan unit lapis lindung
3	Perhitungan beton kejut pesawat yang berakibat pada ketahanan inersia
4	Browsing dan lapatan Shore Protection Manual
5	Cari data dan contoh tentang tipe platform untuk bangunan off shore
DOSEN PENGUJI	



LEMBAR BIMBINGAN TUGAS AKHIR

NAMA

: FikriKhoiril Reza (30201403779)

Esa Putra Haris Hamam (30201403758)

DOSEN PEMBANDING

: Ari Sentani, ST., M.Sc

NO.	TGL ASISTENSI	KETERANGAN	PARAF
1	23/8/2018	- Perbaiki penulisan - Perhatikan perhitungan platform dan panjang runway - Cari jurnal tentang Mega Float - Perhatikan beban hujung saat take off dan landing - Perhatikan besar pesawat	
2	30/8/2018	- Perbaiki referensi - Perhatikan lokasi untuk TA - Perhatikan ukuran pesawat dan banding beban masing masing	
3	3/9/2018	- Perbaiki penulisan yang masih salah - Bisa digilid dan maju pendadaran - All	



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DAFTAR HADIR
DOSEN PENGUJI
SEMINAR TUGAS AKHIR

Hari

Tanggal

Jam

Senin

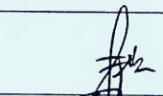
27 Agustus 2018

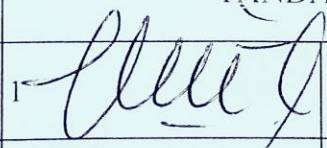
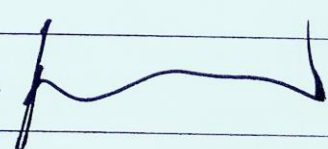
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Judul Tugas Akhir

Design Of Floating Runway

Penyaji

1	Fikri Khoiril Reza	30201403779	1	
2	Esa Putra Haris Hamam	30201403758	2	

NO	NAMA	TANDA TANGAN		
1	Ir. Gatot Rusbintardjo, MSc,Ph.D	1		
2	Ir. H. Djoko Susilo Adhy, MT		2	
3	Ari Sentani, ST, MSc	3		

Semarang, 27 Agustus 2018
Ketua Program Studi Teknik Sipil

Ari Sentani, ST, MSc
NIK. 210214086



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DAFTAR HADIR
SEMINAR TUGAS AKHIR
MAHASISWA FAKULTAS TEKNIK
UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG

Hari : Senin, 27 Agustus 2018
Tanggal : 27 Agustus 2018
Tempat : Ruang Rapat

NO	NAMA	NIM	TANDA TANGAN
1	Zakina Putri M.	30201403956	1
2	Puput A	30201403888	2
3	Jamuludin Ibnu S	30201403807	3
4	Arshad Yahya H	30201403707	4
5	Desy Nurulliana		5
6	Arthmad Fitri		6
7	Furqan Harjanto	30201403783	7
8	Andi Darmawan	30201403697	8
9	Amad Vito Figen	30201403686	9
10	Furhan Fakhry	30201403770	10
11	Desy Nurulliana	30201403723	11
12	Rifki Iman A	30201403896	12
13	Intan Ramudar	30201403799	13
14	Farizal R.M.	30201403774	14
15	Dramudyo Bertan Y	30201403744	15
16	M Sotekem	30201403851	16
17	Aldi Dia H L H	30201403701	17
18			18
19			19
20			20

MENGETAHUI

DOSEN PENGUJI

DOSEN PENGUJI

**LEMBAR ASISTENSI
TUGAS AKHIR**



NAMA

: Esa Putra Haris Hamam (30201403758)

Fikri Khoiril Reza (30201403779)

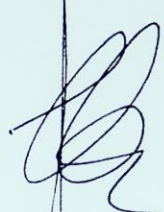
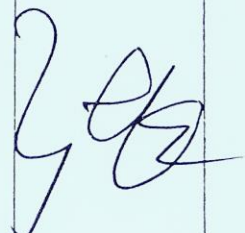
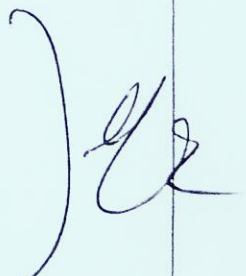
DOSEN PEMBIMBING I
DOSEN PEMBIMBING II

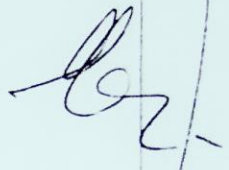
: Ir. H. Gatot Rusbintardjo, M.sc.P.hD

DOSEN PEMBIMBING I
DOSEN PEMBIMBING II

: Ir. H. Djoko Susilo Adhy. MT

NO.	TGL ASISTENSI	KETERANGAN	PARAF
1	4/3 '18 12/11/18	- Di konsep lagi bab 1 sesuai arahan dari P. Batot. - Cari kembali referensi di K.P. P. N. dan lain-lain	
2	12/11/18 9/12/18	IVRUL (TASAK) "STITCH OF P.W. PATIENT OVER LEX." - Bab 1 -> konsep email. - Bab 2. Tulis bab 2 sesuai arahan P. Batot.	

NO.	TGL ASISTENSI	KETERANGAN	PARAF
3	KADUS 12/4 2018	- Probaibi lab 1 (lauprey dlu plus mppis) - Cari korektorin protitrupe tang- pul tetroa pod di laet. - Mulai bab 4 (perlitrupe)	
4.	BELASA 17/4-18	- Probaibi bab 1 sesuai koreksi - mulai bab 2.	
5.	SOALAT 20/4 18.	- Probaibi lab 1 & 2. - lauprey dlu plus mppis. - tetroa mulai ab 4.	

NO.	TGL ASISTENSI	KETERANGAN	PARAF
5	Khalis 9 2007	- Ace ber-r-s - Berak di per- kai bi, berakapi Dm tr jua. - Berak ble mdoers. - Setelah est Job, berak prijeralean berak - acan TA. - truat tegas. - tegas di ber- kap daer ber- berak berak TA	
6	Khalis 10 '07.	- Setelah Ace - Setelah ber- uan TA.	
		- Kap ber ber- berak.	



LEMBAR ASISTENSI TUGAS AKHIR

NAMA

: Fikri Khoiril Reza (30201403779)

Esa Putra Haris Hamam (30201403758)

DOSEN PEMBIMBING II

: Ir. H. Djoko Susilo Adhy, MT

NO.	TGL ASISTENSI	KETERANGAN	PARAF
1	6/09 2018	- bentuk penulisan - tempelkan dg angka yang ada - posisikan masalah diameter besi	
2	10/09 2018	- tempelkan TA yg sudah lengkap - konsekuensi - NGPT jelaskan	
3	15/09 2018	Bisa ke seminar TA	

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