

BAB V

KESIMPULAN DAN SARAN

A. Kesimpulan

Setelah menelaah data menggunakan uji hipotesis Anova Satu Jalur, diperoleh kesimpulan bahwa latihan Health Related Fitness Program efektif terhadap kinerja operasional personel PKP-PK di Bandara Internasional Kualanamu Medan. Personel PKP-PK yang melakukan latihan HRFP program *VO2 Max*, *Push Up*, *Sit Up*, *Shuttle Run* dan *Wall Sit* memberikan pengaruh yang efektif terhadap personel PKP-PK. Merujuk pada hasil uji komparasi ganda menggunakan metode *Scheffe*, diperoleh kesimpulan bahwa program HRFP yang meliputi *VO2 Max*, *Push Up*, *Sit Up*, *Shuttle Run* dan *Wall Sit* memberikan pengaruh yang efektif terhadap personel PKP-PK, sehingga setiap pasang program HRFP yang meliputi *VO2 Max*, *Push Up*, *Sit Up*, *Shuttle Run*, dan *Wall Sit* efektif terhadap personel PKP-PK di Bandara Internasional Kualanamu Medan

B. Saran

Dari kesimpulan diatas terdapat saran yang peneliti jabarkan pada penelitian ini, yaitu personel PKP-PK yang berjaga wajib melaksanakan rutinitas latihan pelengkap untuk menjaga performa fisik personel agar pada saat pengambilan nilai HRFP personel mendapatkan nilai melebihi standar yang sudah ditetapkan.

DAFTAR PUSTAKA

- Angkasa Pura 11. "Sop PKP-PK 2021_Opt.Pdf," 2021.
- Ali, M. (2014). *Metodologi & Aplikasi Riset Pendidikan*. Jakarta: PT Bumi Aksara.
- Arikunto. (2006). *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta: PT. Rineka Cipta.
- Beni. (2016). *Konsep dan Analisis (Efektivitas Pengelolaan Keuangan Daerah di Era Otonomi Daerah)*. Jayapura : Taushia.
- Depdikbud. (1995). *Kamus Besar Bahasa Indonesia*. Jakarta: Balai Pustaka.
- Direktur Jenderal Perhubungan Udara. "Keputusan Direktur Jenderal Perhubungan Udara Nomor : PR 30 Tahun 2022 Tentang Standar Teknis Dan Operasi Peraturan Keselamatan Penerbangan Sipil Bagian 139 (Manual Of Standard Casr Part 139) Volume Iv Pelayanan Pertolongan Kecelakaan Penerbangan Dan Pema" (2019).
- Fatoni, R. A., Suroto, S., & Indahwati, N. (2021). Pengaruh aktivitas fisik program gross motor skill terhadap indeks massa tubuh dan tingkat kebugaran jasmani. *Multilateral : Jurnal Pendidikan Jasmani Dan Olahraga*, 20(1), 1–10. <https://doi.org/10.20527/multilateral.v20i1.9539>
- Febiyanti, H., Destyana, M. E., & Lestari, W. A. (2022). The Importance of Self-Defense Competence for Aviation Security Personnel. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 7(1), 353-.
- Febiyanti, H., Yuniar, D. C., Iwansyah Putra, & Ariyono Setiawan. (2022). Improving the Competence of Cadet Caregivers Using the Pancasila Character Development. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 7(2), 752–768.
- Iztok Kavcic dkk. (2012) *Comparative study of measured And predicted VO2 Max during a multistage Fitness test with junior soccer players. comparative study of measured and predicted. Kinesiology* 4(2012) 1:18-23
- Ismail, F. (2018). *Statistika Untuk Penelitian Pendidikan dan Ilmu-Ilmu Sosial*. Prenadamedia Group.
- Keselamatan, P., Sipil, P., Rahmat, D., Yang, T., & Esa, M. (2022). *No Title*.
- Kementrian Pemuda dan Olahraga. (2009). *Panduan pelaksanaan pengumpulan data Sport Development Index SDI*. Jakarta: Kementrian pemuda dan olahraga RI

