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Basic Radiotelephony Training for Helicopter Landing Officers: Implementation and Participant Evaluation at Surabaya Aviation Polytechnic

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A R T I C L E I N F O

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A B S T R A K

This community service article describes basic radiotelephony training for 27 Helicopter Landing Officer trainees at Surabaya Aviation Polytechnic on 6 October 2026. The program introduced RTF General Operating Procedures, including message sequencing, phraseology, radio test procedures, and communication confirmation. Participant reactions were assessed using six four-category questionnaire items. Very Good ratings were recorded for overall quality (88.9%), material relevance (81.5%), instructor delivery (81.5%), facilitator performance (70.4%), fulfillment of expectations (59.3%), and support for continuation (85.2%). The findings indicate favorable evaluations, with scope for strengthening practical exercises. Because no objective proficiency test was reported, improvements in radiotelephony competence or operational safety cannot be inferred.

INTRODUCTION

Clear communication is fundamental to the coordination of aviation activities in which decisions depend on the timely exchange of precise operational information. Radio communication creates a shared channel for transmitting instructions, status reports, and confirmations, but its effectiveness depends on more than the availability of equipment. The order of a message, the selection of appropriate terminology, the identification of the communicating parties, and the confirmation of critical information all contribute to mutual understanding. When messages are incomplete or interpreted differently by a sender and a receiver, the possibility of operational misunderstanding increases. For personnel responsible for coordinating activities around helicopter landing areas, communication competence is therefore an important component of professional preparation.

Research on aviation communication has documented the combined importance of technical procedures, phraseology, human factors, and language. Alharasees et al. (2023) examined communication-load factors among pilots and air traffic controllers and emphasized training and standardized phraseology as relevant elements of communication performance. Ramadhan et al. (2026), reviewing literature concerning pilot–air traffic controller communication, identified readback and hearback errors, call-sign confusion, blocked transmissions, nonstandard phraseology, and misinterpreted instructions as recurring categories of communication failure. These studies address contexts that are not identical to the duties of Helicopter Landing Officers (HLOs), yet they establish the broader significance of clear, systematic aviation radiotelephony.

A further challenge concerns the linguistic and contextual interpretation of transmitted information. Fitriani and Supriyadi (2023) examined misunderstandings in aeronautical radiotelephony from an aerolinguistic perspective and underscored the need to interpret operational utterances within their specialized communication context. Kim (2023), studying Korean pilots and air traffic controllers, identified differing communicative challenges and discussed the value of incorporating authentic recorded transmissions into relevant education. These findings indicate why introductory radiotelephony instruction should address both the prescribed organization of messages and the practical task of understanding what another operator communicates. Their applicability to HLO personnel is conceptual rather than directly demonstrated by the present activity.

The HLO role is associated with coordination in the operating environment of helicopter landing activities. Within that environment, a radio message must be understandable to the intended recipient and should allow ambiguity to be recognized and resolved. Initial training can provide a common vocabulary and procedural reference before personnel encounter situations that require more demanding operational judgment. Instruction concerning how to begin and end transmissions, listen actively, respond appropriately, and request clarification therefore has practical relevance to the preparation of HLO trainees. The community service program examined here was designed around this

foundational level of procedural understanding; it was not documented as a full operational certification or competency assessment.

Surabaya Aviation Polytechnic, Indonesia, implemented a community service activity entitled "Basic Radio Telephony Training: RTF General Operating Procedures" for participants in the sixth cohort of its Helicopter Landing Officer training program. The institutional report describes an instructional activity concerned with general radio-use procedures, communication equipment, message sequencing, relevant phraseology, attentive reception, and confirmation of unclear information. The program also sought to encourage communication discipline, consistency, responsibility, and appropriate coordination with relevant operational parties. Its intended contribution was educational: to provide introductory knowledge that could support subsequent HLO learning and preparation.

The contribution of this article is to document the implementation of a specialized, small-cohort aviation training activity while examining the pattern of participant evaluations at the level supported by the available evidence. Community service reporting frequently emphasizes activities undertaken and perceptions of their value. For a training intervention, however, it is important to distinguish what participants thought about an activity from what they could actually do afterward. Sitzmann et al. (2008) showed that trainee reactions reflect instructional and contextual characteristics and should not be equated automatically with objective learning. Reio et al. (2017) and Yardley and Dornan (2012) similarly caution against uncritical assumptions when interpreting training-evaluation levels.

