LAPORAN *ON THE JOB TRAINING*
DI AKADEMI PENERBANGAN INDONESIA BANYUWANGI
01 APRIL 2024 - 28 JUNI 2023

Disusun Oleh :

ABHIP RAYA ZAKI PRATAMA

NIT 30421025

PROGRAM STUDI DIPLOMA 3 TEKNIK PESAWAT UDARA

POLITEKNIK PENERBANGAN SURABAYA

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LEMBAR PERSETUJUAN

LAPORAN *ON THE JOB TRAINING (OJT)*
DI AKADEMI PENERBANG INDONESIA BANYUWANGI

Oleh :
ABHIP RAYA ZAKI PRATAMA
NIT. 30421025

Laporan *On The Job Training (OJT)* ini telah diterima dan disetujui sebagai salah satu syarat penilain *On The Job Training (OJT).*

Disetujui Oleh :

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LEMBAR PENGESAHAN

Laporan *On The Job Training* telah dilakukan pengujian didepan Tim Penguji pada tanggal … Juli 2024 dan dinyatakan memenuhi syarat sebagai salah satu komponen penilain *On The Job Training*

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KATA PENGANTAR

Dengan menyebut nama Allah SWT Yang Maha Pengasih lagi Maha Penyayang, kami panjatkan puja dan puji syukur atas kehadirat-Nya, yang telah melimpahkan rahmat, hidayah, dan inayah-Nya kepada penulis, sehingga penulis dapat menyelesaikan laporan *On The Job Training (OJT) di* Akademi Penerbang Indonesia Banyuwangi dapat diselesaikan dengan baik.

Penyusunan laporan *On The Job Training (OJT)* memiliki maksud dan tujua sebagai cara kami untuk lebih mendalamai dan mengimplementasikan ilmu yang telah didapatkan dalam pelaksanaan *On The Job Training*. Selain itu juga bermanfaat unutk menambah wawasan dan pengetahuan bagi para pembacca, khususnya bagi pribadi kami.

Ucapan terima kasih kami sampaikan kepada segenap pihak yang telah membantu selama proses penyusunan *On The Job Training (OJT)* ini, terutama kepada :

1. Bapak Ahmad Bahrawi, S.E,M.T., selaku Direktur Politeknik Penerbangan Surabaya.
2. Bapak Capt. Danieel Dewantoro Rumani selaku Direktur Api Banyuwangi.
3. Bapak Rahmatanto Imanthiar, S.Ak. selaku *Manager of AMO145 ICPA*. Dan *Chief Maintenance* Hanggar C Akademi Penerbang Indonesia Banyuwangi.
4. Bapak Bambang Junipitoyo, S.T, M.T., selaku Ketua Program Studi Diploma 3 Teknik Pesawat Udara di Politeknik Penerbangan Surabaya.
5. Bapak Bambang Junipitoyo, S.T, M.T., selaku Dosen Pembimbing Materi.
6. Mas Andhika Bagaspati, S.T selaku pembimbing lapangan Laporan OJT.
7. Seluruh dosen dan instruktur pengajar Politeknik Penerbangan Surabaya yang telah membimbing selama ini.
8. Seluruh dosen dan pegawai Politeknik Penerbangan Surabaya yang telah membantu dan mendukung pelaksanaan kegiatan *On The Job Training*.
9. Ibu Pamela dan Bapak Timur Raya selaku Orang Tua saya yang telah memberikan doa serta bantuan secara materi, dukungan moral dan doa sehingga dapat melaksanakan kegiatan *On The Job Training* ini serta menyelesaikan laporannya.
10. Seluruh *engineer* dan *mechanic* Hanggar C Akademi Penerbang Indonesia Banyuwangi.
11. Seluruh sahabat, senior, junior, mentor, motivator, dan penyemangat dalam menempuh pendidikan di Politeknik Penerbangan Surabaya.

Tentunya laporan ini masih jauh dari kata sempurna. Atas kesalahan dan kata – kata yang kurang berkenan, kami memohon maaf. Saran dan kritik membangun kami harapkan demi karya yang lebih baik di masa mendatang.

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OJT (*On The Job Training*)

Kegiatan pembelajaran praktek maupun teori secara langsung pada lingkungan kerja dengan supervise yang kompoten dibidangnya.

API (Akademi Penerbang Indonesia)

Perguruan tinggi dibawah naungan Kementrian perhubungan yang terletak di Banyuwangi.

AFML *(Aircraft Fligh Maintenance Logbook)*

Buku wajib terbang yang ada di pesawat yang sedang beroperasi. Buku ini berisi data catatan terbang pesawat yang ditulis oleh engineer dan pilot.

AMM *(Aircraft Maintenance Manual)*

dokumen yang menjelaskan prosedur yang dilakukan dalam perawatan pesawat.

AMO *(Approved maintenance organizations)*

Organisasi yang disahkan oleh DGCA untuk melakukan perawatan, perbaikan dan modifikasi pesawat sesuai dengan cakupan kemampuannya

Artifisial horizontal indicator (AHI)

digunakan untuk mengetahui atau menunjukkan sikap pesawat atau gerakan pesawat terhadap sumbu longitudinal axis dan sumbu lateral axis.

CASR *(Civil Aviation Safety Regulation)*

Berisi tentang aturan pengoprasian pesawat.

DGCA *(Directorate General of Civil Aviation)*

Unsur pelaksana sebagian tugas dan fungsi Kementerian Perhubungan Indonesia, yang berada di bawah dan bertanggung jawab kepada Menteri Perhubungan.

Ground Run Up

Kegiatan yang dilakukan penerbang sebelum terbang, dan dilakukan

teknisi pesawat udara sebagai bagian dari kegiatan perawatan dan pemeliharaan pesawat.

Heading

Adalah sudut arah hidung pesawat yang diukur berdasarkan kutub utara sebagai acuan

ICAO *(Internatonal Civil Aviation Organization)*

Sebuah lembaga Perserikatan Bangsa-Bangsa yang didirikan menurut Konvensi Chicago 1944 tentang Penerbangan Sipil Internasional

BAB I
PENDAHULUAN

1.1 Latar Belakang

Sumber daya manusia merupakan pelaksana dari suatu Pembangunan yang termasuk dalam salah satu indikator kemajuan suatu negara. Dalam dunia penerbangan faktor utama yaitu sikap dan perilaku yang selalu mengutamakan keselamatan, sehingga perlu sebuah pelatihan pendidikan untuk memenuhi unsur tersebut. Politeknik Penerbangan Surabaya memiliki berbagai program studi, yang salah satunya adalah Program Studi Teknik Pesawat Udara (TPU). Diperlukan praktik yang dapat diperoleh melalui kegiatan *On The Job Training* (OJT) atau praktek kerja lapangan yang merupakan salah satu progam kurikulum pendidikan di Politeknik Penerbangan Surabaya, dengan harapan agar para mahasiswa mampu mengaplikasikan kemampuannya di dunia kerja nanti, sehingga pengetahuan dasar dan teori dasar yang disampaikan dikelas akan lebih sempurna dengan di aplikasikan secara langsung di lapangan.

Kegiatan *On The Job Training* bagi mahasiswa Diploma III Teknik Pesawat Udara dilaksanakan berdasarkan kurikulum dan silabus yang dibuat sesuai dengan jadwal kalender akademis yang ditetapkan oleh Politeknik Penerbangan Surabaya. Civitas Akademi Penerbang Indonesia (API) Banyuwangi dipilih sebagai tempat yang memiliki banyak pengalaman dan kesesuaian dengan program pendidikan di Politeknik Penerbangan Surabaya. Salah satu hal yang paling penting yang dilakukan di dunia penerbangan adalah perawatan teratur yang diberikan kepada pesawat. Perawatan diberikan untuk memberikan kenyamanan (*secure*) dan keamanan (*safety*) selama beroperasi dan juga menghasilkan pesawat yang mempunyai performa tinggi. Akademi Penerbang Indonesia (API) Banyuwangi selalu melaksanakan perawatan pada pesawatnya secara teratur. Dengan kemampuan tersebut kami mencoba untuk mendapatkan pengalaman dalam hal merawat pesawat di Akademi Penerbang Indonesia (API) Banyuwangi.

1.2 Tujuan dan manfaat

1.2.1 Tujuan

Tujuan dilaksanakannya *On The Job Training* (OJT) adalah sebagai berikut :

1. Melakukan pengenalan pada pada awal lingkungan kerja bagi mahasiswa dan memperoleh pengalaman nyata dari lembaga atau perusahaan upaya mengembangkan ilmu serta keterampilan yang nantinya akan bekerja di dunia penerbangan khususnya di bidang Teknik pesawat udara untuk melakukan perawatan pada pesawat, dengan berpedoman pada pengalaman *On The Job Training.*
2. Mengetahui dan melihat secara langsung penggunaan atau peranan teknologi secara langsung di tempat *On The Job Training* serta melatih penalaran dalam menyelesaikan suatu pemasalahan yang belum pernah ditemui sebelumnya.

1.2.2 Manfaat

A. Manfaat yang didapatkan oleh mahasiswa Politeknik Penerbangan Surabaya adalah
   1. Meningkatkan ilmu yang diperoleh selama belajar di Politeknik Penerbangan Surabaya serta mendapatkan gambaran secara nyata mengenai situasi dan kondisi dilapangan kerja.
   2. Mendapatkan pengalaman kerja yang sesungguhnya dalam melaksanakan perbaikan dan perawatan pesawat udara.

B. Manfaat bagi lokasi *On The Job Training* adalah
   1. Adanya saran dan masukan yang membangun yang diperoleh dari mahasiswa, serta instansi atau maskapai mendapat bantuan tenaga dari mahasiswa yang melaksanakan progam *On The Job Training.*

BAB II
PROFIL LOKASI ON THE JOB TRAINING

2.1 Sejarah Singkat

Di tahun 2013 Dalam rangka memenuhi kebutuhan akan tersedianya sumber daya manusia penerbang yang memiliki kompetensi sesuai dengan perkembangan teknologi dan memenuhi standar internasional. Berawal dari nama Loka Pendidikan dan Pelatihan Penerbang Banyuwangi yang kemudian disingkat LP3 Banyuwangi, merupakan Unit Pelaksana Teknis di Lingkungan Kementerian Perhubungan yang berada di bawah dan bertanggung jawab kepada Kepala Badan Pengembangan Sumber Daya Manusia Perhubungan dan secara teknis operasional dibina oleh Kepala Pusat Pengembangan Sumber Daya Manusia Perhubungan Udara yang ditetapkan dengan Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 73 Tahun 2013 tentang Organisasi dan Tata Kerja Loka Pendidikan dan Pelatihan Penerbang Banyuwangi tanggal 04 September 2013. Pada Tahun 2013, Sekolah *Pilot* Negeri berdiri di Banyuwangi – Jawa Timur yang merupakan Sekolah *Pilot* Kedua setelah Politeknik Penerbangan Indonesia Curug di Tangerang – Banten yang berdiri sejak Tahun 1952.

Gambar 2. 1 akademi penerbang Indonesia banyuwangi

Lalu pada tahun 2015 Loka Pendidikan dan Pelatihan Penerbang Banyuwangi secara resmi berubah nama menjadi Balai Pendidikan dan Pelatihan Penerbang Banyuwangi yang selanjutnya disingkat BP3 Banyuwangi melalui Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 123 Tahun 2015

tentang Organisasi dan Tata Kerja Balai Pendidikan dan Pelatihan Penerbang Banyuwangi tanggal 20 Agustus 2015.

Balai Pendidikan dan Pelatihan Penerbang Banyuwangi ditetapkan sebagai Instansi Pemerintah yang menerapkan Pengelolaan Keuangan Badan Layanan Umum, setelah memperoleh persetujuan Menteri Keuangan atas dasar usulan Menteri Perhubungan melalui Keputusan Menteri Keuangan Republik Indonesia Nomor: 740/KMK.05/2016 tentang Penetapan Balai Pendidikan dan Pelatihan Penerbang Banyuwangi Pada Kementerian Perhubungan Sebagai Instansi Pemerintah Yang Menerapkan Pengelolaan Keuangan Badan Layanan Umum tanggal 30 September 2016. Dengan telah ditetapkannya Balai Pendidikan dan Pelatihan Penerbang Banyuwangi sebagai organisasi pemerintah yang menerapkan Pengelolaan Keuangan Badan Layanan Umum, sehingga organisasi ditata kembali melalui Peraturan Menteri Perhubungan Republik Nomor PM 95 Tahun 2017 tentang Organisasi dan Tata Kerja Balai Pendidikan dan Pelatihan Penerbang Banyuwangi tanggal 26 September 2017.

Seiring dengan pembaharuan pendidikan dan peningkatan kualitas sumber daya manusia di bidang perhubungan yang dilakukan secara terencana, terarah, dan berkesinambungan melalui peningkatan status Balai Pendidikan dan Pelatihan Penerbang Banyuwangi menjadi Akademi Penerbang Indonesia Banyuwangi melalui Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 26 Tahun 2019 tentang Organisasi dan Tata Kerja Akademi Penerbang Indonesia Banyuwangi tanggal 15 April 2019.

2.1. Data umum

Visi dan Misi Akademi Penerbang Indonesia Banyuwangi untuk mengembangkan dan melaksanakan semua kegiatan yang ada di dalam suatu lembaga. Untuk mewujudkan cita-cita atau cita-cita dalam kurun waktu tertentu, maka visi dan misi Akademi Penerbangan Indonesia Banyuwangi meliputi:

- **Visi Akademi Penerbang Indonesia Banyuwangi**

Menjadi lembaga pendidikan dan pelatihan penerbang yang unggul dan professional serta berdaya saing tinggi di wilayah asia pasifik.

- **Misi Akademi penerbang Indonesia Banyuwangi**

(a) Menyelenggarakan pendidikan dan pelatihan penerbang dan personil operasi penerbangan yang professional sesuai standar internasional.
(b) Menyelenggarakan pendidikan dan pelatihan untuk menghasilkan sumber daya manusia di bidang penerbangan yang prima dan bermanfaat untuk kesejahteraan Masyarakat.
(c) Menyelenggarakan penelitian untuk perkembangan ilmu pengetahuan dan teknologi di bidang penerbangan serta pengabdian kepada Masyarakat.
(d) Mengembangkan kerjasama dengan lembaga dalam negeri maupun luar negeri.
(e) Meningkatkan tata kelola lembaga mandiri, transparan, akuntabel, efektif dan efisien.
(f) Mengembangkan kurikulum dan silabus program studi penerbang dan Menghasilkan lulusan penerbang yang mempunyai daya saing dan siap kerja pada industri penerbangan nasional dan internasional.