- Kurniawan. (2013). *Peningkatan Kebugaran Jasmani Program Latihan Jalan Cepat*. Lampung.
- Machali, I. (2015). *Statistik Itu Mudah, Menggunakan SPSS Sebagai Alat Bantu Statistik*. Ladang Kata.
- Mardalis. (1993). *Metode Penelitian*. Jakarta: Bumi Aksara.
- Moleong, L. J. (2012). *Metodologi Penelitian Kualitatif*. Bandung: Remaja Rosdakarya
- Muhammad, J. (2018). Perkembangan kemampuan fisik (kelentukan, kekuatan otot ekstensor, dan kelincahan) orang dewasa muda ditinjau dari usia dan etnik. *JPOS (Journal Power of Sports)*, 1(2), 1-7.
- Nani Cahyani Sudarsono. (2008). *Kuliah Pengantar pada Kelas Foundation - Mata Kuliah Fitness and Art Tingkat Persiapan STEKPI*. Modul On Line. Diunduh 8 Maret 2008.
- Narlan, A., Priana, A., & Gumilar, R. (2023). Pengaruh Dryland Swimming Workout Terhadap Peningkatan VO₂max. *Jurnal of SPORT*, 7(1), 119–124.
- Pranata, D., & Kumaat, N. (2022). Pengaruh Olahraga Dan Model Latihan Fisik Terhadap Kebugaran Jasmani Remaja: Literature Review. *Jurnal Universitas Negeri Surabaya*, 10(02), 107–116.
- Putra, A. A. (2018). Efektivitas Pelaksanaan Program Bantuan Sosial pada Masyarakat di Kota Palu (Studi Tentang Kelompok Usaha Bersama). *Jurnal Katalogis*, 6(8), 1–8.
- Rahadiani, D. (2023). Pengaruh Latihan Fisik Terhadap Nilai Vo₂ Max Atlet Pelatda Ntb Sebagai Indikator Ketahanan Kardiorespirasi Menuju Pon 2021. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, 13(1), 673–682.
- RESCUE AND FIRE FIGHTING. (2014). *Airport Services Manual Part*.
- Rinaldi, A., Novalia, & Syazali, M. (2020). *Statistika Inferensial untuk Ilmu Sosial dan Pendidikan*. PT Penerbit IPB Press.
- Setiani, T., & Febriyanti, T. A. (2021). Pengaruh Audit Internal Terhadap Efektivitas Pengendalian Internal Persediaan Obat Pada Dinas Kesehatan Kota Cirebon. *Jurnal Akuntansi*, 14(2), 57–70.
- SOP ARFF 2021_opt.pdf*. (n.d.).
- Sugiyono. (2015). *Metode Penelitian Pendidikan Pendekatan Kualitatif, Kuantitatif, dan R&D*. Alfabeta.

- Suryan, V., Sari, A. N., Amalia, D., Septiani, V., & Febiyanti, H. (2020). Peningkatan Keselamatan dan Kesehatan Kerja (K3) melalui Sosialisasi Alat Pelindung Diri (APD) kepada Pekerja Konstruksi (Lokasi: Renovasi Gedung Perpustakaan Politeknik Penerbangan Palembang). *Darmabakti: Jurnal Inovasi Pengabdian Dalam Penerbangan*, 1(1), 30–37. <https://doi.org/10.52989/darmabakti.v1i1.10>
- Walukow, R. A. S., Rumampuk, J., & Lintong, F. (2021). Pengaruh Latihan Sit-up Terhadap Persentase Lemak Tubuh. *Jurnal Biomedik (Jbm)*, 13(3), 298. <https://doi.org/10.35790/jbm.13.3.2021.31727>
- Wicaksana, A., & Rachman, T. (2018). 濟無No Title No Title No Title. *Angewandte Chemie International Edition*, 6(11), 951–952., 3(1), 10–27. <https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf>

LAMPIRAN

Lampiran A:

DATA VO2 MAX

No.	Responden	VO2Max	Standar
1	Personal ARFF 1	3.7	6.2
2	Personal ARFF 2	3.4	6.2
3	Personal ARFF 3	3.3	6.2
4	Personal ARFF 4	4.6	6.2
5	Personal ARFF 5	4.7	6.2
6	Personal ARFF 6	4.2	6.2
7	Personal ARFF 7	5.4	6.2
8	Personal ARFF 8	5.6	6.2
9	Personal ARFF 9	3.5	6.2
10	Personal ARFF 10	4.4	6.2
11	Personal ARFF 11	5.4	6.2
12	Personal ARFF 12	5.2	6.2
13	Personal ARFF 13	5.2	6.2
14	Personal ARFF 14	7.1	6.2
15	Personal ARFF 15	8.6	6.2
16	Personal ARFF 16	4.1	6.2
17	Personal ARFF 17	4.1	6.2
18	Personal ARFF 18	5.6	6.2
19	Personal ARFF 19	3.6	6.2
20	Personal ARFF 20	7.3	6.2
21	Personal ARFF 21	5.1	6.2
22	Personal ARFF 22	5.7	6.2
23	Personal ARFF 23	3.8	6.2
24	Personal ARFF 24	7.6	6.2
25	Personal ARFF 25	5.3	6.2
26	Personal ARFF 26	5.4	6.2
27	Personal ARFF 27	5.4	6.2
28	Personal ARFF 28	3.3	6.2
29	Personal ARFF 29	4.6	6.2
30	Personal ARFF 30	6.3	6.2
31	Personal ARFF 31	4.6	6.2
32	Personal ARFF 32	4.2	6.2