This distinction is particularly important for safety-relevant education. Favorable ratings may indicate that participants found the content relevant, the presenters effective, or the program worth continuing; such ratings do not establish that participants can execute radio procedures correctly in a simulated or operational setting. It is also possible for a program to receive a high overall evaluation while leaving some expectations insufficiently addressed. Rather than treating all positive responses as interchangeable, the present article examines each reported questionnaire item separately and considers how variation among indicators can inform future instructional refinement.

Accordingly, this article has three objectives. First, it describes the setting, participants, instructional focus, and supporting arrangements of the basic radiotelephony community service activity. Second, it presents the complete response distribution for six post-activity evaluation indicators and identifies the relative strengths and areas for improvement documented by participants. Third, it discusses the educational implications of these observations in relation to aviation communication research and the broader literature on simulation-based instruction and training evaluation. The analysis remains descriptive and does not attribute changes in communication proficiency or aviation safety outcomes to the activity.

IMPLEMENTATION AND METHODS

The activity took place at Surabaya Aviation Polytechnic in Surabaya, Indonesia, within the institution's 2026 community service program. The supporting attendance document identifies 6 October 2026 as the activity date, although the printed weekday is inconsistent with the calendar, while the administrative report records preparatory and reporting stages during October 2026. The target group comprised 27 trainees enrolled in the sixth Helicopter Landing Officer training cohort. The report identifies a 12-person implementation team in its principal activity table, although its appended institutional decree records a broader administrative and instructional roster. This difference is treated as a documentation distinction rather than as evidence of additional participant groups.

The initiative was structured around "RTF General Operating Procedures," a foundational radiotelephony topic selected for its relevance to HLO responsibilities. Its stated educational aims included introducing general principles of radio communication, improving awareness of concise and accurate information transfer, familiarizing participants with relevant phraseology, promoting procedural consistency, and emphasizing confirmation where a received message is uncertain. These are program objectives, not pre-specified outcomes measured by an independent skills test. The article therefore refers to them as instructional intentions instead of reporting them as demonstrated changes in trainee behavior.

The activity report describes the use of an instructional classroom or hall, a laptop and presentation equipment, participant attendance sheets, course materials, evaluation questionnaires, and certificates. It also lists radio-communication support or simulation devices conditionally, indicating that such equipment could be used when applicable. This wording does not verify which participants handled a device or the length and complexity of any practice session. To preserve the evidence boundary, implementation is described here as classroom-based instruction supported by documented teaching resources, without assuming a formal simulation-based intervention.

Teaching material reproduced in the report includes slides on time systems, test transmissions, categories of messages and their priority, and signal-strength terminology. These examples indicate attention to how transmissions are prepared, classified, and understood. The report also states that participants were introduced to the sequence of information delivery, conventional terms and phraseology, procedures for opening and closing communication, careful listening, appropriate responses, and confirmation when information is unclear. The materials are summarized as documented instructional themes rather than as a verified complete syllabus, because individual session durations, lesson plans, and performance standards were not provided.

The implementation can be described through three analytically distinct phases: planning and institutional preparation; provision of the documented introductory radiotelephony materials; and collection of participant feedback. The monthly activity timeline identifies target surveying, facility preparation, delivery, evaluation, and report preparation in October 2026. Although these

headings show the planned administrative sequence, the source does not report precise start and end times for each stage. Accordingly, the present account does not infer session length, number of contact hours, or instructional dosage.



Picture 1. Documentation-Based Framework of the Training and Evaluation Activity

Evaluation data consist of six post-activity questionnaire charts, each explicitly showing 27 responses. The questionnaire uses four labeled response categories: Very Good, Good, Fair, and Poor. The items ask participants to assess the activity overall, the match between materials and the activity title, the delivery of material by the speaker, the performance of facilitators or the organizing committee, whether the program met participants' expectations, and whether they supported future continuation of the program. The final item's category labels are evaluation-scale labels; its substantive meaning concerns endorsement of continuation rather than observed subsequent participation.