2.2 Fasilitas

Akademi Penerbang Indonesia Banyuwangi mempunyai beberapa fasilitas Pendidikan yang digunakan.

A. Fasilitas Hanggar Pesawat Udara

Akademi Penerbang Indonesia Banyuwangi memiliki fasilitas 3 unit hanggar pesawat udara yaitu Hanggar A, Hanggar B, dan Hanggar C. Ketiga unit tersebut dapat menyimpan pesawat dengan total kapasitas pesawat 37 pesawat. Untuk gambar 2.3 dan gambar 2.4 merupakan Hanggar A dan C yang digunakan sebagai tempat pelaksanaan perawatan dan perbaikan pesawat, baik berupa *maintenance*, penggantian komponen, cleaning, penggantian *consumable part*, inspeksi ringan hingga tahunan, dan lain-lain. Pada gambar 2.2 dapat dilihat tampilan Hanggar B yang terdapat *helicopter* yang Dimana telah disewakan oleh Akademi Penerbang Indonesia

Gambar 2. 2 Hanggar B

Gambar 2. 3 Hanggar A

Gambar 2. 4 Hanggar C

Gambar 2. 5 Ruang Enginering

Ruangan *Engineering*, untuk tempat penyimpanan rekaman data-data pesawat seperti *Aircraft Fligh Maintenance Logbook* (AFML) serta untuk evaluasi dan merencanakan jadwal inspeksi yang akan dilaksanakn oleh para engineer dilapangan.

Gambar 2. 6 Ruang tools

Ruangan *Tools*, digunakan untuk menyimpan tools, special tools, dan alat-alat pendukung lainnya dalam melaksanakan perawatan maupun perbaikan pesawat udara.

Gambar 2. 7 Ruang storage dan spare part

Ruangan *Storage & Spare Parts*, untuk menyimpan suku cadang (komponen pesawat)` dan bahan-bahan pendukung seperti *Tire* dan *Oil*.

B. Fasilitas Pesawat Udara

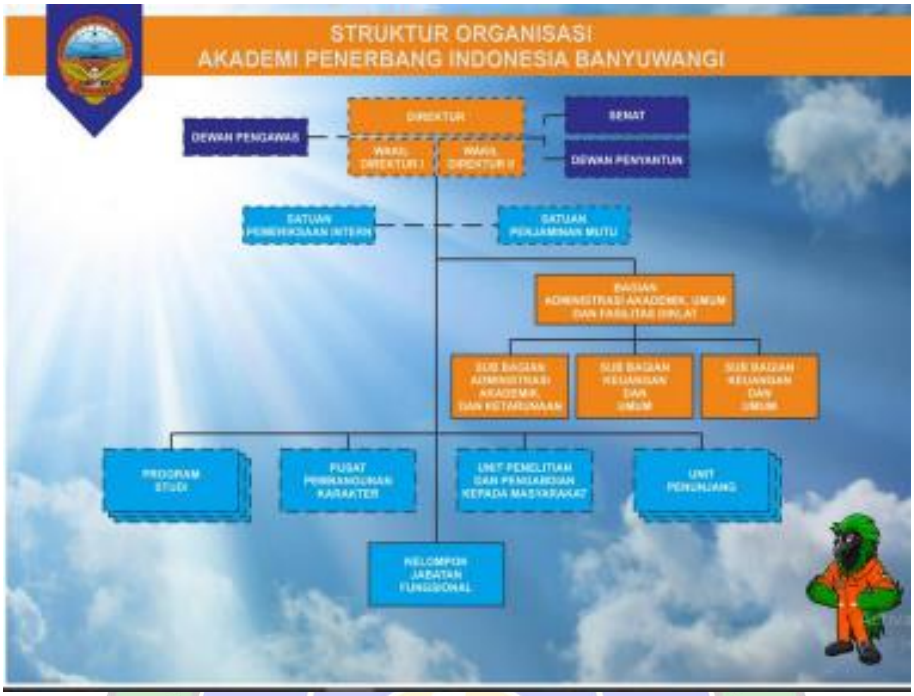
Gambar 2. 8 Pesawat Piper Seneca V

Gambar 2. 9 Pesawat Cessna 172

Gambar 2. 10 Seaplane

Akademi Penerbang Indonesia Banyuwangi mempunyai faislitas pendidikan yaitu 33 unit pesawat latih single engine Cessna 172-S dan 2 unit multi engine Piper Seneca V serta 2 unit pesawat Seaplane .

2.3 Struktur jabatan Akademi Penerbang Banyuwangi



Gambar 2. 11 Struktur jabatan Akademi Penerbang Banyuwangi

Berdasarkan gambar 2.8 semua unit bertanggung jawab terhadap direktur Akademi Penerbang Indonesia Banyuwangi yang dijabat oleh Capt. Daniel Dewantoro Rumani, S.E., S.SiT., M.M., MA.,. Selaku pimpinan tertinggi bertugas mengambil kebijakan serta mengkoordinir segala bentuk kegiatan di lingkup API Banyuwangi. Tentunya tugas dan tanggung jawab yang besar tersebut dibantu dan didampingi oleh wakil direktur 1 dan wakil direktur 2 dalam memimpin pelaksanaan kegiatan. Sedangkan sub bagian admistrasi akademik ketarunaan dan sub bagian keuangan bertanggung jawab terhadap bagian administrasi akademik umum dan fasilitas diklat dalam mengatur dan mengelola keuangan, administrasi, pelayanan serta perencanaan bagi mahasiswa Akademi Penerbang Banyuwangi.

Selain itu bagian fasilitas dan Pendidikan serta satuan pemerikasa *internal* bertugas dalam pengadaan maupun penyelenggaraan sarana dan prasarana sebagi media pelatihan calon penerbang. Kemudian pelaksanaan kegiatan kerohanian, konsultasi serta keolahragaan merupakan tanggung jawab daripada unit bagian

pembangunan karakter API Banyuwangi. Pada bagan diatas juga terdapat unit penelitian dan pengabdian masyarakat. Merupakan tenaga pengajar yang diberikan tugas tambahan dalam kegiatan dibidang penelitian serta pengabdian kepada masyarakat Sebagai sekolah penerbang segala prosedur dan kurikulum API Banyuwangi harus berdasarkan dengan CASR 141 yang telah dikeluarkan oleh DGCA.

CASR 141 mengatur mengenai persyaratan dan standar pelatihan penerbangan termasuk fasilitas pesawat yang digunakan, prosedur, operasi keselamatan, sistem menejemen yang berkaitan dengan pelatihan penerbang baik Akademi penerbang Indonesia juga sudah memiliki sertifikat *Approved Maintenance Organizations* (AMO) terkait kinerjanya dalam melakukan perawatan, perbaikan, pemeliharaan *preventif* maupun perubahan pada pesawat udara. Hal ini sesuai dengan persyaratan dalam CASR part 145 dimana lembaga atau organisasi yang melakukan perawatan pesawat udara harus memiliki sertifikasi AMO yang dikeluarkan oleh Direktorat Jendral Perhubungan Udara.

BAB III
TINJAUAN TEORI

3.1 Cessna 172 skyhawk

Cessna 172 Skyhawk merupakan pesawat *single piston engine* paling populer yang pernah dibuat dan mendapatkan reputasi sebagai pesawat latih terbaik. Sampai dengan saat ini *Cessna Aircraft Company* telah berhasil merakit lebih dari 44.000 unit pesawat seri ini yang dimana menunjukkan bahwa pesawat ini merupakan pesawat paling favorit di kelasnya.

Pesawat Cessna seri 172 *Skyhawk* ini merupakan update dari model varian cessna 172 sebelumnya yang dimana seri ini pertama kali diproduksi pada tahun 1998. Pesawat Cessna 172 *Skyhawk* ini dibekali teknologi terbaru dalam sistem integrasi *avionic cockpit*, yaitu *Garmin G1000 Nav III*. Dengan antarmuka grafis yang meningkat, perangkat *hardware* yang *powerfull*, tampilan resolusi lebih tinggi, fungsionalitas tambahan untuk meningkatkan kesadaran situasional, dan teknologi nirkabel opsional, sehingga mempermudah pengguna dalam mengelola sistem *flight instrument*. Adapun beberapa fitur yang ditawarkan pada sistem Garmin G1000 Nxi pada pesawat ini sebagai berikut :

A. Wireless database and flight plan loading
B. *Enhanced Vision System* (EVS)
C. Enhanced HSI Functionality
D. *VFR Sectionals*
E. *Chelton FlightLogic EFIS glass cockpits*
F. *COM Frequency Decoding*
G. XGA technology display units

Selain membahas tentang *Garmin G1000 Nav III*. Berikut ini juga akan dipaparkan terkait spesifikasi lebih lengkap pada table 3.1 dari Cessna 172 *Skyhawk* milik Akademi Penerbang Indonesia Banyuwangi:

Tabel 3. 1 Spesifikasi Cessna 172S

Dimension	
Length	*27 ft 2 in (8.3m)*

Height	*8 ft 11 in (2.7m)*
Wingspan	*36 ft 0 in (11.00m)*
Wing Area	*174 sq ft (16.17 sq m)*

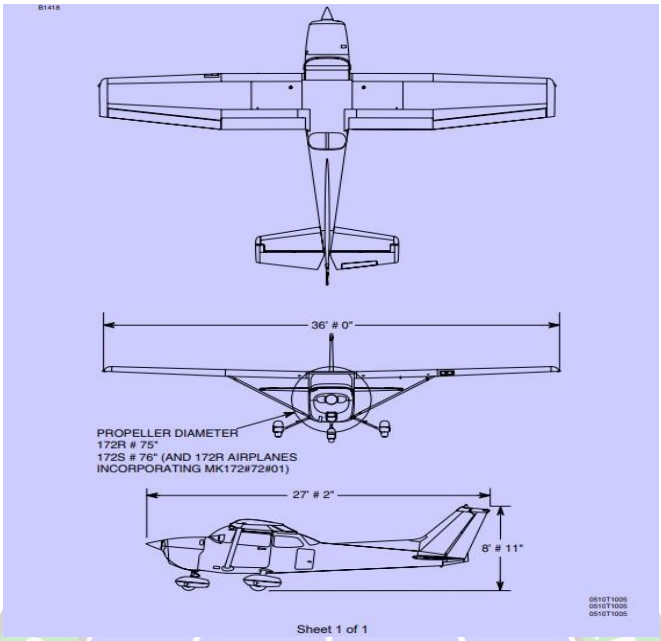
Weights	
Maximum Ramp Weight	2,558 lb (1,160 kg)
Maximum Takeoff Weight	2,550 lb (1,157 kg)
Maximum Landing Weight	2,550 lb (1,157 kg)
Maximum Payload	870 lb (395 kg)
Useful Load	878 lb (398 kg)

Performance	
Maximum Cruise Speed	124 ktas (230 km/h)
Maximum Range	640 nm (1,185 km)
Takeoff Distance	1,630 ft (497 m)
Landing Distance	1,335 ft (407 m)
Maximum Climb Rate	730 fpm (223 mpm)
Maximum Limit Speed	163 kias (302 km/h)
Stall Speed	48 kcas (89 km/h)

Baggage capacity	
Weight	120 lb
Volume	30 cu. ft.

Powerplant	
Manufacture	Lycoming
Model	IO-360-L2A
Power Output	180 hp (180 hp)
Propeller Manufacture	McCauley

Description	blade metal, fixed pitch



Gambar 3. 1 Cessna 172S Sumber: *Aircraft Maintenance Manual*

3.2 Maintenance pada pesawat Cessna 172

Perawatan pesawat udara merupakan salah satu unsur penting dalam suatu perusahaan di bidang penerbangan sebagaimana Akademi Penerbang Indonesia Banyuwangi. Berdasarkan *Civil Aviation Safety Regulation (CASR)* part 43 tentang *Maintenance, Preventive Maintenance, Rebuilding and Alteration*. Perawatan adalah suatu rangkaian kegiatan yang dilakukan untuk memastikan bahwa pesawat udara beserta komponen-komponennya bekerja sesuai dengan fungsinya sebagaimana yang ditunjukan pada gambar 3.1. Hal ini dikarenakan setiap *part* atau komponen pesawat memilik *lifetime* tertentu, sehingga harus dimonitor secara rutin, Perawatan pesawat udara meliputi inspeksi, *repair, servicing, overhaul* dan penggantian *part*.

Tujuan lain daripada perawatan pesawat udara adalah untuk mempertahankan pesawat dalam kondisi terbaik pada saat dioperasikan oleh pengguna. Untuk dapat melakukan perawatan dengan benar, maka setiap pesawat udara diharuskan memiliki Program Perawatan (*Maintenance Program*) gambar 3.2 yang berisi informasi detail tentang apa, kapan dan bagaimana sebuah pesawat udara dirawat.

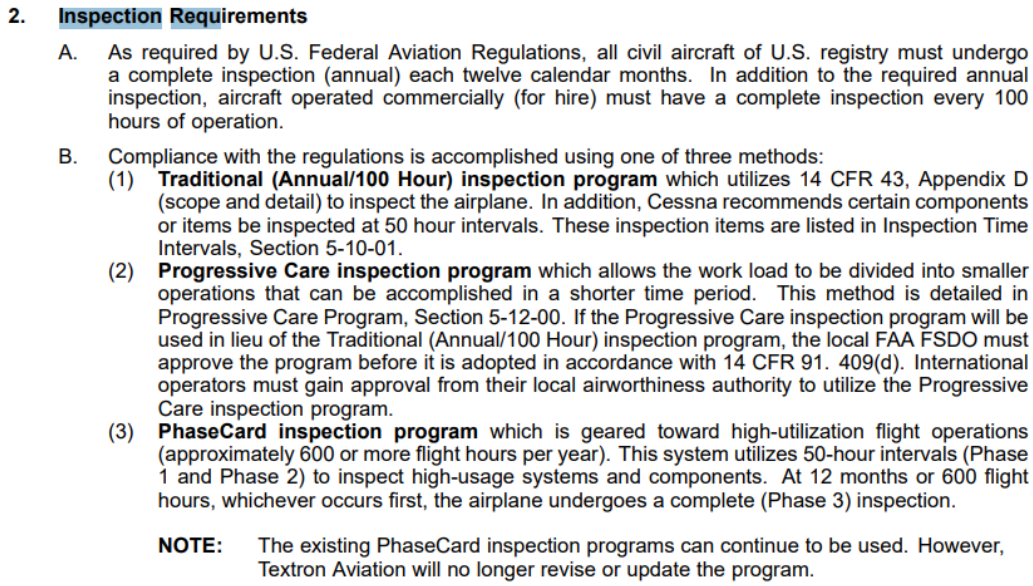
Unit hanggar Akademi Penerbang Indonesia Banyuwangi menerapkan tradisional inspeksi, dimana inspeksi dilakukan setiap interval waktu tertentu menggunakan pedoman *flight hours* yang didasarkan pada jumlah jam operasional suatu pesawat terbang. Operasi yang tersisa mencakup semua persyaratan inspeksi yang jatuh tempo pada interval lain.