33	Personal ARFF 33	5.2	6.2
34	Personal ARFF 34	3.5	6.2
35	Personal ARFF 35	5.1	6.2
36	Personal ARFF 36	4.6	6.2
37	Personal ARFF 37	4.3	6.2
38	Personal ARFF 38	3.7	6.2
39	Personal ARFF 39	5.1	6.2
40	Personal ARFF 40	4.9	6.2
41	Personal ARFF 41	4.2	6.2
42	Personal ARFF 42	5.2	6.2
43	Personal ARFF 43	6.3	6.2
44	Personal ARFF 44	6.2	6.2
45	Personal ARFF 45	6.3	6.2
46	Personal ARFF 46	4.9	6.2
47	Personal ARFF 47	6.1	6.2
48	Personal ARFF 48	2.4	6.2
49	Personal ARFF 49	5.5	6.2
50	Personal ARFF 50	4.5	6.2
51	Personal ARFF 51	4.3	6.2
52	Personal ARFF 52	8.5	6.2
53	Personal ARFF 53	6.6	6.2
54	Personal ARFF 54	4.7	6.2
55	Personal ARFF 55	5.4	6.2
56	Personal ARFF 56	4.3	6.2
57	Personal ARFF 57	6.6	6.2
58	Personal ARFF 58	4.9	6.2
59	Personal ARFF 59	5.2	6.2

Lampiran B:**DATA PUSH UP**

No.	Responden	Push Up	Standar
1	Personal ARFF 1	20	30
2	Personal ARFF 2	40	30
3	Personal ARFF 3	15	30
4	Personal ARFF 4	10	30
5	Personal ARFF 5	26	30
6	Personal ARFF 6	18	30
7	Personal ARFF 7	40	30
8	Personal ARFF 8	20	30
9	Personal ARFF 9	26	30
10	Personal ARFF 10	21	30
11	Personal ARFF 11	40	30
12	Personal ARFF 12	31	30
13	Personal ARFF 13	30	30
14	Personal ARFF 14	31	30
15	Personal ARFF 15	45	30
16	Personal ARFF 16	24	30
17	Personal ARFF 17	28	30
18	Personal ARFF 18	22	30
19	Personal ARFF 19	42	30
20	Personal ARFF 20	20	30
21	Personal ARFF 21	36	30
22	Personal ARFF 22	40	30
23	Personal ARFF 23	30	30
24	Personal ARFF 24	20	30
25	Personal ARFF 25	34	30
26	Personal ARFF 26	20	30
27	Personal ARFF 27	22	30
28	Personal ARFF 28	24	30
29	Personal ARFF 29	19	30
30	Personal ARFF 30	30	30
31	Personal ARFF 31	31	30
32	Personal ARFF 32	20	30
33	Personal ARFF 33	20	30
34	Personal ARFF 34	39	30
35	Personal ARFF 35	20	30

36	Personal ARFF 36	9	30
37	Personal ARFF 37	25	30
38	Personal ARFF 38	21	30
39	Personal ARFF 39	14	30
40	Personal ARFF 40	27	30
41	Personal ARFF 41	20	30
42	Personal ARFF 42	21	30
43	Personal ARFF 43	21	30
44	Personal ARFF 44	50	30
45	Personal ARFF 45	21	30
46	Personal ARFF 46	35	30
47	Personal ARFF 47	40	30
48	Personal ARFF 48	20	30
49	Personal ARFF 49	25	30
50	Personal ARFF 50	30	30
51	Personal ARFF 51	10	30
52	Personal ARFF 52	22	30
53	Personal ARFF 53	54	30
54	Personal ARFF 54	30	30
55	Personal ARFF 55	30	30
56	Personal ARFF 56	35	30
57	Personal ARFF 57	29	30
58	Personal ARFF 58	25	30
59	Personal ARFF 59	30	30

Lampiran C:

DATA SIT UP

No.	Responden	Sit Up	Standar
1	Personal ARFF 1	35	30
2	Personal ARFF 2	41	30
3	Personal ARFF 3	44	30
4	Personal ARFF 4	36	30
5	Personal ARFF 5	60	30
6	Personal ARFF 6	27	30
7	Personal ARFF 7	72	30
8	Personal ARFF 8	30	30
9	Personal ARFF 9	62	30
10	Personal ARFF 10	37	30
11	Personal ARFF 11	95	30
12	Personal ARFF 12	60	30
13	Personal ARFF 13	40	30
14	Personal ARFF 14	43	30
15	Personal ARFF 15	66	30
16	Personal ARFF 16	49	30
17	Personal ARFF 17	57	30
18	Personal ARFF 18	35	30
19	Personal ARFF 19	70	30
20	Personal ARFF 20	32	30
21	Personal ARFF 21	48	30
22	Personal ARFF 22	70	30
23	Personal ARFF 23	45	30
24	Personal ARFF 24	40	30
25	Personal ARFF 25	37	30
26	Personal ARFF 26	48	30
27	Personal ARFF 27	46	30
28	Personal ARFF 28	65	30
29	Personal ARFF 29	40	30
30	Personal ARFF 30	32	30
31	Personal ARFF 31	42	30
32	Personal ARFF 32	44	30
33	Personal ARFF 33	22	30
34	Personal ARFF 34	55	30
35	Personal ARFF 35	35	30

36	Personal ARFF 36	51	30
37	Personal ARFF 37	30	30
38	Personal ARFF 38	41	30
39	Personal ARFF 39	21	30
40	Personal ARFF 40	42	30
41	Personal ARFF 41	39	30
42	Personal ARFF 42	48	30
43	Personal ARFF 43	30	30
44	Personal ARFF 44	54	30
45	Personal ARFF 45	38	30
46	Personal ARFF 46	40	30
47	Personal ARFF 47	100	30
48	Personal ARFF 48	55	30
49	Personal ARFF 49	38	30
50	Personal ARFF 50	44	30
51	Personal ARFF 51	21	30
52	Personal ARFF 52	34	30
53	Personal ARFF 53	68	30
54	Personal ARFF 54	50	30
55	Personal ARFF 55	40	30
56	Personal ARFF 56	50	30
57	Personal ARFF 57	55	30
58	Personal ARFF 58	40	30
59	Personal ARFF 59	42	30

Lampiran D:**DATA SHUTTLE RUN**

No.	Responden	Shuttle Run	Standar
1	Personal ARFF 1	86	<90
2	Personal ARFF 2	85	<90
3	Personal ARFF 3	101	<90
4	Personal ARFF 4	74	<90
5	Personal ARFF 5	88	<90
6	Personal ARFF 6	85	<90
7	Personal ARFF 7	77	<90
8	Personal ARFF 8	73	<90
9	Personal ARFF 9	95	<90
10	Personal ARFF 10	73	<90
11	Personal ARFF 11	73	<90
12	Personal ARFF 12	85	<90
13	Personal ARFF 13	80	<90
14	Personal ARFF 14	70	<90
15	Personal ARFF 15	70	<90
16	Personal ARFF 16	93	<90
17	Personal ARFF 17	82	<90
18	Personal ARFF 18	87	<90
19	Personal ARFF 19	74	<90
20	Personal ARFF 20	82	<90
21	Personal ARFF 21	78	<90
22	Personal ARFF 22	81	<90
23	Personal ARFF 23	72	<90
24	Personal ARFF 24	82	<90
25	Personal ARFF 25	80	<90
26	Personal ARFF 26	81	<90
27	Personal ARFF 27	92	<90
28	Personal ARFF 28	81	<90
29	Personal ARFF 29	76	<90
30	Personal ARFF 30	87	<90
31	Personal ARFF 31	87	<90
32	Personal ARFF 32	81	<90
33	Personal ARFF 33	93	<90
34	Personal ARFF 34	86	<90
35	Personal ARFF 35	94	<90

36	Personal ARFF 36	95	<90
37	Personal ARFF 37	94	<90
38	Personal ARFF 38	81	<90
39	Personal ARFF 39	74	<90
40	Personal ARFF 40	87	<90
41	Personal ARFF 41	86	<90
42	Personal ARFF 42	74	<90
43	Personal ARFF 43	78	<90
44	Personal ARFF 44	76	<90
45	Personal ARFF 45	78	<90
46	Personal ARFF 46	80	<90
47	Personal ARFF 47	103	<90
48	Personal ARFF 48	80	<90
49	Personal ARFF 49	80	<90
50	Personal ARFF 50	90	<90
51	Personal ARFF 51	69	<90
52	Personal ARFF 52	77	<90
53	Personal ARFF 53	83	<90
54	Personal ARFF 54	77	<90
55	Personal ARFF 55	78	<90
56	Personal ARFF 56	73	<90
57	Personal ARFF 57	83	<90
58	Personal ARFF 58	84	<90
59	Personal ARFF 59	75	<90