The original report provides percentages in pie charts, rather than a de-identified participant-level dataset. To preserve and clarify the numerical findings, absolute counts were reconstructed using the fixed denominator of 27 and the displayed percentages, rounded to one decimal place. For example, 24 divided by 27 corresponds to 88.9%, and 16 divided by 27 corresponds to 59.3%. The full count distribution for each item was checked to sum to 27. Reported percentages and reconstructed counts are descriptive; no hypothesis testing, correlations, composite questionnaire score, or confidence intervals were calculated.

The sixth item evaluates willingness or support for continuing the activity, while the fifth item specifically asks whether implementation met expectations. In the report's narrative summary, the fifth item is alternatively labeled as alignment with HLO training needs, and one line describes 59.3 as “good” without specifying the percentage sign. The questionnaire chart is treated as the controlling source for both the wording and the response category. Thus, 59.3% is reported here as the proportion selecting Very Good for fulfillment of expectations. Similarly, the fourth item is described as facilitator or committee performance in accordance with its chart wording, not reclassified as a direct facilities-quality measure.

The evaluation design is best described as a descriptive post-activity participant reaction assessment. All six displayed items have 27 responses, matching the documented cohort size; the available material nevertheless does not link records to individuals or establish whether the instrument was piloted, validated, administered anonymously, or supplemented by follow-up interviews. Baseline knowledge, observed message accuracy, radio phraseology performance, retention, and subsequent workplace application were not

reported. These limitations define the kinds of claims that can be supported by the resulting evidence.

Ethically and analytically, this manuscript uses only aggregate evaluation results and institutional activity details. Names and contact information from the attendance appendix are not reproduced. The report provides administrative approval and attendance documentation but does not document a research ethics committee determination or participant consent for a separate research study. Accordingly, no formal ethics approval or consent procedure is asserted here. A submission-ready version should be checked against the journal's requirements for secondary analysis of program evaluation material and authorship approval.

Table 1. Training Topics Identified in the Activity Report

Documented topic	Instructional emphasis
General radio operating procedures	Orderly initiation, transmission, reception and termination of radio communication
Message sequencing and phraseology	Clear, concise statements using operational terminology
Test transmissions and signal strength	Transmission checks and interpretation of reception quality
Time system and message priority	Consistent time references and categories of message urgency
Listening, responding and confirming	Appropriate responses and clarification of uncertain information

RESULTS AND DISCUSSION

Documented scope and institutional setting

The activity was conducted for a clearly defined instructional cohort rather than a broad public audience: 27 Helicopter Landing Officer trainees registered in the sixth course intake at Surabaya Aviation Polytechnic. This setting is significant because the learners were preparing for a specialized aviation-related function that requires communication with relevant operational parties. The institutional program provided an opportunity to introduce standardized radiotelephony concepts within an organized professional training environment. The source documents support the cohort size, activity title, place, and scheduled implementation period, but they do not provide trainees' prior aviation experience, linguistic profiles, age distribution, or previous exposure to radio communication. Such characteristics cannot be inferred from the cohort label alone.

The report identifies two complementary orientations of the activity. One concerns procedural knowledge: participants were expected to become familiar with the structure of a radio transmission, relevant phraseology, test procedures, and ways of clarifying received information. The second concerns professional conduct: participants were encouraged to listen carefully, communicate concisely, follow procedures consistently, and act responsibly in exchanging

operational information. The distinction is useful because familiarity with formal procedures and adoption of disciplined behavior are different outcomes. The documentation establishes that both were addressed as training goals; it does not report independent performance data to demonstrate that either was achieved to a defined proficiency threshold.

In its administrative presentation, the program includes a target survey, preparation of facilities, activity delivery, evaluation, and preparation of the final report, all shown in the October 2026 timeline. The attendance sheet specifies 6 October 2026 as the activity day. A signed institutional decision issued earlier that month specifies the activity's administrative authorization and designated personnel. These records provide a traceable context for the community service undertaking, although they do not establish how long participants were exposed to each instructional theme or whether multiple teaching sessions occurred.