Gambar 3. 2 Maintenance Cessna 172S

3.3 Persyaratan inspeksi

Sebagaimana disyaratkan oleh U.S. *Federal Aviation Regulation* pada gambar 3.3, semua pesawat terbang sipil yang terdaftar di U.S. harus menjalani pemeriksaan tahunan setiap dua belas bulan kalender. Selain pemeriksaan tahunan yang diwajibkan, pesawat yang dioperasikan secara komersial (untuk disewakan) harus menjalani pemeriksaan lengkap setiap 100 jam.

sehingga harus dilakukan perawatan pesawat sesuai dengan *maintenance manual* yang tersedia. Inspeksi umum ini bertujuan untuk menemukan bagian pesawat yang perlu perawatan lebih. Beberapa kegiatan *maintenance inspection operation* 1 yang sesuai dengan task card Cessna 172 Skyhawk milik Akademi Penerbang Indonesia Banyuwangi.



2. Inspection Requirements

A. As required by U.S. Federal Aviation Regulations, all civil aircraft of U.S. registry must undergo a complete inspection (annual) each twelve calendar months. In addition to the required annual inspection, aircraft operated commercially (for hire) must have a complete inspection every 100 hours of operation.

B. Compliance with the regulations is accomplished using one of three methods:

(1) **Traditional (Annual/100 Hour) inspection program** which utilizes 14 CFR 43, Appendix D (scope and detail) to inspect the airplane. In addition, Cessna recommends certain components or items be inspected at 50 hour intervals. These inspection items are listed in Inspection Time Intervals, Section 5-10-01.

(2) **Progressive Care inspection program** which allows the work load to be divided into smaller operations that can be accomplished in a shorter time period. This method is detailed in Progressive Care Program, Section 5-12-00. If the Progressive Care inspection program will be used in lieu of the Traditional (Annual/100 Hour) inspection program, the local FAA FSDO must approve the program before it is adopted in accordance with 14 CFR 91. 409(d). International operators must gain approval from their local airworthiness authority to utilize the Progressive Care inspection program.

(3) **PhaseCard inspection program** which is geared toward high-utilization flight operations (approximately 600 or more flight hours per year). This system utilizes 50-hour intervals (Phase 1 and Phase 2) to inspect high-usage systems and components. At 12 months or 600 flight hours, whichever occurs first, the airplane undergoes a complete (Phase 3) inspection.

NOTE: The existing PhaseCard inspection programs can continue to be used. However, Textron Aviation will no longer revise or update the program.

Gambar 3. 3 *Maintenance Manual Cessna 172S*

Kepatuhan terhadap peraturan dilakukan dengan menggunakan salah satu dari tiga metode berikut :

1. *Traditional (Annual/100 hour) Inspection Program* yang merekomendasikan item komponen tertentu diperiksa dengan interval 50 jam. Item inspeksi ini tercantum dalam *Inspection Time Intervals*.
2. *Progressive Care Inspection Program* yang memungkinkan beban kerja dibagi menjadi lebih kecil operasi yang dapat diselesaikan dalam waktu yang lebih singkat. Metode ini dirinci dalam Program Perawatan *Progresif*, Jika program pemeriksaan Perawatan *Progresif* akan digunakan sebagai pengganti program inspeksi Tradisional (Tahunan/100 Jam), Internasional operator harus mendapatkan persetujuan dari otoritas kelaikan udara setempat untuk menggunakan *Progressive Care Inspection Program.*
3. *Phase Card Inspection Program* yang diarahkan untuk operasi penerbangan dengan pemanfaatan tinggi (sekitar 600 jam terbang atau lebih per tahun). Sistem ini menggunakan interval 50 jam (*Fase* 1 dan *Fase* 2) untuk memeriksa sistem dan komponen yang sering digunakan. Pada 12 bulan atau 600 jam terbang, mana yang terjadi lebih dulu.

Kegiatan selama OJT perawatan pesawat yang dilaksanakan menggunakan *Traditional Inspection* Program yaitu sebagai berikut :

1. *50 hours Inspection*
2. *100 hours Inspection*
3. *Pre-flight Check*
4. *Ground run*

3.3.1. 50 *hours inspection*

Kegiatan perawatan pesawat pada tabel 3.2 setiap pesawat mencapai penggunaan 50 jam disebut dengan 50 *hours inspection* menunjukan kegiatan kegitan yang harus dilakukan. Dalam giatnya perawatan pesawat ini didasari dengan referensi dari AMM (*Aircraft Maintenance Manual*) Cessna 172S.

Tabel 3. 2 Task 50 hours inspection

NO	ATA CHAPTER	NO	ATA CHAPTER
1	Chapter 21 – Air Conditioning	11	Chapter 52 – Doors
2	Chapter 23 – Communication	12	Chapter 55 – Stabilizers
3	Chapter 24 – Electrical Power	13	Chapter 56 – Windows
4	Chapter 25 – Equipment/ Furnishing	14	Chapter 57 – Wings
5	Chapter 26 – Fire Protection	15	Chapter 61 – Propellers
6	Chapter 27 – Flight Control	16	Chapter 71 – Powerplants
7	Chapter 28 – Fuel	17	Chapter 76 – Engine Controls
8	Chapter 31 – Indicating	18	Chapter 78 – Exhaust
9	Chapter 33 – Lights	19	Chapter 79 – Oil
10	Chapter 34 – Navigation	20	Chapter 80 – Starting

Sumber : *Task card 50 hours inspection*

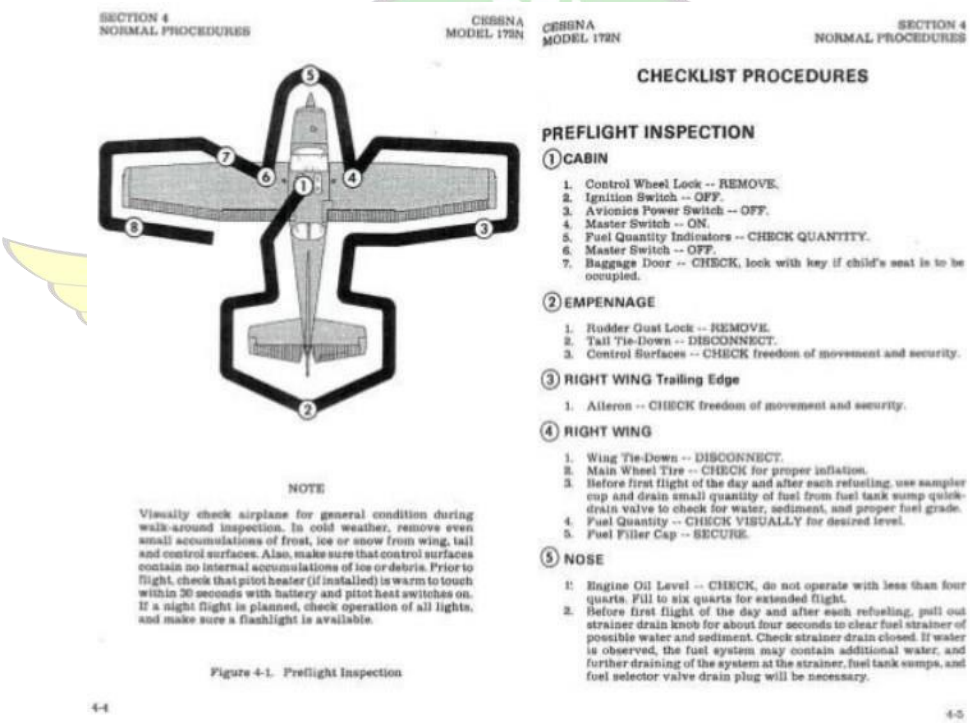
3.3.2. 100 *Hours inspection*

Kegiatan perawatan pesawat setiap pesawat mencapai penggunaan 100 jam disebut dengan 100 *hours inspection.* Dalam giatnya perawatan pesawat

ini didasari dengan referensi dari AMM (*Aircraft Maintenance Manual*) Cessna 172- S. Kegiatan ini sama dengan kegiatan inspeksi 50 jam dan ada beberapa tambahan.

3.3.3. *Pre flight check*

Pre-Flight pada gambar 3.4 merupakan kegiatan pemeriksaan pesawat, kegiatan ini guna untuk memastikan kondisi pesawat siap untuk terbang. Dalam pelaksanaannya kegiatan ini dilakukan oleh taruna penerbang yang akan melaksanakan latihan terbang. Kegiatan ini dilakukan dengan melakukan *walk around* seperti Gambar berikut .



SECTION 4
NORMAL PROCEDURES

CESSNA
MODEL 172N

NOTE

Visually check airplane for general condition during walk-around inspection. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. Prior to flight, check that pitot heater (if installed) is warm to touch within 30 seconds with battery and pitot heat switches on. If a night flight is planned, check operation of all lights, and make sure a flashlight is available.

Figure 4-1. Preflight Inspection

4-4

CESSNA
MODEL 172N

SECTION 4
NORMAL PROCEDURES

CHECKLIST PROCEDURES

PREFLIGHT INSPECTION

(1) CABIN

1. Control Wheel Lock -- REMOVE.
2. Ignition Switch -- OFF.
3. Avionics Power Switch -- OFF.
4. Master Switch -- ON.
5. Fuel Quantity Indicators -- CHECK QUANTITY.
6. Master Switch -- OFF.
7. Baggage Door -- CHECK, lock with key if child's seat is to be occupied.

(2) EMPENNAGE

1. Rudder Gust Lock -- REMOVE.
2. Tail Tie-Down -- DISCONNECT.
3. Control Surfaces -- CHECK freedom of movement and security.

(3) RIGHT WING Trailing Edge

1. Aileron -- CHECK freedom of movement and security.

(4) RIGHT WING

1. Wing Tie-Down -- DISCONNECT.
2. Main Wheel Tire -- CHECK for proper inflation.
3. Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick-drain valve to check for water, sediment, and proper fuel grade.
4. Fuel Quantity -- CHECK VISUALLY for desired level.
5. Fuel Filler Cap -- SECURE.

(5) NOSE

1. Engine Oil Level -- CHECK, do not operate with less than four quarts. Fill to six quarts for extended flight.
2. Before first flight of the day and after each refueling, pull out strainer drain knob for about four seconds to clear fuel strainer of possible water and sediment. Check strainer drain closed. If water is observed, the fuel system may contain additional water, and further draining of the system at the strainer, fuel tank sumps, and fuel selector valve drain plug will be necessary.

4-5

Gambar 3. 4 *Pre flight checklist*

3.4 Servicing Main Battrey

Standart dari *Main Battery* pesawat pada gambar 3.7 adalah 24volt, 8 Amp-hours dengan tipe *flooded lead-acid battery. Optional tipe wooded* 10.0 Amp-*Hour* serta tipe tertutup sebesar 13.6 Amp-Hour. *Main Battery* pada pesawat Cessna 1725 dipasang di sisi kiri depan *firewall* dibawah *electrical power junction box.*

Main Battery berfungsi memasok daya listrik sebesar 24 volt untuk menghidupkan *engine* dan memberikan sumber daya cadangan jika terjadi kegagalan *alternator.* Pengoperasian *Main Battery* dikendalikan oleh *Switch master alternator battery*, *switch* ini dapat ditemukan pada bagian sisi kiri *panel switch* yang mana untuk *battery* pada *switch* bagian kanan. *Swicth master battery*, ketika dioperasikan menghubungkan *battery contractor coil* atau ke *ground* sehingga kontak menutup dan mensuplai daya ke sistem hanya *dari main battery.*

Gambar 3. 5 *Standby battrey*

3.5 Static Discharge

Sistem kerja *static discharge* sebagai Penyalur muatan listrik statis, muatan dialihkan keluar dari pesawat agar. penumpukan muatan karena sambaran petir tidak terjadi, sehingga instrumen pesawat yang digunakan sebagai alat navigasi dan komunikasi bisa bekerja tanpa ada masalah. Pembuangan listrik statis ke atmosfir bisa mencegah penumpukan muatan statis di struktur pesawat dengan menentukan letak dimana *static discharge* itu dipasang pada pesawat terbang. Dengan menggunakan metode bola gulir, bisa untuk menegtahui potensi yang terkena sambaran petir itu terletak dimana saja dan juga bisa menentukan tempat-tempat yang akan dipasang *static discharge*. Sehingga mendapatkan hasil yang sesuai dengan keamanan dan kelaikan pesawat pada saat sedang melakukan

penerbangan maupun pada saat *parking*. ketika *static discharge* bekerja dengan normal sangat kecil kemungkinan bila pesawat terbang terkena oleh sambaran petir yang menyebabkan gangguan pada elektronik maupun *body* pesawat terbang.

Gambar 3. 6 *Static discharge*

3.6 Brake System

Brake system terdiri dari dua *master cylinder* terletak tepat di depan pedal kemudi pilot, *brake line* dan selang (*hose*) yang menghubungkan setiap *master brake cylinder* ke *brake caliper*, *brake caliper* tipe *axial-single piston*, yang terletak di setiap *main landing gear*.

Hydraulic adalah suatu *system* penghasil tenaga atau tekanan dengan mengandalkan zat cair atau *fluida* sebagai perantara. *Brake* system adalah unit untuk mengontrol pergerakan pesawat pada saat di darat. Setiap *brake* dilengkapi piston yang mengaktifkan *brake* dengan *hydraulic pressure. System Hydraulic* memiliki nilai efisiensi yang dapat mencapai 100% dan kerugian yang disebabkan oleh gesekan cairan yang tidak banyak berarti dibandingkan dengan keuntunganya. *Hydraulic system* merupakan bagian dari ilmu mekanika *fluida* yang mempelajari karakteristik fisik cairan baik dalam kondisi diam atau bergerak. *Brake* berfungsi mensupport pesawat saat *parking*, *taxing* dan *landing*. Pada pesawat terbang Cessna 172S dilengkapi dengan 3 *wheel* yang terdiri dari sebuah *nose wheel* dan 2 buah *main wheel*

BAB IV
PELAKSANAAN OJT

4.1. Lingkup pelaksanaan OJT

On The Job Training (OJT) Mahasiswa Diploma III Teknik Pesawat Udara dilaksanakan di Akademi Penerbang Indonesia Banyuwangi. Kegiatan tersebut dikelompokkan menjadi beberapa 2 unit berdasarkan shift kerja, penggolongan menjadi beberapa 2 unit dalam kegiatan tersebut. Shift pagi melaksanakan praktik mulai pukul 06.00 WIB sampai dengan 14.00 WIB. Shift siang bekerja mulai pukul 08.00 WIB sampai 16.00 WIB dengan cakupan wilayah kerja Hangar A dan Hangar C. OJT ini dilaksanakan selama 3 bulan, terhitung mulai tanggal 01 april 2024 sampai dengan 30 Juni 2024. Pembagian tugas dalam kegiatan tersebut disesuaikan oleh *chief of maintenance*.