Lampiran E:**DATA WALL SIT**

No.	Responden	Wall Sit	Standar
1	Personal ARFF 1	46	90
2	Personal ARFF 2	96	90
3	Personal ARFF 3	61	90
4	Personal ARFF 4	58	90
5	Personal ARFF 5	135	90
6	Personal ARFF 6	80	90
7	Personal ARFF 7	124	90
8	Personal ARFF 8	50	90
9	Personal ARFF 9	102	90
10	Personal ARFF 10	42	90
11	Personal ARFF 11	120	90
12	Personal ARFF 12	152	90
13	Personal ARFF 13	66	90
14	Personal ARFF 14	95	90
15	Personal ARFF 15	218	90
16	Personal ARFF 16	186	90
17	Personal ARFF 17	232	90
18	Personal ARFF 18	118	90
19	Personal ARFF 19	52	90
20	Personal ARFF 20	126	90
21	Personal ARFF 21	194	90
22	Personal ARFF 22	225	90
23	Personal ARFF 23	62	90
24	Personal ARFF 24	222	90
25	Personal ARFF 25	136	90
26	Personal ARFF 26	126	90
27	Personal ARFF 27	197	90
28	Personal ARFF 28	77	90
29	Personal ARFF 29	131	90
30	Personal ARFF 30	85	90
31	Personal ARFF 31	144	90
32	Personal ARFF 32	76	90
33	Personal ARFF 33	63	90
34	Personal ARFF 34	63	90

35	Personal ARFF 35	183	90
36	Personal ARFF 36	83	90
37	Personal ARFF 37	81	90
38	Personal ARFF 38	68	90
39	Personal ARFF 39	46	90
40	Personal ARFF 40	68	90
41	Personal ARFF 41	63	90
42	Personal ARFF 42	70	90
43	Personal ARFF 43	90	90
44	Personal ARFF 44	145	90
45	Personal ARFF 45	158	90
46	Personal ARFF 46	208	90
47	Personal ARFF 47	122	90
48	Personal ARFF 48	36	90
49	Personal ARFF 49	226	90
50	Personal ARFF 50	50	90
51	Personal ARFF 51	96	90
52	Personal ARFF 52	311	90
53	Personal ARFF 53	102	90
54	Personal ARFF 54	62	90
55	Personal ARFF 55	60	90
56	Personal ARFF 56	123	90
57	Personal ARFF 57	141	90
58	Personal ARFF 58	81	90
59	Personal ARFF 59	303	90

Lampiran F:**HASIL PERHITUNGAN DATA AMATAN***Frequencies*

		<i>Statistics</i>				
		VO2Max	Push_Up	Sit_Up	Shuttle_Run	Wall_Sit
N	Valid	59	59	59	59	59
	Missing	236	236	236	236	236
Mean		5.0644	27.0847	46.2881	82.0169	117.5593
Median		5.1000	25.0000	42.0000	81.0000	96.0000
Mode		5.20 ^a	20.00	40.00	80.00 ^a	63.00
Range		6.20	45.00	79.00	34.00	275.00
Minimum		2.40	9.00	21.00	69.00	36.00
Maximum		8.60	54.00	100.00	103.00	311.00

Lampiran G:**PERHITUNGAN UJI NORMALITAS***One-Sample Kolmogorov-Smirnov Test*

		Personal ARFF
N		295
Normal Parameters ^{a,b}	Mean	55.6027
	Std. Deviation	50.24717
Most Extreme Differences	Absolute	.146
	Positive	.110
	Negative	-.146
Test Statistic		.146
Asymp. Sig. (2-tailed)		.000 ^c

Lampiran H:**HASIL PERHITUNGAN UJI HOMOGENITAS****Levene's Test of Equality of Error Variances^{a,b}**

		Levene Statistic	df1	df2	Sig.
Personal ARFF	Based on Mean	74.328	4	290	.271
	Based on Median	50.521	4	290	.305
	Based on Median and with adjusted df	50.521	4	68.90 7	.865
	Based on trimmed mean	69.990	4	290	.204