An implementation report is most informative when it makes the relationship between the educational objective, delivered content, and evaluation clear. In this case, those three elements can be connected conceptually: radio procedures and phraseology respond to the objective of improving procedural familiarity, while participant feedback measures perceived relevance and quality of delivery. What remains absent is a direct link between the instructional content and observed task performance. This discontinuity is relevant when interpreting the study, because the available data describe whether the participants evaluated the course favorably, not whether they transmitted and interpreted messages more accurately after the course.

Learning materials and the operational communication sequence

The introductory course materials depict several identifiable radiotelephony elements. The time-system slide reflects the need to communicate temporal information consistently in aviation contexts. Slides concerning test procedures address the organization of test transmissions and the identification of stations and reception quality. Material on message categories and priority introduces the principle that communications may require different levels of urgency and sequencing. A signal-strength example describes gradations of received transmission quality. Collectively, these topics support an instructional progression from knowing what a transmission is intended to convey, to understanding how it is sent, interpreted, and confirmed.

The activity narrative gives particular attention to preparing and transmitting information clearly, responding with relevant information, and verifying uncertain messages. These themes are consistent with a broader aviation communication literature that identifies message ambiguity, nonstandard phraseology, and readback or hearback problems as potential sources of misunderstanding (Alharasees et al., 2023; Ramadhan et al., 2026). The cited studies predominantly consider pilots and air traffic controllers. Their findings provide a rationale for emphasizing accuracy and confirmation in general aviation communication training, but should not be treated as evidence that the 27 HLO trainees committed particular types of errors before training.

Table 2. Instructional Objectives and Corresponding Evidence

Objective in report	Documented content or evidence	Not evaluated
Procedural familiarity	General RTF topics, communication sequence	Knowledge test results
Clear radio messages	Phraseology and information-order materials	Accuracy of spoken transmissions
Confirmation discipline	Listening, response and clarification themes	Readback or hearback task scores
Operational coordination	HLO-oriented communication aims	Observed operational behavior

From an instructional perspective, the documented material lends itself to a task sequence: establishing the intended recipient, preparing the relevant information, making the transmission, receiving and interpreting the response, and clarifying content if necessary. This sequence is an organizing interpretation of the topics in the report, rather than a claim that the trainers followed a specific competency checklist. Presenting the material in such a sequence can help future course documentation explain which operational problems a lesson addresses and how success will be assessed. For example, a future radio exercise might evaluate whether a trainee identifies the receiving station, states a message unambiguously, and requests clarification when information is incomplete.

The distinction between terminology familiarization and applied communication becomes especially apparent when considering the contextual findings of Fitriani and Supriyadi (2023) and Kim (2023). Familiarity with a phrase does not guarantee that its operational meaning will be interpreted correctly under variable communication conditions. Kim's investigation specifically discusses aviation communication challenges and relevant training approaches in a pilot–controller context, including the educational potential of authentic transmissions. For the present program, these observations suggest avenues for instructional development, such as recorded-message interpretation or structured role-playing; they do not establish that those activities formed part of the documented delivery.

The report lists equipment for communication support or simulation as conditionally available but does not provide an inventory or participant-by-participant practice record. This matters because the presence of a listed simulator, a photograph of a training facility, and proof of completed radio-communication exercises are different forms of evidence. The photographed activities corroborate that a group session and classroom arrangements took place, yet do not specify the number of radio transmissions completed by each trainee. The article therefore describes the content and setting without exaggerating the practical intensity of the intervention.

Participants' ratings of training quality

The six post-activity questionnaire charts provide the principal quantitative findings. Each chart records 27 responses, and every item uses the same four-category rating scale. Table 3 reproduces the full response structure by combining the displayed one-decimal percentages with corresponding counts. The count reconstructions are exact at the integer level because the displayed values align with multiples of 1/27. Each response row totals 27, permitting straightforward comparison of the distribution of ratings while avoiding unnecessary assumptions about an interval scale.