4.2. Waktu dan Tempat OJT

On the Job Training (OJT) di Akademi Penerbang Indonesia Banyuwangi dilaksanakan dengan data sebagai berikut.

Peserta : Taruna Politeknik Penerbangan Surabaya

Jumlah : 14 orang

Waktu : 3 Mei 2023 sampai dengan 10 Juli 2023

Tempat : Hangar A dan C Akademi Penerbang Indonesia Banyuwangi

4.3. Permasalahan

Pelaksanaan *On The Job Trainning* mahasiswa dilibatkan secara langsung dalam kegiatan Inspeksi dan perawatan pesawat Cessna 172S sehingga peserta menjumpai beberapa studi kasus yang diangkat menjadi materi penulisan laporan, studi kasus diambil dari kegiatan sebagai bentuk laporan kegiatan *On The Job Training* di Akademi Penerbang Indonesia Banyuwangi. Secara garis besar selama mengikuti kegiatan *On The Job Training* di Akademi Penerbang Indonesia Banyuwangi, peserta OJT mempelajari tahapan mengenai perawatan pesawat udara, Adapun urutan kerangka kerja dijelaskan sebagai berikut:

1. Identifikasi Masalah

Identifikasi Masalah adalah tahap sebelum melaksanakan suatu perbaikan maupun perawatan pesawat udara langkah pertama yang harus

dilakukan yaitu identifikasi *troubleshooting* dimana teknisi akan mendiagnosa letak maupun sumber permasalahan sebelum masuk ke tahap selanjutnya.

2. *Disassembly*

Disassembly adalah kebalikan daripada proses *assembly* dimana disassembly merupakan kegiatan melepas komponen-komponen maupun bagian pesawat yang ada di suatu system pesawat udara. Berdasarkan buku *Aircraft Power Plant Chapter 10* menyatakan bahwa perlu persiapan sebelum melaksanakan proses assembly seperti pengadaan wadah tempat menyimpan, bagian-bagian individu harus ditata secara teratur pada meja kerja saat dipindahkan. Untuk menjaga dari kerusakan dan untuk mencegah kehilangan.

3. *Inspection*

Inspection adalah ketika pesawat digunakan maka umur penggunaan dari suatu komponen akan berkurang sehingga salah satu tujuan dari *aircraft inspection* adalah mengganti atau memperbaiki part-part tersebut serta memastikan kondisi pesawat laik terbang ketika dioperasikan. Semua kegiatan isnpeksi sudah ditentukan melalui *task card dan* dilakukan berdasarkan *Maintenance Manual Cessna* 172 Skyhawk.

4. Repair / Servicing

Repair adalah kegiatan memperbaiki atau mengganti suatu bagian yang rusak, perbaikan biasanya meliputi penggantian suku cadang yang terdapat pada *aircraft system*

5. *Re-assembly/installation*

Reassembly adalah tahap dimana teknisi memasang kembali semua komponen yang telah di *servicing* maupun diperbaiki. Langkah *installation* semua bagian pesawat sudah tertulis pada *Aircraft Maintenance Manual*

6. *Functional Test*

Functional Test adalah tahap setelah semua kegiatan penggantian maupun perbaikan komponen pesawat telah selesai tahap berikutnya adalah melakukan pengamatan terhadap kinerja daripada part yang diganti ataupun diperbaiki

7. *Return to Service*

Return to Service adalah tahap ketika maintenance telah selesai dilaksanakan dan hasil *functional test* melalui *ground run* menyatakan bahwa semuanya layak, maka pesawat tersebut dikatakan *RTS (Return To Service)* sehingga dapat dioperasikan kembali.

Ketujuh point tersebut diimplementasikan oleh peserta selama pelaksanaan OJT. Berikut akan disajikan studi kasus yang memenuhi point point diatas dan *servicing* yang telah dikerjakan:

1. *Static discharge*
2. *Battery servicing*
3. *Brake loss*

4.4. Penyelesaian Masalah

Dari beberapa *troubleshooting* yang ditemukan pada saat melaksanakan *On The Job Training* maka harus diberikan beberapa penanganan masalah sebagai berikut :

4.4.1. Static Discharge

1. Identifikasi

Pesawat Cessna 172S dengan registrasi PK BYD dilakukan perbaikan pada tanggal 07 juni 2023 karena *static wick* putus saat pelaksanaan *pre flight* di pagi hari, sesuai dengan *MM chapter 23-60-00 Page 601* sebagai pedoman, *engineer* mengganti *static discharge* yang telah patah.

Gambar 4. 1 *static discharge*

2. *Disassembly*

Setelah melakukan identifikasi permasalahan maka selanjutnya adalah *disasseembly* dengan melepas *static discharge* yang putus pelaksanaan *disassembly* ini dilaksanakan dengan melepas *rivet* terlebih dahulu menggunakan *punch.*

Gambar 4. 2 *Removal static discharge*

3. *Inspection*

Melakukan inspeksi pada komponen masih layak digunakan atau tidak karena *static discharge* sebelumnya telah patah, sesuai dengan manual untuk melakukan penggantian dengan yang baru.

4. *Reassembly*

Reassembly dilaksanakan dengan membersihkan *skin* pada bagian *static wick* yang akan dipasang menggunakan *rivets* agar terpasang dengan rapat lalu tahap akhir dari *reassembly* yaitu melakukan *repaint*.

Gambar 4. 3 *installation static discharge*

5. Functional test

Setelah pelaksanaan *reassembly* maka dilakukan tes fungsi guna memastikan apakah *static discharge diinstall* dan berfungsi dengan baik menggunakan *megohmmeter*, gunakan *megohmmeter* yang disetel ke 500 volt untuk memeriksa resistensi antara *base assemblies* dan *static discharge* Pastikan resistansi antara *base assemblies* dan pelepasan *static discharge* adalah 1 hingga *100 megohmeter*.

6. Return to service

Setelah melakukan *functional test* dan memeriksa bahwa tidak terdapat masalah, maka pesawat dapat dikatakan *return to service* dengan syarat :

a. Pesawat beregristrsi PK – BYD dinyatakan telah di *maintenance* dan diinspeksi sesuai dengan *maintenance* progam yang telah disetujui.

b. Memenuhi persyaratan sesuai dengan CASR.

c. Dan pesawat dinyatakan *Airworthy condition* dengan tertanda tangan oleh *engineer* dan diberi nomer AMEL.

Maka Pesawat Cessna 172S PK – BYD telah memenuhi persyaratan dan dikatakan layak terbang dan kembali beroperasi.

4.4.2. Servicing Main Battrey

Pada pesawat Cessna 172S dengan registrasi PK-BYC melaksanakan *Inspection 100-Hours* dengan alur yang dilakukan adalah *Servicing Battery.*

1. Identification

Pesawat Cessna 172S PK-BYC pada tanggal 21 april 2024 melaksanakan *Inspection 100-Hours* dimana salah tugas dari *taskcard* dilakukan adalah *Servicing Battery Maintenance Manual* yang digunakan berada pada *Chapter 12* dan *Chapter 24* sebagai pedoman ketika pengerjaan suatu *maintenance*.

2. *Disassembly*

Pertama-tama membuka *cowling* pesawat, setelah itu melepas kabel negative memotong *straps* pada cover terminal positif, kemudian lepas kabel positif untuk mencegah terjadinya *short* dari baterai, lepas *battery vent line* dari *hose clamp*,

lepas *bolt dan washer* yang menahan baterai, lepas *cowling shroud* dari baterai, kemudian lepas baterai dari pesawat.

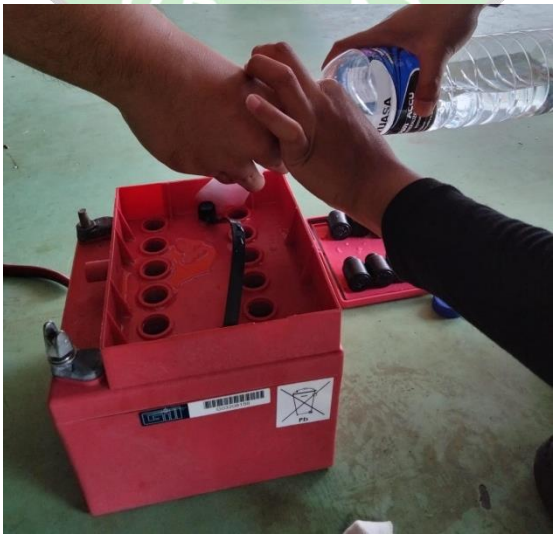
3. *Inspection*

Melepas *vent caps* dan melihat ketinggian *elektroli*t harus berada diatas pelat berbahan *separator*. Ketika dicek *Battery* mengalami kekurangan *distilled water* maka dilanjutkan dengan tahap *servicing*

Gambar 4. 4 *Inspeksi* pada *distilled water*

4. *Servicing*

Tambahkan *distilled water* hingga ketinggian *elektroli*t harus berada diatas pelat bahan *separator*. Kemudian baterai dilakukan *charging* bila dibutuhkan, karena battery tidak mengalami penurunan tegangan maka, dapat dilanjutkan ke tahap *reassembly*.



Gambar 4. 5 Pengisian *distilled water*

5. *Reassembly*

Memasang *vent caps* dan siapkan baterai pada *battery tray* pasang *strap dan bolt* untuk menahan baterai, torsi *bolt* hingga 10 inchpounds, hubungkan *vent line* dengan *hose clamp*, saat memasang dahulukan untuk menghubungkan kabel positif kemudian kabel negative, kemudian pasang cover terminal, dan pasang *tie-straps* pada cover terminal.

6. Functional Test

Functional test dilakukan Ketika inspeksi sudah selaseai dilaksanakan dan melakukan *ground run* untuk mengetahui kondisi *battery* dapat diketahui apakah instrument *garmin* mendeteksi adanya kerusakan pada *main battery*

7. *Return To Service*

Setelah melakukan *functional test* dan memeriksa bahwa tidak terdapat masalah, maka pesawat dapat dikatakan *return to service* dengan syarat :

a. Pesawat beregristrsi PK – BYC dinyatakan telah di *maintenance* dan diinspeksi sesuai dengan *maintenance* progam yang telah disetujui.

b. Memenuhi persyaratan sesuai dengan CASR.

c. Dan pesawat dinyatakan *Airworthy condition* dengan tertanda tangan oleh *engineer* dan diberi nomer AMEL.

Maka Pesawat Cessna 172S PK – BYC telah memenuhi persyaratan dan dikatakan layak terbang dan kembali beroperasi.

4.4.3. Brake loss

1. Identification

pesawat Cessna 172S dengan registrasi PK APF harus dilakukan perbaikan pada *brake system* pada tanggal 08 mei 2024 karena terdapat masalah pada saat melakukan taxi saat akan *inspection* dengan identifikasi saat melakukan *brake* pedalnya terlalu dalam dan *brakenya* mengalami penurunan peforma.

2. *Disassembly*

Setelah melakukan identifikasi permasalahan maka selanjutnya adalah disassembly yang dilakukan sesuai prosedur pada *Maintenance Manual* yang dilakukan yaitu melepas *brake line* pada *cylinder master.*

3. *inspection*

Pemeriksaan pada *Flexible lines* diperiksa apakah ada keretakan, keausan dan kerusakan ternyata terdapat *bubble* pada *brake line* setelah diperiksa kembali sesuai dengan *maintenance manual* engineer mengganti *fluid* pada *brake line* dengan mengeluarkan *fluid* sebelumnya terlebih dahulu.

Gambar 4. 6 inspeksi pada *brake*

4. *Servicing*

Setelah melakukan inspeksi maka tahap selanjutnya adalah *servicing*, dilakukan untuk mengeluarkan bubble dan menggantinya dengan *fluid* yang baru agar *brake* layak digunakan.

Gambar 4. 7 Penambahan *fluid* pada *brake line*

5. *Reassembly*

Langkah untuk *reassembly* dengan memasang Kembali *brake line* ke *brake master cylinder* dan memastikan semua terpasang dengan rapat

6. *Fungctional Test*

Setelah pelaksanaan *reassembly* maka dilakukan percobaan pada pedal *brake* apakah masih mengalami *brake loss*, memastikan *brake system* berfungsi secara normal.

7. *Return to Service*

Setelah melakukan *functional test* dan memeriksa bahwa tidak terdapat masalah, maka pesawat dapat dikatakan *return to service* dengan syarat :

a. Pesawat beregristrsi PK – APF dinyatakan telah di *maintenance* dan diinspeksi sesuai dengan *maintenance* progam yang telah disetujui.

b. Memenuhi persyaratan sesuai dengan CASR.

c. Dan pesawat dinyatakan *Airworthy condition* dengan tertanda tangan oleh *engineer* dan diberi nomer AMEL.

Maka Pesawat Cessna 172S PK – APF telah memenuhi persyaratan dan dikatakan layak terbang dan kembali beroperasi.

BAB V
PENUTUP

5.1 Kesimpulan

Kesimpulan adalah rangkaian pernyataan singkat dari hasil umum suatu laporan atau karya ilmiah, sehingga sifat dan hasil pernyataan tersebut dapat dilihat dari kesimpulan. Menurut pedoman penulisan laporan OJT terbaru, kesimpulan dibagi menjadi dua bagian, kesimpulan tentang pelaksanaan OJT secara keseluruhan dan studi kasus yang disajikan.

5.1.1 Kesimpulan permasalahan *On The Job Training*

1. Berdasarkan uraian pada bab 4, dapat disimpulkan bahwa Troubleshoot ini terjadi akibat putusnya *static discharge* pada saat akan melakukan *pre flight*
2. Berdasarkan uraian pada bab 4, dapat disimpulkan bahwa *troubleshooting* pada *standby battery* terjadi karena masa penggunaan pada *battery* tersebut telah terlewati yang menyebabkan lampu pada indicator mati
3. Berdasarkan uraian pada bab 4, dapat disimpulkan bahwa *brake loss* terjadi karena adanya *bubble* pada *brake line* cara mengatasi yang dilakukan adalah membuang semua *fluid* pada *brake line* dan menggantinya dengan yang baru

5.1.2 Kesimpulan terhadap pelaksanaan *On The Job Training*

Berdasarkan kegiatan *On The Job Training* yang telah dilaksanakan dari tanggal 01 April 2024 sampai dengan 30 Juni 2024, maka dapat diambil kesimpulan bahwa kegiatan *On The Job Training* dapat meningkatkan mutu pembelajaran sekaligus dapat memberikan pengetahuan yang belum bisa didapatkan selama pembelajaran di Politeknik Penerbangan Surabaya.