Lampiran I:**HASIL PERHITUNGAN UJI ANOVA SATU JALUR****ANOVA**

Personal ARFF

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	471438.879	4	117859.720	126.19 5	.000
Within Groups	270845.899	290	933.951		
Total	742284.778	294			

Lampiran J:

HASIL PERHITUNGAN UJI KOMPARASI GANDA SCHEFFE

Multiple Comparisons

Dependent Variable: Personal ARFF

Scheffe

(I) HRFP	(J) HRFP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
VO2Max	Push Up	-22.02034 [*]	5.62667	.005	-39.4640	-4.5767
	Sit Up	-41.22373 [*]	5.62667	.000	-58.6674	-23.7801
	Shuttle Run	-76.95254 [*]	5.62667	.000	-94.3962	-59.5089
	Wall Sit	-112.49492 [*]	5.62667	.000	-129.9386	-95.0513
Push Up	VO2Max	22.02034 [*]	5.62667	.005	4.5767	39.4640
	Sit Up	-19.20339 [*]	5.62667	.022	-36.6471	-1.7597
	Shuttle Run	-54.93220 [*]	5.62667	.000	-72.3759	-37.4885
	Wall Sit	-90.47458 [*]	5.62667	.000	-107.9182	-73.0309
Sit Up	VO2Max	41.22373 [*]	5.62667	.000	23.7801	58.6674
	Push Up	19.20339 [*]	5.62667	.022	1.7597	36.6471
	Shuttle Run	-35.72881 [*]	5.62667	.000	-53.1725	-18.2852
	Wall Sit	-71.27119 [*]	5.62667	.000	-88.7148	-53.8275
Shuttle Run	VO2Max	76.95254 [*]	5.62667	.000	59.5089	94.3962
	Push Up	54.93220 [*]	5.62667	.000	37.4885	72.3759
	Sit Up	35.72881 [*]	5.62667	.000	18.2852	53.1725
	Wall Sit	-35.54237 [*]	5.62667	.000	-52.9860	-18.0987
Wall Sit	VO2Max	112.49492 [*]	5.62667	.000	95.0513	129.9386
	Push Up	90.47458 [*]	5.62667	.000	73.0309	107.9182
	Sit Up	71.27119 [*]	5.62667	.000	53.8275	88.7148
	Shuttle Run	35.54237 [*]	5.62667	.000	18.0987	52.9860

Lampiran H:

Lembar Bimbingan



**KEMENTERIAN PERHUBUNGAN
BADAN PENGEMBANGAN SDM PERHUBUNGAN
POLITEKNIK PENERBANGAN PALEMBANG
PROGRAM STUDI DIPLOMA III MANAJEMEN BANDAR UDARA**

**LEMBAR BIMBINGAN TUGAS AKHIR
TAHUN AKADEMIK 2022/2023**

Nama Taruna : Sigit Hardjanto
 NIT : 55232010023
 Course : PPKP O1
 Judul Tugas Akhir : Efektivitas Health Related Fines Program terhadap Personel PKP-PK
 Di Bandar Udara Internasional Kualanamu Medan
 Dosen Pembimbing : Dr. Rr. Retno Sawitri Wulandari, S.SiT., M.M.Tr

No	Tanggal	Uraian	Paraf Pembimbing
1	13-4-2023	Lengkapi dengan permasalahan yang ada di bab 3 Latar belakang	
2	19-4-2023	Revisi BAB I (Latar belakang, rumusan, batasan tujuan, manfaat Lanjut BAB II	
3	26-5-2023	Revisi BAB II Tinjauan Teori - Penelitian terdahulu	
4	10-6-2023	BAB III Lanjut Bab IV	
5	26-6-2023	Revisi penulisan penulisan bahasa asing penyusunan BAB III	
6	27-06-2023	finalisasi tugas akhir	

Mengetahui,
Ketua Program Studi Manajemen Bandar Udara



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Dosen Pembimbing



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POLITEKNIK PENERBANGAN PALEMBANG
PROGRAM STUDI
DIPLOMA TIGA PENYELAMATAN DAN PEMADAMAN KEBAKARAN PENERBANGAN

LEMBAR BIMBINGAN TUGAS AKHIR
TAHUN AKADEMIK 2022/2023

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Course : D III PPKP
Judul TA : Efektivitas Health Related Fitness Program Terhadap Personel PPK-PK Di Bandar Udara Internasional Kualanaram Medan.

Dosen Pembimbing : Herlina Febiyanti, S.T.M.M.