Table 3. Post-Activity Questionnaire Responses (n = 27 per Item)

Indicator	Very Good	Good	Fair	Poor
Overall activity quality	24 (88.9%)	3 (11.1%)	0 (0.0%)	0 (0.0%)
Material relevance	22 (81.5%)	3 (11.1%)	2 (7.4%)	0 (0.0%)
Instructor delivery	22 (81.5%)	5 (18.5%)	0 (0.0%)	0 (0.0%)
Facilitator performance	19 (70.4%)	8 (29.6%)	0 (0.0%)	0 (0.0%)
Expectations fulfilled	16 (59.3%)	9 (33.3%)	2 (7.4%)	0 (0.0%)
Program continuation	23 (85.2%)	4 (14.8%)	0 (0.0%)	0 (0.0%)

Note. Counts are reconstructed from the six original pie charts using 27 responses per item. Reported percentages are rounded to one decimal place; each row totals 27.

The most favorable distribution concerned the overall assessment of the activity. Twenty-four participants (88.9%) selected Very Good and three (11.1%) selected Good; no respondent selected Fair or Poor. This finding indicates a positive overall reaction among those who completed the evaluation. It does not identify which components of the activity had the greatest influence on the overall rating, because the study did not report item associations or interviews. Nevertheless, the combined finding that all 27 responses were located in the two most favorable categories suggests that there was no recorded overtly negative overall evaluation within the available questionnaire responses.

The relevance of instructional materials to the training theme was rated Very Good by 22 participants (81.5%), Good by three (11.1%), and Fair by two (7.4%). This is the first of two indicators for which at least one Fair rating was recorded. The pattern suggests strong perceived alignment between the content and the announced radiotelephony topic, alongside limited room for improving thematic correspondence or participants' understanding of how the content relates to their expected duties. The evaluation does not reveal the reasons behind the two Fair responses. It would be inappropriate to attribute them to insufficient instructional depth, inaccurate material, or delivery problems without additional feedback.

Instructor delivery was rated Very Good by 22 participants (81.5%) and Good by five (18.5%), with no Fair or Poor responses. The absence of lower ratings suggests that the presentation was generally acceptable to respondents,

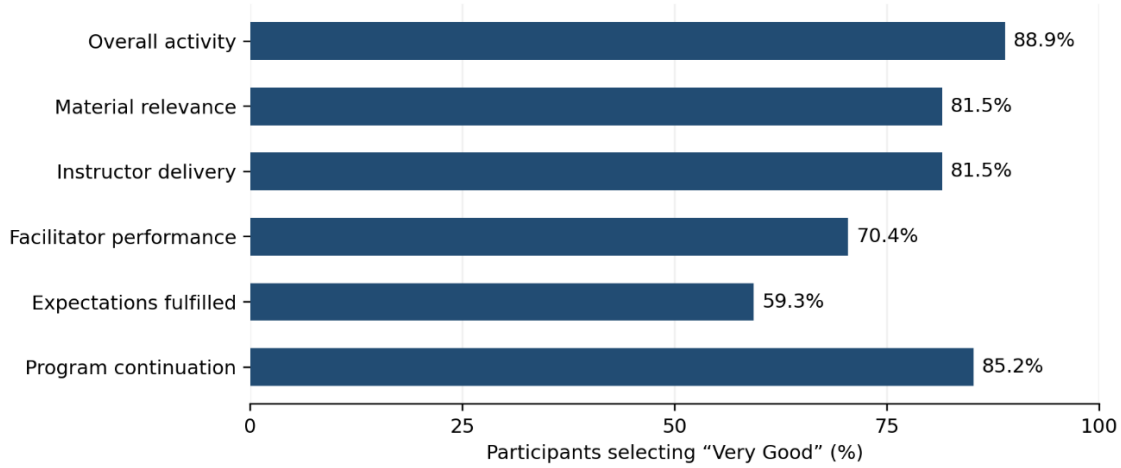
although acceptance is not the same as measured pedagogical effectiveness. As Sitzmann et al. (2008) note, reactions are particularly sensitive to features of the training experience such as instructional style and human interaction. For that reason, the instructor-delivery indicator is best interpreted as a measure of learners' perceptions of presentation quality rather than an index of how accurately they subsequently followed radio procedures.