Pelaksanaan *On The Job Training* menjadi gambaran dalam dunia kerja sesungguhnya sehingga dapat mengembangkan wawasan dan kreatifitas yang dapat menumbuhkan profesionalisme dengan memahami keadaan lapangan saat terjadi suatu permasalahan ataupun perbaikan pesawat dibawah pengawasan teknisi dan *engineer* di Hanggar C API Banyuwangi. Selain itu, kegiatan *On The Job Training* dapat menambah kedisiplinan untuk mematuhi aturan yang berlaku

selama belajar dan tanggung jawab disetiap tindakan maupun keputusan yang kita ambil.

5.2 Saran

5.2.1. Saran Terhadap Permasalahan OJT

Melakukan inspeksi dengan teliti baik itu pada komponen *major* maupun *minor* agar dapat diketahui bagian *part* apa saja yang mungkin terjadi troubleshooting atau kerusakan pada pesawat terbang. Ketika telah ditemukan sebuah kerusakan maka segera berkoordinasi dengan pada engineer maupun teknisi agar segera dilakukan *maintenance* dan selalu menggunakan *maintenance manual* pada saat melakukan perbaikan pada suatu *part* yang telah diidentifikasi oleh para engineer telah mengalami kerusakan.

5.2.2. Saran Terhadap Permasalahan OJT

Berikut ini beberapa saran yang dapat saya berikan kepada Politeknik Penerbangan Surabaya dan Akademi Penerbang Indonesia Banyuwangi :

1. Kepada taruna yang akan melaksanakan *On the Job Training* (OJT) selanjutnya diharapkan dapat memanfaatkan waktu yang sebaikbaiknya untuk mendapat bimbingan, lebih aktif dalam bimbingan, dan mendokumentasikan setiap permasalahn-permasalahan yang didapat selama melaksanakan OJT.
2. Kepada pihak Politeknik Penerbangan Surabaya agar dapat memberikan penambahan waktu OJT bagi taruna kepada pihak Akademi Penerbang Indonesia Banyuwangi. Karena dengan waktu 2 bulan masih dirasa sangat kurang dalam menggali ilmu dan pengalaman praktik kerja lapangan.

5.3 Manfaat *On The Job Training*

1. Berdasarkan pengalaman selama *On the Job Training*, saya mendapatkan pengalaman yang belum saya dapatkan secara langsung, mengenai *remove/install* dan *procedure static discharge.*

2. Berdasarkan pengalaman selama *On the Job Training*, saya mendapatkan pengalaman yang belum saya dapatkan secara langsung, mengenai *remove/install Battery* dan *procedure servicing battery*.
3. Berdasarkan pengalaman selama *On the Job Training*, saya mendapatkan pengalaman yang belum saya dapatkan secara langsung, mengenai *remove/install wheel* dan *procedure brake*.

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SEHW_ATA24_ATA33_ATA80_ElectricalSystems.(2016) TRU simulation training a Textron company

LAMPIRAN

Troubleshooting static discharge

flap and aileron.

D. Lightning Strike

(1) If the airplane is flown through an electrically charged region of the atmosphere, it can be struck by an electrical discharge moving from cloud to cloud or from cloud to ground. During a lightning strike, the current goes into the airplane at one point and comes out of another, usually at opposite extremities. The wing tips, nose and tail sections are the areas where damage is most likely to occur. You can find burns and/or erosion of small surface areas of the skin and structure during inspection. In most cases, the damage is easily seen. In some cases, however, a lightning strike can cause damage that is not easily seen. The function of the lightning strike inspection is to find any damage to the airplane before it is returned to service.

(2) Lightning strike check. As the checks that follow are performed, complete the Lightning Strike/ Static Discharge Incident Reporting Form and return it to Cessna Customer Care Dept. 569, Cessna Aircraft Company, P.O. Box 7706, Wichita, KS. 67277-7706. If there are components listed on the form that are not applicable to your airplane, please write "Not Applicable" in the space provided.

(a) Communications

1 Antennas - Examine all antennas for burns or erosion. If you find damage, complete the functional test of the communication system.

(b) Navigation

1 Glideslope antenna - Examine for burning and pitting. If damage is found, complete a functional check of the glideslope system.

2 Compass - The compass is serviceable if the corrected heading is within plus or minus 10 degrees of the heading shown by the remote compass system. Remove, repair, or replace the compass if the indication is not within the tolerance limits.

(c) Fuselage

1 Skin - Examine the surface of the fuselage skin for signs of damage.
2 Tailcone - Examine the tailcone and static dischargers for damage.

(d) Stabilizers

1 Examine the surfaces of the stabilizers for signs of damage.

(e) Wings

1 Skins - Examine the skin for burns and erosion.
2 Wing tips - Examine the wing tips for burns and pits.
3 Flight surfaces and hinging mechanisms - Examine for burns and pits.

(f) Propeller

1 Propeller - Examine for evidence of burns or arching on blades and hub. Remove from service and have the propeller inspected at an authorized repair facility if signs of damage are present.

(g) Powerplant

1 Engine - Refer to the engine manufacturer's overhaul manual for inspection procedures.

STATIC DISCHARGING - MAINTENANCE PRACTICES

1. General

A. Maintenance of the static (discharger) wicks consists of removal/replacement of the wick assembly and ensuring that bonding straps are properly connected between control surfaces and primary structure.

B. Static wicks are mounted on the trailing edges of the ailerons, rudder and the elevators. Bonding straps are secured to flight control surfaces and electrically connect those surfaces to the primary structure.

2. Tools and Equipment

A. For a list of applicable tools and equipment, refer to Chapter 23, Communications - General.

3. Static Wicks Removal/Installation

A. Remove Static Wick (Refer to Figure 201).
(1) Carefully drill out mounting rivets which attach static wick to structure. Ensure holes are not drilled oversize.
(2) Remove static wick from the airplane skin.

B. Install Static Wick (Refer to Figure 201).
(1) Clean surface of airplane skin where static wick will attach to skin. Remove all traces of contaminants (including paint/primer) using scotchbrite and P-D-680 solvent.
(2) Secure static wick to airplane skin using rivets.
(3) Repaint at base of new wick (if required).
(4) Do a Static Discharge System Functional Check, refer to Chapter 23, Static Discharging Inspection/Check.
(5) Rebalance control surfaces. Refer to 1996 and On Single Engine Structural Repair Manual Flight Control Surface Balancing.

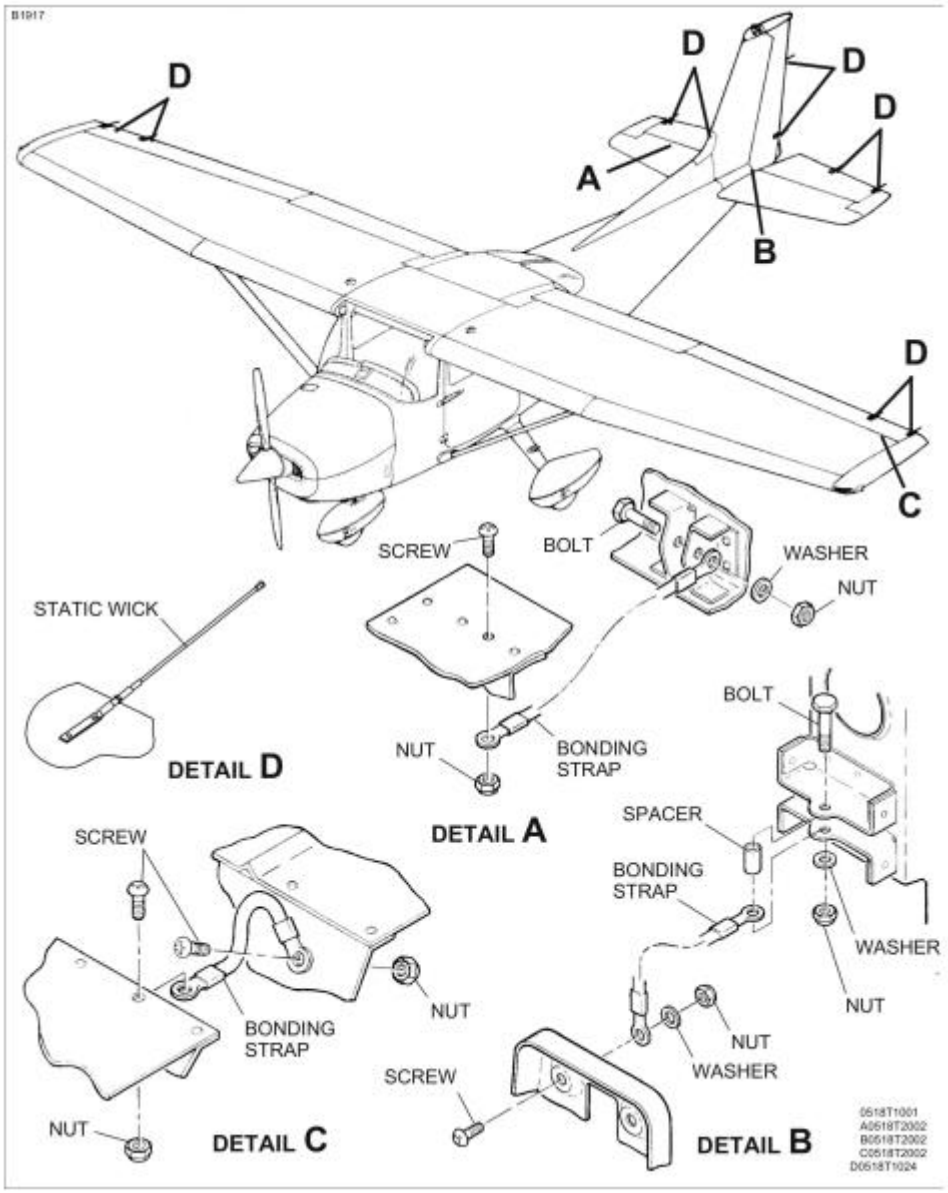
4. Bonding Straps Removal/Installation

A. Bonding straps are provided to ensure that electrical potential between primary and secondary structure remains nearly equal. If bonding straps are removed, they should be reinstalled using hardware called out in the 172R Illustrated Parts Catalog.

B. The maximum allowable resistance (in ohms) for bonding straps is 0.0025 ohms.

C. Primary and secondary structure should be cleaned using scotchbrite pad and P-D-680 solvent before installing bonding hardware. Aluminum surfaces should be chemically protected (alodine or equivalent) before attaching bonding hardware to surface.

D. Do a Static Discharge System Functional Check, refer to Chapter 23, Static Discharging Inspection/Check.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WASHER
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STATIC WICK
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DETAIL C
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SCREW
DETAIL B
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C0518T2002
D0518T1024

STATIC DISCHARGING - INSPECTION/CHECK

1. General

A. This section has the inspections and checks necessary to keep the static discharging system in a serviceable condition.

2. Static Discharge System Functional Check

A. General
(1) This procedure gives the information needed to complete the bonding check for the static discharge system.

B. Special Tools
(1) Digital Ohmmeter
(2) Megohmmeter

C. Do the Static Discharge System Checks.
(1) Visually examine the static dischargers for lightning damage and erosion of the airplane skin at the attach points.
(a) If the static discharger shows signs of a lightning strike, replace the static discharger and examine the entire aircraft for lightning strike damage. Refer to Chapter 5, Unscheduled Maintenance Checks.
(2) Visually examine between the tips of the static dischargers and the base assemblies for erosion.
(3) Visually examine the static dischargers for condition and security.
(4) Replace the damaged or the missing static dischargers.
(5) Make sure that all static dischargers are tight.

D. Do a Functional Check of the Static Discharge System.
(1) Use an ohmmeter (bonding meter) to do a check of the resistance between the base assemblies and a good airplane ground.
(a) Make sure that the resistance between the base assembly and the metal surface is 0.0025 ohms or less.
(b) Make sure there is a good ground before you do the next step.

WARNING: Use precaution when you use a high voltage megohmmeter to prevent an electrical shock.

(2) Use a megohmmeter set to 500 volts to do a check of the resistance between the base assemblies and the static dischargers.
(a) Make sure that the resistance between the base assembly and the static discharger is 1 to 100 megohms.
(b) If the resistance between the base assembly and the static discharger is not in tolerance, replace the static discharger.

Servicing Main Battery

CESSNA®
MODEL 172 (SERIES 1996 AND ON)
MAINTENANCE MANUAL

BATTERY - MAINTENANCE PRACTICES

1. General

A. The standard aircraft main battery is a 24-Volt, 8.0 Amp-hour flooded lead-acid type battery. An optional 10.0 Amp-hour flooded type as well as a 13.6 Amp-hour sealed type have been approved. Either of these batteries can be installed. The aircraft main battery is installed on the front-left side of the firewall below the electrical power junction box.

NOTE: The Amp-hour rate is based on a one hour discharge rate.

2. Battery Removal/Installation

A. Remove the Main Battery (Refer to Figure 201).
(1) Remove the top engine cowl. Refer to Chapter 71, Cowls - Maintenance Practices.

CAUTION: DISCONNECT THE NEGATIVE BATTERY CABLE FIRST, THEN THE POSITIVE CABLE. THIS WILL PREVENT AN ACCIDENTAL SHORT OF THE BATTERY FROM HAND TOOLS.

(2) Cut the tie straps to the positive terminal cover.
(3) Disconnect the negative battery cable.
(4) Disconnect the positive battery cable.
(5) Disconnect the battery vent line at the hose clamp.
(6) Remove the battery hold down bolts and washers.
(7) Remove the cooling shroud from the battery.
(8) Remove the battery from the airplane.

B. Install the Main Battery (Refer to Figure 201).
(1) Set the battery in the battery tray.
(2) Install the hold-down strap to the battery with the hold-down bolts.

CAUTION: DO NOT TIGHTEN THE HOLD-DOWN BOLTS TOO MUCH OR YOU WILL DAMAGE THE HOLD-DOWN STRAP.

(3) Tighten the hold-down bolts to 10 inch-pounds (1.13N.m).
(4) Connect the battery vent line with the hose clamp.

CAUTION: CONNECT THE POSITIVE BATTERY CABLE FIRST, THEN CONNECT THE NEGATIVE CABLE. THIS WILL PREVENT AN ACCIDENTAL SHORT OF THE BATTERY FROM HAND TOOLS.