No	Tanggal	Uraian	Paraf Pembimbing
1.	12 / April 2023	Revisi Latar belakang, Rumusan, Tujuan, manfaat, Bahasan & sistematika penulisan	
2.	15 / Mei 2023	Revisi Pengurutan huruf kapital, Pengurutan Spasi, Pemisahan istilah asing dan melengkapinya data dikumpulkan Permasalahannya di bab I	
3.	12 / Mei 2023	Revisi: Pembetulan tabel & gambar. Penulisan judul gambar & tabel dan Revisi Bab III	
4.	16 / Juni 2023	Memperbaiki abstrak, cek typo, cek spasi, memperbaiki kata dengan bar merevisi tulisan daftar gambar & tabel, merevisi Bab III, IV, & V	
5.	26 / Juni 2023	Revisi Penulisan dan Bab III	
6.	13 / Juli 2023	Final check sistematika penulisan (APA I, II, III, IV) Lanjut kesimpulan & saran (Bab IV)	
7.	14 / Juli 2023	Bismillah, Acc.	

Mengetahui,
Ketua Program Studi
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Lampiran I:



Standar HRFP Menurut SOP PKP-PK Bandar Udara Internasional Kualanamu Medan

ARFF STANDARD OPERATING PROCEDURES KUALANAMU INTERNATIONAL AIRPORT	HRFP (HEALTH RELATED FITNESS PROGRAM)		ANGKASA PURA II INDONESIA'S AIRPORT COMPANY	
	Dock. No :	17.02.03.03		Revision : 01
	Date :	19 July 2021		Page 1 of 19

<p>1. Pendahuluan</p> <p>HRFP (Health Related Fitness Program) adalah Program komprehensif yang dirancang meningkatkan kemampuan personel untuk melakukan kegiatan kerja dan untuk mengurangi atau menghilangkan cedera serta kematian dini, <u>kenapa perlu dilaksanakan Personel ARFF :</u></p> <ul style="list-style-type: none"> • Memiliki resiko tinggi terhadap pekerjaan; • Alat-alat yang digunakan berat & berbahaya; • Pekerjaan tidak mengenal waktu (bisa cepat – bisa lama). 	<p>1. Preliminary</p> <p>HRFP (Health Related Fitness Program) is a comprehensive program designed to improve the ability of personnel to carry out work activities and to reduce or eliminate injuries and premature deaths, why should ARFF personnel be implemented:</p> <ul style="list-style-type: none"> • Have a high risk to work; • The tools used are heavy & dangerous; • Work knows no time (it can be fast – it can take a long time).
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ARFF STANDARD OPERATING PROCEDURES KUALANAMU INTERNATIONAL AIRPORT	HRFP (HEALTH RELATED FITNESS PROGRAM)		ANGKASA PURA II INDONESIA'S AIRPORT COMPANY	
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- | | |
|---|---|
| <p>7.1.1. Target ARFF KNO saat ini adalah level 6 bolak-balik 2;</p> <p>7.1.2. <u>Beep Test dilakukan dengan lari menempuh jarak 20 meter bolak-balik, yang dimulai dengan lari pelan-pelan secara bertahap yang semakin lama semakin cepat hingga personil tidak mampu mengikuti irama waktu lari, berarti kemampuan maksimalnya pada level bolak-balik tersebut</u></p> <p>7.1.3. <u>Waktu setiap level 1 menit</u></p> <p>7.1.4. <u>Pada level 1 jarak 20 meter ditempuh dalam waktu 8,6 detik dalam 7 kali bolak-balik</u></p> | <p>7.1.1. ARFF KNO's current target is level 6 turn 2;</p> <p>7.1.2. <u>Beep Test carried out by running for a distance of 20 meters back and forth, starting with running slowly and gradually getting faster and faster until the personnel are unable to keep up with the rhythm of the running time, meaning that their maximum ability is at that level of back and forth;</u></p> <p>7.1.3. <u>Time each level 1 minute;</u></p> <p>7.1.4. <u>At level 1 the distance of 20 meters is covered in 8.6 seconds in 7 round trips;</u></p> |
|---|---|