Facilitator or organizing-committee performance received 19 Very Good responses (70.4%) and eight Good responses (29.6%). All reported ratings were therefore favorable, but the balance between the two upper categories differed from the overall assessment and the instructor-delivery indicator. This difference can inform program management: trainees were positive about organization, yet less inclined to use the most favorable category for the facilitators than for the activity overall. The questionnaire did not ask respondents to specify logistical concerns, and the report does not provide a separate quality audit of facilities or materials. Accordingly, potential improvements in coordination, communication before the event, or participant support are proposals for future review rather than identified defects.

The item concerning whether the program met participant expectations showed the widest distribution and the lowest share of Very Good ratings. Sixteen respondents (59.3%) selected Very Good, nine (33.3%) selected Good, and two (7.4%) selected Fair. Although 25 participants (92.6%) gave a favorable rating when the two highest categories are combined, the lower Very Good share is analytically important. It may reflect a gap between anticipated and delivered content, but the available data do not distinguish expectations about technical detail, practical exercises, duration, or other aspects of the program. A follow-up question asking what trainees had expected would be necessary to diagnose that gap.

Support for continuation of the activity was strong: 23 respondents (85.2%) selected Very Good and four (14.8%) selected Good, with no Fair or Poor responses. The survey format therefore indicates an entirely favorable distribution on the stated continuation item. However, because the response labels use judgments of quality rather than a conventional agree–disagree scale, this item is most safely described as the highest category of support recorded for program continuation. It cannot predict whether participants would attend additional training or whether institutional resources are sufficient to operate a recurring program.

Figure 2 compares the proportion selecting Very Good for each indicator. It makes visible an important feature of the results: a high overall rating (88.9%) coexisted with a substantially lower top-category rating for meeting expectations (59.3%), a difference of 29.6 percentage points. This is a descriptive contrast between two separately worded questions, not an inferential test of a true difference in underlying constructs. Because the questionnaires were not supplied at the individual level, it is not possible to determine whether respondents who rated expectations below Very Good were the same respondents who gave other items the highest rating.



Picture 2. Share of Participants Selecting the Highest Rating for Each Indicator

No category was rated Poor by any of the 27 respondents. Four Fair selections occurred across the 162 total item responses: two for material relevance and two for meeting expectations. This observation can be useful as a descriptive check, but the 162 selections should not be treated as 162 independent participants or pooled to manufacture an overall satisfaction score. Each participant was asked multiple questions, and the raw data do not permit estimation of relationships among them. The evaluation is more faithfully represented as six distinct distributions than as a single synthetic effectiveness index.

Interpretation and educational implications

The results indicate broad acceptability of the introductory radiotelephony activity among the respondent group. High evaluations of the course as a whole and of the instructor's presentation suggest that the training format was sufficiently accessible and relevant to be regarded positively. Nevertheless, the appropriate inference is limited to reaction-level information. Reio et al. (2017) describe both the influence and the limitations of widely used models that distinguish participant reactions from later forms of training outcome. Yardley and Dornan (2012) likewise warn that level-based evaluation frameworks should not be interpreted as automatic hierarchies of evidential quality or causality.

For an aviation-related program, the absence of a proficiency measure has direct implications for how success should be reported. The project report anticipates improvements in understanding, precision, coordination, discipline, and safety awareness. These are reasonable educational aims for introductory training, but the survey does not directly test them. A favorable answer to "How do you rate the instructor's delivery?" cannot tell whether a trainee can correctly repeat a call sign; similarly, a positive assessment of overall quality does not establish reduced error during real helicopter landing operations. The most defensible conclusion is that the activity was implemented and was positively perceived by its respondents.

The particular value of the lower expectation-fulfillment rating is that it directs attention beyond headline satisfaction. The response distribution does not demonstrate dissatisfaction with the program; in fact, most respondents rated it positively. Rather, it suggests a relatively less emphatic endorsement of the activity's correspondence to what trainees had anticipated. A practical next step would be to collect expectations before instruction and ask a brief open-ended question afterward about which topics or activities require further elaboration. Such feedback could differentiate demands for more examples from requests for hands-on practice, emergency communication scenarios, or more time with communication equipment.

Scenario-based learning is a plausible avenue for future improvement because radiotelephony is inherently an applied communication task. In an aviation setting, a scenario can require a trainee to identify a radio station, state the intended message, recognize a poor-quality transmission, request repetition, and verify information that affects coordination. However, the present program did not report a controlled comparison between instructional methods or recorded scores for such scenarios. The suggestion to expand practice is therefore a proposed curriculum development strategy, not an empirical explanation for the questionnaire outcomes.