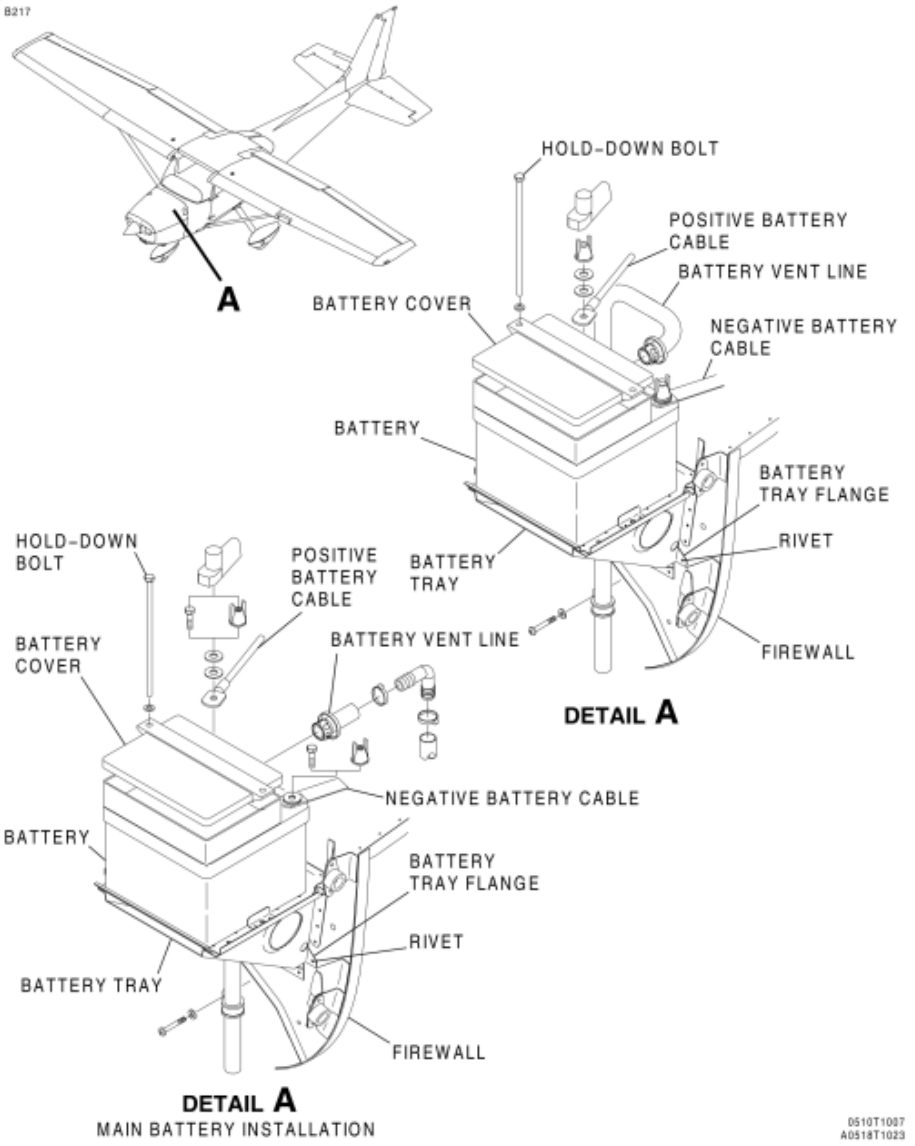
(5) Connect the positive battery cable. Use bolt or nut provided with battery and torque to battery manufacture requirements. Refer to battery label or manufactures instructions.
(6) Install the positive battery terminal cover.
(7) Attach tie-straps to the terminal cover.
(8) Connect the negative battery cable. Use bolt or nut provided with battery and torque to battery manufacture requirements. Refer to battery label or manufactures instructions.
(9) Install the top engine cowl. Refer to Chapter 71, Cowls - Maintenance Practices.

3. Battery Cleaning

A. Clean the Main Battery (Refer to Figure 201).

NOTE: For correct operation, the battery and connections must be clean at all times.

(1) Remove the battery. Refer to Battery Removal/Installation.
(2) For flooded battery type, tighten the battery cell filler caps to prevent the cleaning solution from entering the cells.



Main Battery Installation
Figure 201 (Sheet 1)

(3) Use a clean cloth moistened with a solution of bicarbonate (baking soda) and water to clean the battery cable ends, battery terminals and the surfaces of the battery.
(4) Rinse with clear water.
(5) Use a dry cloth to clean off the water and let the battery dry.
(6) Polish the cable ends and battery terminals with an emery cloth or a wire brush.
(7) Install the battery. Refer to Battery Removal/Installation.
(8) Apply petroleum jelly or an ignition spray product to the battery terminals to decrease corrosion.

4. New Battery Check

A. Complete a New Battery Check.
(1) For flooded battery type - do a specific gravity check to make sure the correct strength of electrolyte is used. The electrolyte must be 1.285 +0.005 or -0.005 specific gravity when it is measured between 75°F to 85°F (24°C to 30°C).
(2) For sealed battery type - do an open circuit battery voltage check. The battery voltage must be 25.5 +0.5 or -0.5 volts.
(3) To charge a new battery, use the manufacturer's instructions supplied with the battery.
(4) Before you install the battery, clean the battery box. Refer to Chapter 12, Battery - Servicing.
(5) Install the battery in the airplane. Refer to Battery Removal/Installation.

5. Battery Charging

WARNING: YOU MUST KEEP SPARKS AND OPEN FLAME AWAY FROM THE BATTERY. THE BATTERY MAKES HYDROGEN AND OXYGEN GASES WHEN IT IS CHARGED. THE GASES WILL COLLECT AND CAUSE A HAZARDOUS, EXPLOSIVE CONDITION. YOU MUST HAVE FREE VENTILATION OF THE BATTERY AREA WHEN YOU CHARGE IT.

A. If you use a Gill TSC-01V battery charger with a Gill flooded battery, do the instructions that follow.

NOTE: The Gill TSC-01V is automated with a typical charge time of approximately two hours. Some batteries will take more time to charge as a result of the battery condition and capacity.

(1) Remove the battery from the airplane and place it in a well ventilated area to charge. Refer to Battery Removal/Installation.
(2) Remove the vent caps and make sure the electrolyte level is above the plates and separator material. Do not fill the battery to the split rings at this time.
(3) Do a specific gravity check of the battery electrolyte with a hydrometer such as the Gill FR-1 (or equivalent) to determine the battery charge. Refer to Table 201 and Table 202.
(4) Record the value for each battery cell.
(5) Install the vent caps.
(6) Attach the red cable to the positive battery terminal and the black cable to the negative battery terminal.
(7) Connect the charger to AC power. The procedures that follow will result:
(a) The AC POWER ON indicator light will come on.
(b) The three battery level indicators will flash one time.
(c) The EMPTY battery level indicator will flash on and remain on.

NOTE: The EMPTY battery level indicator shows that the battery is correctly connected.

(8) If the battery is not fully charged, the PARTIALLY CHARGED indicator light will come on. Make sure that the battery stays connected at this time.

NOTE: Make sure that you let the battery fully charge. This will make sure of a good battery life and performance.

(a) Do not disconnect the battery. The charger will not operate correctly if the battery is disconnected and then connected after the PARTIALLY CHARGED indicator light comes on. If the battery is disconnected, you must disconnect and connect the charger at the electrical outlet to start the charge process.

(9) When the battery is fully charged, the BATTERY READY indicator will come on.

(10) The electrolyte level must touch the bottom of the split ring while the battery is warm and still on the charger.

(a) If the electrolyte level needs to be increased, use only distilled or mineral free water to adjust the electrolyte level. The battery must be warm when the electrolyte level is increased.

NOTE: The electrolyte level decreases as the battery temperature decreases.

(11) Do not add any more fluid after these instructions unless the battery electrolyte spills.

(a) If the fluid level is below the plates and separator material because a spill occurs, add electrolyte with a value of 1.285 specific gravity.

(12) When the BATTERY READY indicator light comes on, turn the AC power off.

(13) Disconnect the battery charger from the electrical outlet.

(14) Disconnect and remove the battery from the charger.

(15) Do a specific gravity check of the battery electrolyte. Refer to Battery Test- Gill Flooded Series.

B. If you use a Gill TDMC battery charger with a Gill flooded battery, do the instructions that follow.

WARNING: THE BATTERY CELL TEMPERATURE MUST NOT BE MORE THAN 115°F (46°C). DECREASE THE CHARGE RATE IF THE TEMPERATURE INCREASES MORE THAN 115°F (46°C). THE CHARGE MUST NOT CAUSE ACID TO BE BLOWN FROM THE VENTS.

(1) Remove the battery from the airplane and place it in a well ventilated area to charge. Refer to Battery Removal/Installation.

(2) Remove the vent caps and make sure the electrolyte level is above the plates and separator material. Do not fill the battery to the split rings at this time.

(3) Do a specific gravity check of the battery electrolyte with a hydrometer such as the Gill FR-1 (or equivalent) to determine the battery charge. Refer to Table 201 and Table 202.

(4) Record the value for each battery cell.

(5) Install the vent caps.

(6) Click the Gill TDMC charger ON button two times to select the 24 volt position.

(7) Set the timer for 8 to 10 hours.

NOTE: The charger is in a constant current mode when the timer is on.

(8) Set the charge rate to 1.5 amps.

CAUTION: DO NOT LET THE BATTERY CHARGER CHARGE AT 32 VOLTS FOR MORE THAN THIRTY MINUTES.

(9) Charge the battery until the voltage stabilizes for three consecutive hours or shows 32 volts, whichever occurs first.

NOTE: The charge voltage is measured across the battery terminals with the charger on.

(10) The electrolyte level must touch the bottom of the split ring while the battery is warm and still on the charger.
(a) If the electrolyte level needs to increased, use only distilled or mineral free water to adjust the electrolyte level. The battery must be warm when the electrolyte level is increased.

NOTE: The electrolyte level decreases as the battery temperature decreases.

(11) Do not add any more fluid after these instructions unless the battery electrolyte spills.
(a) If the fluid level is below the plates and separator material because a spill occurs, add electrolyte with a value of 1.285 specific gravity.
(12) Disconnect and remove the battery from the charger.
(13) Do a specific gravity check of the battery electrolyte. Refer to Battery Test - Gill Flooded Series.

C. For a sealed Concord RG series battery, do the instructions that follow. For further information, refer to the Concord RG series charging instructions.

NOTE: Constant Potential charging is the preferred method of charging the battery.

(1) Remove the battery from the airplane and place it in a well ventilated area to charge. Refer to Battery Removal/Installation.
(2) Connect the battery terminals to the constant potential charging equipment. Care must be taken to insure proper polarity of terminals.
(3) Apply a constant potential of 28.25 ± 0.25 volts with a current capability of at least 3.0 amperes.
(4) Continue charging until the charge current remains constant, within 10%, for 3 consecutive hourly readings.
(5) Disconnect and remove the battery from the charger.
(6) Install the battery in the airplane. Refer to Battery Removal/Installation.

6. Battery Test

A. Battery Test - Gill Flooded Series
(1) Complete a Specific Gravity Check. Refer to Table 201 and Table 202.
(a) Measure the specific gravity of the battery with a hydrometer to find the condition of the battery charge.

NOTE: Some hydrometers will have a built-in temperature compensation chart and a thermometer.

(b) The battery condition for various hydrometer values with an electrolyte temperature of 80°F (27°C) is shown in Table 201.
1 Electrolyte measurements with the hydrometer must be compensated for the temperature of the electrolyte. Refer to Table 202.

NOTE: For increased temperatures, the values will be lower. For decreased temperatures, the values will be higher.

(c) If the specific gravity indicates the battery is not fully charged, refer to Battery Charging.
(d) Replace the battery if the following conditions are not true:
1 The specific gravity values that are adjusted for temperature must be between 1.260 and 1.290.
2 The specific gravity values between cells must not have a difference of more than 0.020.

MAINTENANCE MANUAL

3 The battery must give sufficient power to crank the engine with the starter.

NOTE: For more accurate results, you can use a load type tester after you charge the battery.

NOTE: A specific gravity check can be completed after the charge. This check will not find cells that short circuit under electrical loads, or have broken connectors between cell plates.

Table 201. Battery Hydrometer Values at 80°F (27°C).

VALUE	BATTERY CONDITION
1.280 Specific Gravity	100% Charged
1.250 Specific Gravity	75% Charged
1.220 Specific Gravity	50% Charged
1.190 Specific Gravity	25% Charged
1.160 Specific Gravity	Not Charged

Troubleshooting brake line

Main Landing Gear Removal/Installation

A. Remove the Main Landing Gear (Refer to Figure 201).
   (1) Remove the front seat(s) to get access to the fuselage floor. Refer to Chapter 25, Equipment/ Furnishings - Maintenance Practices.
   (2) Pull up the carpet and remove the floorboard access plate (231AT) to get access to the landing gear components under the fuselage floorboard. Refer to Chapter 6, Access/Inspection Plates - Description and Operation.
   (3) Jack the airplane. Refer to Chapter 7, Jacking - Maintenance Practices.
   (4) Remove the screws that attach the fuselage fairing to the fuselage.
   (5) Remove screws at the splice in the fuselage fairing.
   (6) Remove the fuselage fairing from the strut fairing.
   (7) Drain the hydraulic fluid from the brake line on the strut.
   (8) Disconnect the hydraulic brake line at the fitting where the brake line comes out from the fuselage skin.
   (9) Put a cap or plug on disconnected fittings.
   (10) Remove the nut, washer and bolt the attach the inboard end of the tubular strut to the inboard landing gear bulkhead fitting.