7.3. Sit Ups	7.3. Sit Ups
	
<p>7.3.1. Target untuk ARFF KNO berdasarkan survey pengambilan data beberapa personel RFF KNO saat ini Target Sit Up Tanpa Rest 30 repetisi, Sit Up dengan Rest 20 repetisi, Sit Up 2 menit 50 repetisi, dalam tes jasmani militer dalam 1 menit mencapai 40 kali,</p> <p>7.3.2. Gerakan Sit Up boleh turun full dan turun setengah;</p> <p>7.3.3. Gerakan harus full ke atas pada saat tubuh bergerak ke atas;</p>	<p>7.3.1. The target for ARFF KNO is based on a survey of data collection of several RFF KNO personnel at this time. Target Sit Ups Without Rest 30 repetitions, Sit Ups with Rest 20 repetitions, Sit Ups 2 minutes 50 repetitions, in the military physical test in 1 minute reaching 40 times,</p> <p>7.3.2. Sit Up movement can go down full and down half,</p> <p>7.3.3. Movement must be full upwards when</p>

7.2. Push Up





7.2. Push Ups

7.2.1. Target untuk ARFF KNO saat ini berdasarkan survey pengambilan data beberapa personel ARFF KNO **Push Up Tanpa Rest 30 repetisi, Push Up dengan Rest 20 repetisi, Push Up 2 menit 50 repetisi**, dalam Tes jasmani dan militer dalam 1 menit mencapai 42 kali,

7.2.1. The current target for ARFF KNO is based on a survey of data collection from several ARFF KNO personnel. **Push Up without Rest 30 repetitions, Push Up with Rest 20 repetitions, Push Up 2 minutes 50 repetitions**, in physical and military tests in 1 minute reaching 42 times,

ARFF STANDARD OPERATING PROCEDURES KUALANAMU INTERNATIONAL AIRPORT

7.4. Shuttle Run	7.4. Shuttle Run
	
<p>7.4.1. Target yang di tentukan di ARFF KNO sesuai survey pengambilan data beberapa personel yaitu catatan waktu < 01'30" (di bawah 1 menit 30 detik);</p> <p>7.4.2. Memastikan tali sepatu terikat kuat;</p> <p>7.4.3. Aba - aba di mulai dari peluit berbunyi;</p> <p>7.4.4. Ada 6 cone masing2 jarak cone ke cone lainnya 10 meter dan total jarak 50 meter;</p> <p>7.4.5. Personil bersiap2 di belakang cone 1 (cone start sekaligus sebagai cone finishing) untuk melakukan awal</p>	<p>7.4.1. The target set in ARFF KNO is according to a survey of data collection for several personnel, namely time records < 01'30" (under 1 minute 30 seconds);</p> <p>7.4.2. Ensure that shoelaces are firmly tied;</p> <p>7.4.3. The cue starts from the whistle sounds;</p> <p>7.4.4. There are 6 cones, each cone to another 10 meters distance and a total distance of 50 meters;</p> <p>7.4.5. Personnel get ready behind cone 1</p>

7.6. Wall Sit



7.6. Wall Sit

7.6.1. Berdasarkan survey data beberapa personil ARFF KNO di dapat target waktu yaitu minimal 90 Detik tanpa Rest;

7.6.1. Based on survey data, several ARFF KNO personnel were given a target time of at least 90 seconds without rest;

ARFF STANDARD OPERATING PROCEDURES KUALANAMU INTERNATIONAL AIRPORT

Lampiran J:

ICAO Doc 9137-AN/898 Airport Services Manual Part 1 - Rescue and Firefighting Fourth Edition, 2015. Chapter 10. Personnel – 10.4 Physical and medical fitness assessments for RFF services

Doc 9137 – AN/898
Part 1



AIRPORT SERVICES MANUAL

PART 1

RESCUE AND FIRE FIGHTING

Fourth Edition — 2014

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Approved by the Secretary General
and published under his authority

INTERNATIONAL CIVIL AVIATION ORGANIZATION

10.4 PHYSICAL AND MEDICAL FITNESS ASSESSMENTS FOR RFF SERVICES

10.4.1 As the nature of RFF operations involves periods of intense physical activity, all RFF personnel have to possess a minimum level of physical fitness and medical fitness to be able to perform the tasks associated with these operations. Physical fitness and medical fitness is often described as the overall physical condition of the body, which can range from peak condition for performance at one end of the spectrum to extreme illness or injury at the other. The key fitness components for RFF are generally aerobic fitness, anaerobic fitness, flexibility and medical fitness. Optimum physical fitness and medical fitness for RFF personnel would mean that a fire fighter is able to carry out RFF activities safely, successfully and without undue fatigue.

10.4.2 *Aerobic fitness* is the ability to continue to exercise for prolonged periods of time at low to moderate or high intensity. This is typically what limits the ability to continue to run, cycle or swim for more than a few minutes and is dependent upon the body's heart, lungs and blood to get the oxygen to the muscles (VO_2) providing the sustained energy needed to maintain prolonged exercise. Typical aerobic