Evidence from other professional domains can help specify the kind of evaluation that would be useful. Cook et al. (2011) found generally favorable outcomes in a systematic review of technology-enhanced simulation in health professions education compared with no intervention. Cook et al. (2012), comparing simulation-based approaches with other forms of instruction, reported modest to moderate effects across several learning measures, while Cook et al. (2013) examined mastery-learning approaches involving defined proficiency requirements. These studies are not directly about HLO trainees; their relevance lies in the educational design principles of structured practice, feedback, repetition, and observable performance standards.

A future HLO training evaluation could establish a short, clearly described practical assessment before or after instruction, or both. Observable indicators might include correct station identification, use of appropriate phraseology, sequence completeness, accurate reception and acknowledgment, appropriate request for repetition, and prioritization of a message under a defined scenario. The assessment rubric should define what constitutes satisfactory performance before collecting data. If a pretraining–posttraining design is used, its reporting should distinguish immediate performance change from retention or transfer to operational work. Where feasible, assessors could score recorded practice sessions using a common rubric to support transparency.

Another improvement concerns the alignment of evaluation items with the training's stated objectives. The existing instrument usefully covers global perceptions, material relevance, delivery, facilitation, expectations, and continuation. These items are appropriate for understanding acceptability, but they do not separately ask whether participants feel prepared to interpret a radio message, whether they can distinguish message priority categories, or whether they can recognize when a readback or confirmation is required. Adding task-

linked items might improve the specificity of formative feedback, provided they are not mistaken for substitutes for observed skill measures.

The communication literature also suggests that training design should consider variability in the listening environment, language and terminology, and message complexity. Alharasees et al. (2023) investigated communication-load factors across a diverse aviation sample, while Kim (2023) highlighted the instructional value of addressing challenges encountered by pilots and controllers with different linguistic backgrounds. Applied cautiously to HLO preparation, these insights support practice that progresses from simple, well-structured messages to scenarios requiring clarification or prioritization. The present source does not document the participants' English-language proficiency; it would therefore be speculative to assign their responses to a language-related cause.

The institutional and logistical features of a program also matter to its repeatability. The report includes a planned allocation of Indonesian rupiah (IDR) 5,000,000 across five expenditure headings. The amounts add precisely to the stated total but represent an activity budget rather than audited expenditure. They show that the organizers anticipated costs for materials, documentation, catering, miscellaneous needs, and training support. This breakdown helps demonstrate that future continuation would require both instructional planning and resource allocation. It cannot be used to establish cost effectiveness, cost per demonstrated competency, or an actual per-participant expenditure.

Table 4. Planned Activity Budget (IDR)

Expenditure category	Planned amount
Consumable materials, stationery and duplication	1,000,000
Publication and documentation	1,250,000
Participant and committee refreshments	1,200,000
Other accountable administrative expenses	400,000
Training support equipment	1,150,000
TOTAL	5,000,000

Note. These amounts are budget allocations in the institutional report, not evidence of actual expenditure.

The published activity report includes a broader team roster in its institutional decree than in its main 12-person project table. Such administrative differences are common in reporting where authorizing officials, instructional personnel, and logistical assistants have different responsibilities. For the purposes of scientific reporting, the program should clearly differentiate the participant population, instructors, organizers, and approving institution. The author list of a manuscript should be established by the contributors themselves according to the journal's authorship criteria, rather than inferred from inclusion in either administrative roster.

An additional documentary issue concerns the labels used in the report's narrative conclusions. The final summary associates 59.3 with alignment to trainees' needs, whereas the corresponding chart asks whether the program met expectations. It also describes an item as facilities and implementation despite the chart addressing facilitator or committee performance. These differences do not alter the pie-chart percentages, but they can change the interpretation of what was measured. By reconstructing the response distributions from the item wording, the present article keeps the findings tied to the instrument rather than extending them to constructs that were not directly asked.