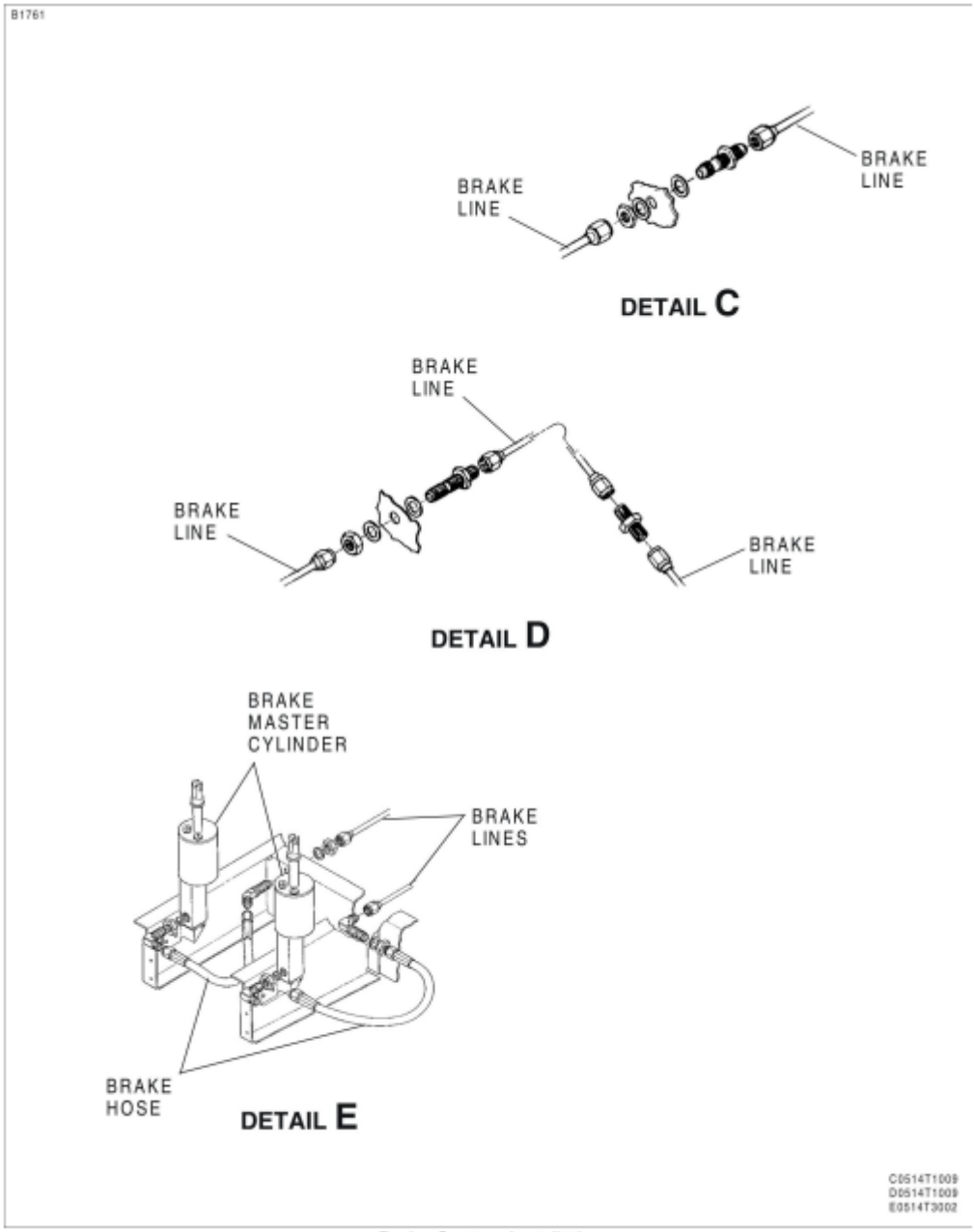
CAUTION: Be careful when you remove the strut to prevent damage to the hydraulic brake line.

(11) Pull the tubular strut from the fitting and bushing.

NOTE: The tubular strut is a compression fit in the bushing in the outboard landing gear forging.

Brake Line Removal

A. Brake lines in the system are mostly metal, with flexible rubber lines installed near the master cylinders. Rigid lines may be replaced in sections using pre-formed parts available from Cessna. Flexible lines should be inspected for cracks, deterioration wear and damage, and are also available in replacement assemblies through Cessna.



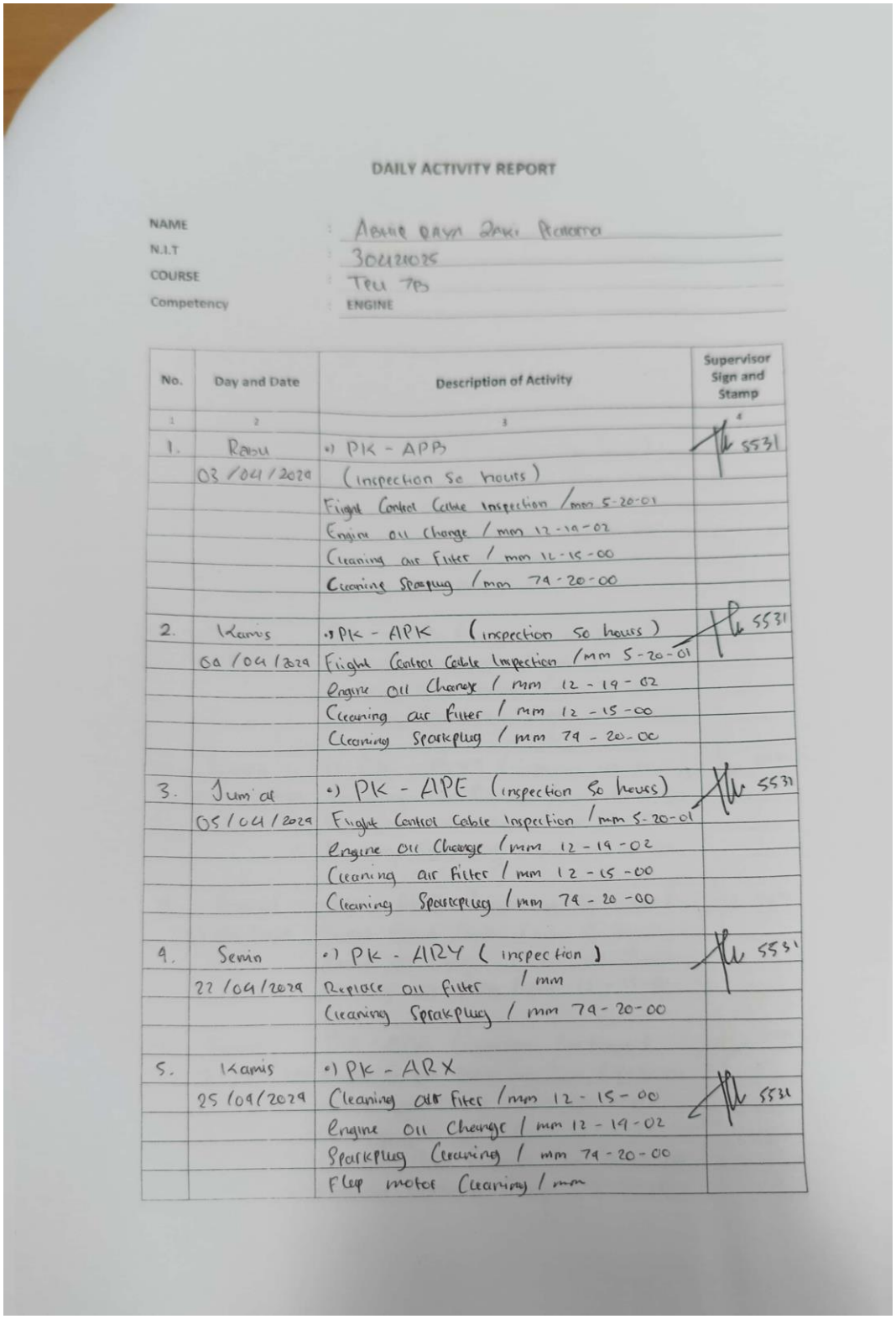
Brake System Installation
Figure 201 (Sheet 2)

BRAKE SYSTEM - TROUBLESHOOTING

1. Troubleshooting

TROUBLE	PROBABLE CAUSE	REMEDY
DRAGGING BRAKES.	Brake pedal binding.	Check and adjust properly. Refer to Brakes - Maintenance Practices.
	Parking brake linkage holding brake pedal down.	Check and adjust properly. Refer to Brakes - Maintenance Practices.
	Worn or broken piston return spring in master cylinder.	Repair, or install new master cylinder. Refer to Brakes - Maintenance Practices.
	Restriction in hydraulic lines or restrictions in compensating port in master cylinder.	Drain brake line and clean inside of brake line with filtered compressed air. If cleaning lines fails to give satisfactory results, the master cylinder may be faulty and should be repaired.
	Worn, scored or warped brake disc.	Install new disc and brake linings. Refer to Brakes - Maintenance Practices.
	Damaged or accumulated dirt restricting free movement of wheel brake parts.	Clean and repair or install new parts as necessary. Refer to Brakes - Maintenance Practices.
BRAKES FAIL TO OPERATE.	Leak in system.	If brake master cylinders or wheel cylinder assemblies are leaking, repair, or install new parts. Refer to Brakes - Maintenance Practices.
	Air in system.	Bleed system. Refer to Brakes - Maintenance Practices.
	Lack of fluid in master cylinders.	Fill and bleed system. Refer to Brakes - Maintenance Practices.
	Defective master cylinder.	Repair or install new parts as necessary. Refer to Brakes - Maintenance Practices.

Daily activity report



DAILY ACTIVITY REPORT

NAME : Abdul Rayn Zaki Pratama
N.I.T : 30121025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
1.	Rabu	•) PK - APB	5531
	03/04/2029	(inspection 50 hours)	
		Flight Control Cable Inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning air Filter / mm 12-15-00	
		Cleaning Sparkplug / mm 79-20-00	
2.	Kamis	•) PK - APK (inspection 50 hours)	5531
	04/04/2029	Flight Control Cable Inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning air Filter / mm 12-15-00	
		Cleaning Sparkplug / mm 79-20-00	
3.	Jum'at	•) PK - APE (inspection 50 hours)	5531
	05/04/2029	Flight Control Cable Inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning air Filter / mm 12-15-00	
		Cleaning Sparkplug / mm 79-20-00	
4.	Senin	•) PK - APY (inspection)	5531
	22/04/2029	Replace oil Filter / mm	
		Cleaning Sparkplug / mm 79-20-00	
5.	Kamis	•) PK - ARX	5531
	25/04/2029	Cleaning oil Filter / mm 12-15-00	
		Engine oil Change / mm 12-19-02	
		Sparkplug Cleaning / mm 79-20-00	
		Flap motor Cleaning / mm	

DAILY ACTIVITY REPORT

NAME : Arbie Raya 2.P

N.I.T : 30421025

COURSE : TPU 7B

Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	•) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-40-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 74-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning air filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 74-20-00	
8.	Selasa	•) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-40-00	
		Cleaning Sparkplug / mm 74-20-00	
9.	Jum'at	•)PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning air filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning air filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 74-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P

N.I.T : 30421025

COURSE : TPU 7B

Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning air filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning air filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Chang / mm 12-19-02	
		Cleaning Air Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

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NAME : Abdul Razak 2.P

N.I.T : 30421025

COURSE : TPU 7B

Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
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	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
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	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
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	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P
N.I.T : 30421025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
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		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
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		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
10.	Senin	PK - APD (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P
N.I.T : 30421025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2. P

N.I.T : 30421025

COURSE : TPU 7B

Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
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		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
10.	Senin	PK - APD (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P
N.I.T : 30421025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P
N.I.T : 30421025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abhie Raya 2.P
N.I.T : 30421025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	•) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Chang / mm 12-19-02	
		Servicing main wheel / mm 32-40-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 74-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning air filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 74-20-00	
8.	Selasa	•) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-40-00	
		Cleaning Sparkplug / mm 74-20-00	
9.	Jum'at	•) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning air filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Chang / mm 12-19-02	
		Cleaning air Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 74-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P
N.I.T : 30421025
COURSE : TPU 7B
Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
1	2	3	4
6.	Selasa	a) PK - APD (inspection 100 hours)	5531
	30/04/2024	Flight Control Cable inspection / mm 5-20-01	
		Engine oil Change / mm 12-19-02	
		Servicing main wheel / mm 32-90-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	
8.	Selasa	a) PK - BYS (inspection 100 hours)	5531
	07/05/2024	Servicing Fuel Strainer / mm 28-20-00	
		Servicing main wheel / mm 32-90-00	
		Cleaning Sparkplug / mm 79-20-00	
9.	Jum'at	a) PK - APD (inspection 50 hours)	5531
	17/05/2024	Flight Control Cable / mm 5-20-01	
		Engine Oil Change / mm 12-19-02	
		Cleaning cair Filter / mm 12-15-00	
10.	Senin	PK - APA (inspection 100 hours)	5531
	27/05/2024	Flight Control Cable inspection / 5-20-01	
		Engine oil Change / mm 12-19-02	
		Cleaning Cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
		Cleaning Sparkplug / mm 79-20-00	

DAILY ACTIVITY REPORT

NAME : Abdul Razak 2.P

N.I.T : 30421025

COURSE : TPU 7B

Competency : ENGINE

No.	Day and Date	Description of Activity	Supervisor Sign and Stamp
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		Cleaning Sparkplug / 79-20-00	
7.	Jum'at	PK - APP (inspection 100 hours)	5531
	03/05/2024	Cleaning cair Filter / mm 12-15-00	
		Servicing Fuel Strainer / mm 28-20-00	
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COURSE : TPU 7B

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	03/05/2024	Cleaning cair Filter / mm 12-15-00	
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		Cleaning Sparkplug / mm 79-20-00	

Task card inspection 50

AKADEMI PENERBANG INDONESIA BANYUWANGI	MAINTENANCE PROGRAM CESSNA 172 SKYHAWK APPENDIX

50 HOURS INSPECTION SHEET
CESSNA 172 SKYHAWK

Due at	:		
Interval	:	A, L	
Insp. Operation	:	1, 13	
Type Inspection	:	Routine/Schedule	
Form No.	:	141-014-172S50	

Aircraft Registration	:	PK- BHJ	Aircraft Hours	:	2749:37
Aircraft Serial Number	:	17281621	Engine Hours	:	750:10
Date	:	30 Mei 2024	Propeller Hours	:	750:10
Reference	:	Cessna 172S MM 5-12-01 Rev. 27 5-12-13 Rev. 27	Manual Revision	:	Rev. 27 15 Jan 2024

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
PRELIMINARY				
000000	Record anomalies into log book or equivalent document for corrective action.	000		
000000	Check aircraft compliance with airworthiness directives, service bulletins and service letters.	000		
000000	Check expiry date of life-limited parts : - Airframe - Equipment and hoses	000		
ATA 21 – AIR CONDITIONING				
214002	Heater Components, Inlets, and Outlets - Inspect all lines, ducts, clamps, seals, and gaskets for condition, restriction, and security.	211		
214003	Cabin Heat and Ventilation Controls - Check freedom of movement through full travel. Check friction locks for proper operation.	211		Inspection Operation 1
ATA 23 – COMMUNICATIONS				
231001	Communication Antennas and Cables - Inspect for security of attachment, connection, and condition.	210		Inspection Operation 3
235001	Microphones, Headsets, and Jacks - Inspect for cleanliness, security, and evidence of damage.	211		Inspection Operation 1
235002	Microphone Push-To-Talk Switch - Clean the pilot's and copilot's microphone switches. Refer to Chapter 23, NAV/COM - Maintenance Practices.	222, 223		
ATA 24 – ELECTRICAL POWER				
242001	Alternator, Mounting Bracket, and Electrical Connections - Check condition and security. Check alternator belts for condition and proper adjustment. Check belt tension.	120		
243003	General Airplane and System Wiring - Inspect for proper routing, chafing, broken or loose terminals, general condition, broken or inadequate clamps, and sharp bends in wiring.	210		Inspection Operation 1
246001	Switch and Circuit Breaker Panel, Terminal Blocks, and Junction Boxes - Inspect wiring and terminals for condition and security.	222		Inspection Operation 1