This approach also reduces the possibility of overinterpreting percentages in a small cohort. Each respondent represents approximately 3.7 percentage points of a 27-person denominator. Consequently, a shift of only two responses changes a displayed percentage by about 7.4 points. The one-decimal values give numerical precision about the recorded sample proportions but should not imply that the findings estimate the views of all future HLO trainees with corresponding accuracy. The activity represents one training cohort at one institution, and the descriptive distributions are most defensibly generalized to those 27 responses.

The training therefore offers a useful example of how community service evidence can contribute to instructional improvement without requiring claims of experimentally demonstrated effectiveness. The activity's substantive value is the specialized application of radiotelephony content to an HLO cohort, complemented by a documented post-activity feedback process. Its strongest empirical contribution is the transparent description of the full response pattern, including the less enthusiastic top-category result for meeting expectations. Its principal limitation is the absence of directly observed knowledge or skills outcomes. Both features should remain visible in subsequent reporting.

A coherent future evaluation design could combine several forms of evidence. A brief pre-activity needs assessment would clarify expectations; a structured instructor checklist could document materials and practice scenarios actually delivered; a proficiency task could assess message production and interpretation; and a short follow-up questionnaire could gather perceptions of relevance and remaining difficulties. Repeated implementation across cohorts might allow descriptive comparisons over time. These proposals should be considered design recommendations, not retrospective descriptions of the October 2026 activity.

Table 5. Practical Priorities for Further HLO Training

Development priority	Proposed implementation	Evidence required
Diagnose participant expectations	Pre-activity needs question and post-activity open response	Documented needs and qualitative feedback
Increase applied practice	Radio scenario exercises with repetition and feedback	Lesson logs and observed task completion

Development priority	Proposed implementation	Evidence required
Assess technical proficiency	Criterion-based phraseology and response rubric	Scored recordings or assessor checklist
Evaluate retention and transfer	Scheduled follow-up task or supervised operational review	Longitudinal performance evidence
Improve program documentation	Record instructors, equipment used and contact hours	Standardized implementation records

Finally, while safe communication is the broader rationale for radiotelephony education, an activity-level survey cannot measure aviation safety outcomes. Such outcomes would require different evidence, potentially involving procedural compliance observations, communication incident reporting, or operational performance records under appropriate safeguards. The current findings therefore justify continued attention to radiotelephony education and more rigorous outcome assessment, but not statements that the program reduced incidents, improved flight safety, or produced certified operators. Maintaining this distinction protects the credibility of the community service contribution and makes future evaluation goals more concrete.

CONCLUSIONS AND RECOMMENDATIONS

The October 2026 community service program introduced basic RTF General Operating Procedures to 27 trainees in the sixth Helicopter Landing Officer cohort at Surabaya Aviation Polytechnic. The documented instructional scope covered the structure and terminology of radiotelephony communication, radio test procedures, message priorities, signal-strength concepts, attentive listening, appropriate responses, and confirmation of unclear information. The program's immediate empirical outcome was a set of six participant-reaction distributions, not direct measurement of communication skills.

The evaluation was predominantly favorable. Overall quality received 88.9% Very Good ratings; material relevance and instructor delivery each received 81.5%; facilitator performance received 70.4%; fulfillment of expectations received 59.3%; and support for continuation received 85.2%. Every respondent rated overall activity quality, instructor delivery, facilitator performance, and program continuation either Very Good or Good. The relatively lower top-category rating for fulfillment of expectations identifies a useful focus for further examination, even though most participants also evaluated that aspect positively.

Future training should pair foundational instruction with documented role-based radio practice, clarification scenarios, instructor feedback, and transparent performance criteria. Before recurring delivery, organizers should identify trainees' expectations and determine which operational communication

tasks are essential for introductory proficiency. After instruction, assessment should distinguish the participant experience from observed communication skills. Follow-up assessment would be needed before drawing conclusions about knowledge retention, operational transfer, or safety-related effects.

The conclusions are limited by a single institutional cohort, the lack of individual response data, absence of validated questionnaire information, no documented pretraining comparison, and no observed task performance measures. The results nevertheless offer a specific and transparent account of program acceptability and practical priorities for curriculum development. Subsequent community service reports could improve scientific usefulness by linking the planned learning objectives, actually delivered activities, participant perceptions, and competency assessments within a consistent evaluation framework.

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