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 24 – ELECTRICAL POWER (Cont...)				
246002	Power Junction Box - Check operation and condition. Check availability and condition of spare fuse (if applicable).	222		
ATA 25 – EQUIPMENT/FURNISHINGS				
251001	Seats - Examine the seats to make sure they are serviceable and installed correctly. Make sure the seat stops and adjustment mechanism operate correctly. Examine the seat recline control and attaching hardware to make sure the hardware and lock are not damaged and are correctly installed. Lubricate the threads of the Seat Crank Handle Assembly with MIL-PRF-81322 general purpose grease.	211		
251101	Restraint System, front and rear - Check belts for thinning, fraying, cutting, broken stitches, or ultra-violet deterioration. Check system hardware for security of installation.	211		
256001	Emergency Locator Transmitter - Inspect for security of attachment and check operation by verifying transmitter output. Check cumulative time and useful life of batteries in accordance with CASR Part 91.207.	310		
ATA 26 – FIRE PROTECTION				
262001	Portable Hand Fire Extinguisher - Inspect for proper operating pressure, condition, security of installation, and servicing date.	230		
ATA 27 – FLIGHT CONTROLS				
271001	Aileron Controls - Check freedom of movement and proper operation through full travel.	120, 520, 620		
271002	Ailerons and Cables - Check operation and security of stops. Check cables for tension, routing, fraying, corrosion, and turnbuckle safety. Check travel if cable tension requires adjustment or if stops are damaged. Check fairleads and rub strips for condition.	120, 520, 620		Inspection Operation 3
271003	Aileron Structure, Control Rods, Hinges, Balance Weights, Bellcranks, Linkage, Bolts, Pulleys, and Pulley Brackets - Check condition, operation, and security of attachment.	520, 620		
271004	Ailerons and Hinges - Check condition, security, and operation.	520, 620		
271005	Control Wheel Lock - Check general condition and operation.	222		
271006	Control Yoke - Inspect pulleys, cables, bearings, and turnbuckles for condition and security.	222, 223		

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 27 – FLIGHT CONTROLS (Cont...)				
272001	Rudder - Check internal surfaces for corrosion, condition of fasteners, and balance weight attachment.	340		Inspection Operation 3
272002	Rudder - Inspect the rudder skins for cracks and loose rivets, rudder hinges for condition, cracks and security; hinge bolts, nuts, hinge bearings, hinge attach fittings, and bonding jumper for evidence of damage and wear, failed fasteners, and security. Inspect balance weight for looseness and the supporting structure for damage.	340		
272003	Rudder, Tips, Hinges, Stops, Clips and Cable Attachment - Check condition, security, and operation.	340		
272004	Rudder Pedals and Linkage - Check for general condition, proper rigging, and operation. Check for security of attachment.	230		Inspection Operation 1
272005	Rudder Control - Check freedom of movement and proper operation through full travel. Check rudder stops for damage and security.	340		
273001	Elevator Control - Check freedom of movement and proper operation through full travel.	222, 223		
273002	Elevator Control System - Inspect pulleys, cables, sprockets, bearings, chains, and turnbuckles for condition, security, and operation. Check cables for tension, routing, fraying, corrosion, and turnbuckle safety.	222, 223		
273003	Elevator, Hinges, Stops, and Cable Attachment - Check condition, security, and operation.	320, 330		
273101	Elevator Trim System - Check cables, push-pull rods, bellcranks, pulleys, turnbuckles, fairleads, rub strips, etc. for proper routing, condition, and security.	224, 240, 310		
273102	Elevator Trim Control and Indicator - Check freedom of movement and proper operation through full travel. Check pulleys, cables, sprockets, bearings, chains, and turnbuckles for condition and security. Check cables for tension, routing, fraying, corrosion, and turnbuckle safety.	224, 240, 310		Inspection Operation 1
273103	Elevator Trim Tab and Hinges - Check condition, security, and operation.	224		

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 27 – FLIGHT CONTROLS (Cont..)				
273104	Elevator Trim Tab Actuator - Examine the free play limits. Refer to Chapter 27, Elevator Trim Control - Maintenance Practices, Trim Tab Free Play Inspection. If the free play is more than the permitted limits, lubricate the actuator and examine the free play limits again. If the free play is still more than the permitted limits, replace the actuator.	320		
273106	Elevator Trim Tab Stop Blocks - Inspect for damage and security.	240		Inspection Operation 1
275001	Flaps - Check tracks, rollers, and control rods for security of attachment. Check rod end bearings for corrosion. Check operation.	510, 610		
275002	Wing Flap Control - Check operation through full travel and observe Flap Position indicator for proper indication.	221		Inspection Operation 1
275003	Flap Structure, Linkage, Bellcranks, Pulleys, and Pulley Brackets - Check for condition, operation and security.	510, 610		Inspection Operation 3
275004	Flaps and Cables - Check cables for proper tension, routing, fraying, corrosion, and turnbuckle safety. Check travel if cable tension requires adjustment.	510, 610		Inspection Operation 3
275005	Flap Motor, Actuator, and Limit Switches - Check wiring and terminals for condition and security. Check actuator for condition and security.	610		Inspection Operation 3
275006	Flap Actuator Threads - Clean and lubricate. Refer to Chapter 12, Flight Controls - Servicing.	610		
ATA 28 – FUEL				
282001	Fuel System - Inspect plumbing and components for mounting and security.	510, 610		
282002	Fuel Tank Vent Lines and Vent Valves - Check vents for obstruction and proper positioning. Check valves for operation.	510, 610		
282003	Fuel Selector Valve - Check controls for detent in each position, security of attachment, and for proper placarding.	224		
282004	Integral Fuel Bays - Check for evidence of leakage and condition of fuel caps, adapters, and placards. Using quick drains, ensure no contamination exists. Check quick drains for proper shut off.	510, 610		Check quick drains for proper shut off.
282005	Fuel Reservoir - Using quick drain, ensure no contamination exists.	510, 610		
282006	Fuel Selector - Using quick drain, ensure no contamination exists.	224		

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 28 – FUEL (Cont...)				
282007	Fuel Strainer, Drain Valve, and Controls - Check freedom of movement, security, and proper operation. Disassemble, flush, and clean screen and bowl.	510, 610		
ATA 31 – INDICATING/RECORDING SYSTEMS				
311001	Instruments - Check general condition and markings for legibility.	220		
311003	Instrument Lines, Fittings, Ducting, and Instrument Panel Wiring - Check for proper routing, support, and security of attachment.	220		Inspection Operation 1
ATA 33 – LIGHTS				
331001	Instrument and Cabin Lights - Check operation, condition of lens, and security of attachment.	220, 211, 221		
334001	Navigation, Beacon, Strobe, and Landing Lights - Check operation, condition of lens, and security of attachment.	340, 520, 620		
ATA 34 – NAVIGATION				
341101	Static System - Inspect for security of installation, cleanliness, and evidence of damage.	210		Inspection Operation 3
341103	Pitot Tube and Stall Warning System - Examine for condition and obstructions and make sure the anti-ice heat operates correctly. Apply vacuum to stall warning horn scoop assembly and make sure horn is audible.	510		
342101	Magnetic Compass - Inspect for security of installation, cleanliness, and evidence of damage.	225		Inspection Operation 1
345001	Instrument Panel Mounted Avionics Units (Including Audio Panel, VHF Nav/Com(s), ADF, GPS, Transponder, and Compass System) - Inspect for deterioration, cracks, and security of instrument panel mounts. Inspect for security of electrical connections, condition, and security of wire routing.	225		Inspection Operation 1
345002	Avionics Operating Controls - Inspect for security and proper operation of controls and switches and ensure that all digital segments will illuminate properly.	225		Inspection Operation 1
345003	Navigation Indicators, Controls, and Components - Inspect for condition and security.	220, 225		Inspection Operation 1
345004	Navigation Antennas and Cables - Inspect for security of attachment, connection, and condition.	310		Inspection Operation 1
ATA 52 – DOORS				
521001	Doors - Inspect general condition. Check latches, hinges, and seals for condition, operation, and security of attachment.	210		Inspection Operation 1

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 52 – DOORS (Cont...)				
531001	Fuselage Surface - Inspect for skin damage, loose rivets, condition of paint, and check pitot-static ports and drain holes for obstruction. Inspect covers and fairings for security.	210		
531003	Internal Fuselage Structure - Inspect bulkheads, doorposts, stringers, doublers, and skins for corrosion, cracks, buckles, and loose rivets, bolts and nuts.	211		Inspection Operation 1
ATA 55 – STABILIZERS				
551001	Horizontal Stabilizer and Tailcone structure - Inspect bulkheads, spars, ribs, and skins, for cracks, wrinkles, loose rivets, corrosion, or other damage. Inspect horizontal stabilizer attach bolts for looseness. Retorque as necessary. Check security of inspection covers, fairings, and tips.	320, 330		
551002	Horizontal Stabilizer and Tips - Inspect externally for skin damage and condition of paint.	320, 330		
553001	Vertical Stabilizer Fin - Inspect bulkheads, spars, ribs, and skins for cracks, wrinkles, loose rivets, corrosion, or other damage. Inspect vertical stabilizer attach bolts for looseness. Retorque as necessary. Check security of inspection covers, fairings, and tip.	340		
553002	Vertical Stabilizer Fin and Tailcone - Inspect externally for skin damage and condition of paint.	340		
ATA 56 – WINDOWS				
561001	Windows and Windshield - Inspect general condition. Check latches, hinges, and seals for condition, operation, and security of attachment.	210		
ATA 57 – WINGS				
571001	Wing Surfaces and Tips - Inspect for skin damage, loose rivets, and condition of paint.	510, 520, 610, 620		
571002	Wing Struts and Strut Fairings - Check for dents, cracks, loose screws and rivets, and condition of paint.	510, 610		
571003	Wing Access Plates - Check for damage and security of installation.	510, 520, 610, 620		Inspection Operation 3
571004	Wing Spar and Wing Strut Fittings - Check for evidence of wear. Check attach bolts for indications of looseness and retorque as required.	510, 520, 610, 620		Inspection Operation 3

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 57 – WINGS (Cont...)				
571005	Wing Structure - Inspect spars, ribs, skins, and stringers for cracks, wrinkles, loose rivets, corrosion, or other damage.	510, 520, 610, 620		Inspection Operation 3
ATA 61 – PROPELLERS				
611001	Spinner - Check general condition and attachment.	110		
611003	Propeller Blades - Inspect for cracks, dents, nicks, scratches, erosion, corrosion, or other damage.	110		
611005	Propeller Mounting - Check for security of installation.	110		
ATA 71 – POWERPLANTS				
711001	Cowling - Inspect for cracks, dents, other damage and security of fasteners.	120		New Revision Model 172 MM
712002	Do a check of the engine mount and the oil filler tube for evidence of contact. Refer to SB99-71-02.	120		New Revision Model 172 MM
716001	Alternate Induction Air System - Check for obstructions, operation, and security.	120		
716002	Induction System - Check security of clamps, tubes, and ducting. Inspect for evidence of leakage.	120		
716003	Induction Airbox, Valves, Doors, and Controls - Remove air filter and inspect hinges, doors, seals, and attaching parts for wear and security. Check operation.	120		
716004	Induction Air Filter - Remove and clean. Inspect for damage and service.	120		
722001	Engine - Inspect for evidence of oil and fuel leaks. Wash engine and check for security of accessories.	120		
722003	Hoses, Metal Lines, and Fittings - Inspect for signs of oil and fuel leaks. Check for abrasions, chafing, security, proper routing and support and for evidence of deterioration.	120		
723003	Engine Baffles and Seals - Check condition and security of attachment.	120		
ATA 76 – ENGINE CONTROLS				
761001	Engine Controls and Linkage - Examine the general condition and freedom of movement through the full range. Complete a check for the proper travel, security of attachment, and for evidence of wear. Complete a check of the friction lock and vernier adjustment for proper operation. Complete a check to make sure the throttle, fuel mixture, and propeller governor arms operate through their full arc of travel.	120, 225		The maximum linear freeplay is 0.050 inch.

ITEM CODE NUMBER	TASK	ZONE	ENGINEER SIGN	REMARKS
ATA 78 – EXHAUST				
781001	Exhaust System - Inspect for cracks and security. Special check in area of heat exchanger. Refer to Chapter 78, Exhaust system - Maintenance Practices.	120		
ATA 79 – OIL				
791001	Engine Oil – Drain oil sump and oil cooler. Check for metal particles or foreign material in filter, on sump drain plug and on engine suction screen. Replace filter, and refill with recommended grade aviation oil	120		They are complete every 50 hours or 4 (four) months, whichever occurs first.
792001	Oil Cooler - Check for obstructions, leaks, and security of attachment.	120		
ATA 80 – STARTING				
801002	Bendix Drive Starter Assembly - Clean and lubricate starter drive assembly.	120		
FINAL STEP				
000000	Perform a test run-up. Record parameters (at engine shutdown).	000		
000000	After the test run-up, remove upper and lower engine cowlings and check for leaks (oil, fuel, air, exhaust gases). If everything is normal, reinstall the engine cowlings and check that they are correctly locked.	000		
000000	Record this inspection in the aircraft maintenance files (airframe, engine and propeller log books).	000		

End of 50 Hours Inspection Sheet

Component Replacement Record

No.	Description	S/N OFF	S/N ON	Sign

Inspection Result :

Ok

Corrective Action :

N/A

AKADEMI PENERBANG INDONESIA BANYUWANGI	MAINTENANCE PROGRAM CESSNA 172 SKYHAWK APPENDIX

Return to Service

I hereby certify that aircraft PK - BYJ has been maintained and inspected in accordance with the Cessna 172S Approved Maintenance Program and met requirements with applicable of Civil Aviation Safety Regulation and is determined to be airworthy condition.

Issued at : API BANYUWANGI Date : 30/05/2024

Amel No. : 10295 Signature :